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Peplau’s Theory of Psychodynamic Nursing and the Nurse-Patient Interaction: A Literature Review

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Abstract

The aims of this paper were to review a theoretical model useful for developing nursing knowledge in relation to nurse–patient interactions. Nurses are favorably viewed by society, often as virtuous, benevolent, angelic, and admirable. Nurses have been stereotyped positively as ‘ministering angels’. This positive view of the profession is frequently experienced first-hand in the clinical practice.

The interaction between a nurse and the patient is in about four phases as defined by Peplau: Orientation, Identification, Exploitation and Resolution, although these phases are defined separately, there is a considerable level of overlap between them. Issues such as power, the socio-cultural context, and interpersonal competence are shown to be important in the quality of nurse–patient interactions and nurses need to take cognizance of these factors in their interactions with patients.

Method: A review of the literature on nurse–patient interaction was carried out to identify areas for further studies identified.

The literature was reviewed from the following perspectives, (1) nurse communication within the nurse–patient interaction, (2) nurse–patient interaction, (3) patient perception of the nurse–patient interaction, and (4) patient care-seeking communication.

Theoretical model: Peplau’s theory of Psychodynamic nursing.

Results: Nurse–patient interaction is a central element of clinical nursing practice. This paper shows how Peplau’s model can be used as a theoretical framework for understanding nurse–patient communication.

Relevance to clinical practice: Issues such as power, the socio-cultural context, and interpersonal competence are important in the quality of nurse–patient interactions and nurses need to take cognizance of these factors in their interactions with patients.

Keywords: nurse–patient communication, nurse–patient interaction, nurse–patient relationship

Introduction

Nurses are favorably viewed by the society, often as virtuous, benevolent, angelic, and admirable. Nurses have been stereotyped positively as ‘ministering angels’ (Muff, 1982). This positive view of the profession is frequently experienced first-hand in the clinical practice (Shattell M, 2004).

A study of the hospital environment that is phenomenological found that nurses were prominent in patient’s descriptions of the hospital (Shattell, 2002). Participants in the study were asked what they were aware of in the hospital environment. In addition to positive statements about ‘nice nurses’, strong negative statements about nurses and nursing care were also present in their descriptions of the hospital environment.

One participant said this of her experience during hospitalization: It’s terrible [the radium implant]. So finally I thought okay, endure this, we’ll get through it. And heck with it and I’ll get through the next one and of course I didn’t want to come back here. I mean this time when I had surgery, I mean I knew I had to come back up here and I thought, I hate them, and they hate me (Shattell M. 2004). This patient view illustrated in Shattell M’s study clearly shows a paradox as the patient’s overall
experiences of nursing care seem inconsistent with the representation of the ‘nice’ nurse. While nurses may be seen as ‘nice’, patient participants in Shattell’s (2002) study of the hospital environment longed for better connections and therapeutic relationship with nurses.

In the hospital environment, patients depend on the nursing staff with a perception of powerlessness which creates a situation in which the patient sees the need to solicit needed nursing care by any means possible. Added to these factors, nurses are seen as overwhelmed and overworked culminating in greater patient needs and thus the patients activates multiple strategies to get these needs met of which Nurse – patient interaction was a central tactic (Victor, 2000).

This paper aims to review a theoretical basis for nursing knowledge development regarding nurse-patient interaction by carrying out a literature review and identifying areas for further study.

Peplau’s theory of psychodynamic nursing will be reviewed afterwards; a literature review will be carried out on the following sub-headings: Interpersonal communication within the nurse-patient relationship, nurse–patient interaction, the perception of the patient on nurse–patient interaction, and care-seeking communication of the patients. Following the literature review will be a discussion including implications for practice and future research.

**Peplau’s theory of psychodynamic nursing**

According to Victor et al., (2000) The psychodynamic theory suggests that interpersonal, infant and childhood attachments and dilemmas provides a base for personality for accurate prediction of coping strategies in the future.

The therapeutic relationship and interactions between and nurse and patients can be conceptualized from the perspective of interactionism that is symbolic. This interaction-ism is a socio-psychological approach to studying human actions (Schwandt, 1998).

This relationship differs from other forms of relationship in that the nurse utilizes maximally her communication skills, knowledge of human behavioral patterns and personal strength to enhance the growth of the client. The ideas, feelings and experiences of the client are the focus of this relationship (Forchuk C., 2000). The core of this theory is that the relationship between the nurse and the patient is the focus of their interaction rather than the patient himself (Forchuk 1993). The goals of this interaction are to engender patient’s recovery and to help patient understand his health challenge and learn from them as he develops new patterns of behavior, the nurse also gets a clear understanding of how universal stressors and ailments affect the lives and behaviors of the individual client (Pearson et al., 2005).

The sense of self of an individual emerges with social interaction, it is developed when people imagine themselves in various social roles, anticipate their responses, acts according to the meanings they have deciphered (Powers & Knapp, 1995).

According to Merriam-Webster online dictionary, psychodynamics was defined as the psychological study of the mental and /or emotional processes that is developed during early childhood and how they affect mental states and behaviors.

It involves the use of the nurses’ understanding of individual behavior and knowledge to help patients identify difficulties and how to apply interpersonal relationship to problems arising at various levels of personal experiences (Carey, Rasmussen, Noll, Stark and Searcy, 1989).

The process of interpersonal relations as defined by Peplau consisted of four phases in the nurse-patient interaction, this includes Orientation, Identification, Exploitation and Resolution, although these phases are defined separately, there is a considerable level of overlap between them.
**Orientation Phase:** this is the point of initial contact between the patient and the nurse, they get to know each other as people, roles and expectations are clarified. Patient at this point identifies and recognizes his need for help, plan is made to utilize professional services on offer and maximize the energy derivable from needs identified. Patient at this point attempts to establish the nurses’ integrity.

The main tasks that is carried out during this phase include building rapport and trust, establishing a therapeutic environment, patients strength and weakness is assessed and acceptable mode of communication between the nurse and patient is established.

**Identification Phase:** during this phase, trust is engendered with selective response from patients to persons who make offers of help, identifying with the nurse and problems which can be managed, feelings and behavior is explored for meanings. Peplau states that when a patient is allowed by the nurse to express feelings, and still get the needed nursing care, illness experience is undergone such that it reorients feelings and strengthens positive forces in the personality. Tasks emphasized during this phase are to clarify patient's preconceptions and expectations of nurses and nursing, develop acceptance, explore feelings, identify problems and response to care givers. The nurse aids the expression of feelings, needs, and assists when stressed, is receptive and provides necessary information. Plans are made for the future during this phase.

**Exploitation Phase:** The patient exploits realistically services available to them based on needs and interest. The nurse helps the patient to strike a balance between the needs for independence and dependence. Plans made in the previous phase are implemented and evaluation is done. Continuous assessment with provision of needed assistance by the nurse as new needs emerge.

**Resolution phase**

This phase involves the gradual development of independence from care givers which eventually leads to the termination of the relationship mutually. The patient aspires to new set goals while maintaining changes in communication style and mode of interaction with plan for alternative sources of help, prevention of the problem from reoccurrence and integration of the illness experience.

Across these phases, Peplau identified some roles for the nurse.

1. **Stranger Role:** is recipient of the client in a similar way to meeting a stranger in other situations; engenders a trusting climate and objectively accepting the patient.
2. **Resource Person Role:** attends to questions and enquiries, explains clinical data and treatment plan.
3. **Teaching Role:** Gives clear instructions and provides training which involves the analysis of the learner's experience and its synthesis. Offers timely information and helps the patient learn (www.slsu-coam.blogspot.com).
4. Peplau categorized teaching into two: Instructional—which consists of information transference. Experiential— which is capitalizing on the learner’s experience as a basis from which learning products are developed.
5. **Counseling Role:** Helps the client to understand, integrate and maximize the current life circumstances; guide and encourage necessary changes.
6. **Surrogate Role:** Helps client sort out domains of dependence, interdependence, and independence and acts as client’s advocate. Figuratively representing a person in the client’s life.
7. **Active Leadership Role:** Helps client assume utmost responsibility for meeting set goals in the plan of care in a way that is satisfying mutually. Working in a democratic way with the patient (www.slsu-coam.blogspot.com).
Limitations of the theory

- Personal space considerations and community social service resources are considered less.
- Health promotion and maintenance were less emphasized.
- Cannot be used in a patient who doesn’t have a felt need eg. With drawn patients, unconscious patients.
- Some areas are not specific enough to generate hypothesis (www.currentnursing.com)

Peplau’s theory emphasized reciprocity in the nurse-patient relationship and envisioning nursing as a collaborative and interactive process.

The core around which this theory revolves is “self-awareness” which aids the nurses’ understanding of which emotions, needs and responses are their own and which are the needs of others thereby identifying the signs of exhaustion emotionally, burnout, involvement with patients excessively and thus identify ways to ventilate and refresh themselves. Self awareness engenders a balance between the personal and professional selves of the nurse thereby enhancing professional role congruence.

Peplau (1999) stated that the nurse is an individual that is complex, the totality of past experiences, training that is rigorous and personality traits that is unique. As nurses apply the human relationship principles, maturity is attained in the promotion of therapeutic relationship as the nurse gets to understand his/her own behaviors and needs (Peterson and Bredow, 2004). Nurses therefore must identify and encourage cues indicative of the patients’ readiness for growth at the same time, mobilize identified community resources to assist the patient in coping with psychosocial needs accompanying the change in their health status (Peterson and Bredow, 2004).

Review of literature

To access literature for the review, databases used include but not limited to: CINAHL, Medline, and Psych-Info. Search references used were nurse–patient interaction, nurse–patient relationship, patient communication and nurse–patient communication. Literature in relation to the nature of nurse–patient communication was included. References listed in various articles were also used to inform this discussion. Theoretical and discussion articles were included if they were germane to the topic and all studies relevant were included.

Nurse communication within nurse–patient interaction

Majority of the studies on nurse-patient interactions focused on the communication from the nurses’ angle in the interaction with an assumption that the nurse assumed the position of power in the relationship. Sociological theories on professions award power to the professional as a result of their knowledge that has been acquired via academics and expertise (Haug & Lavin, 1981.). This professional power is adequately documented in Parson’s work on the sick role in which patient is said to willingly submit to professionals because of the specialized knowledge that they have and the professional is ever willing to accept this power tilt (Parson 1975). In a study of doctor-patient relationship, Roth(1972) found that patients were more likely to be active in their care and utilized bargaining and negotiation to enhance their interpersonal power but do not attain equality. Other studies in this regard examined power tilt in relation to decision making by the patient (Taylor et al., 1989), needs of mental health patients (Jackson and Stevenson 2000), patient autonomy (Martins, 1998) and Webb (1995) who studied the dimensions of power in the nurse-client interactions.

Johnson and Webb (1995) in their study of the nurse–patient experiences of social processes of care reported that nurses’ exerted power over their clients in a
Patients are aware of the existence of a nursing agenda which they are expected to adhere to failure to which is consequential. This is evident in the words of an old patient that was hospitalized, ‘I have to do as I’m told. I’m 94 next week and I still have to do as I’m told’ (Hewiston, 1995). When patients fail to adhere to the “nursing agenda” negative social labeling as non-compliant, difficult or bad occurs. This social labeling affects the quality of care on the long run hence the need for the nurse to understand the diversity in sick role behavior of individuals as being influenced by various factors especially their culture. According to face work theory, patients wanted to be viewed positively therefore they were rather compliant to the nursing agenda but in the psychodynamic theory, patients attempted to negotiate their compliance; through their self-evaluation and their perceived evaluation by the other, they were able to maintain their presentation of the ‘good’ or ‘easy’ patient (Jackson and Stevenson 2000).

A variety in communication pattern in relation to work experience among nurses was reported by Harrison et al., (1989). Nurses in training with nursing related working experience were sensitive to the feeling of others compared to those who did not have a similar working experience also, these group of students were less likely to be judgmental or deceptive but used threat to engender cooperation, frequently disagreed with the client and interrupted conversations more than those in the group without prior working experience. Harrison et al. (1989) also found that the group that had no prior experience listened better and were less critical. It appears that as these students become more experienced and educated, communication behaviors diminishes. Harrison et al. therefore postulated that nursing students having learned communication skills that are appropriate did not inculcate them into their communication pattern. It has been suggested that the health care environment prevents the full integration and maximum utilization of communication skills that is therapeutic (Mathews, 1962; Mynatt, 1985). Further research in this area is warranted to deepen our understanding of these processes.

Baer and Lowery (1987) in their study examined how patient character and helping situations affected the predisposition of nursing students to caring for patients and reported that these students preferred to care for patients who were cheerful, communicating and accepted their illness and care provided. The finding of this study highlights the fact that when considering the nurse-patient interaction, the characteristics of patient communication pattern was an important variable to consider (Garvin and Kennedy 1990). The use of Peplau’s psychodynamic nursing theory in investigating the nurse–patient interaction is understandable as it includes both the patient and the nurse actively, thereby addressing the points stated by Garvin and Kennedy.

Roter’s interaction analysis system was used by Caris-Verhallen et al., (1998) to analyze the communication pattern of nurse-elderly patients in home care and long term care facilities and they reported that communication in relation to nursing care occurred more frequently in home care than in the long term care facilities where relationship related communication was more frequent. Self selection and performance bias were limitations to these studies as nurses selectively recruited patients that participated in the study and the presence of a video recorder could affect the pattern of communication used by the nurse. Although this study increases the theoretical research base of knowledge of types of nurses’ communication pattern and when they are used, it does not improve the understanding of the nurse-patient relationship.

In a study of speech acts and style of ten (10) registered nurses with older clients in two different nursing homes, it was reported that majority of the nurses
communication elicited verbal elaboration from the patients eliciting mono-syllabic yes or no answers and that nurses rarely gave up control of procedures in patient care (Gibb and O’Brien, 1990).

Nurse–patient interaction

This was the focus of various studies in the context of terminal illnesses, chronic illness, care of the elderly, labor and delivery and psychiatry (Aranda & Street, 1999, Cleary and Edwards, 1999).

Altschul(1971), in an early study on nurse-patient interactions in the United Kingdom reported controversies about whether or not nurses should form relationships with patients as some opined that it was a “dangerous” both for the patients and nurses. In observing this, Altschul interviewed the nurses and patients about their experience in the interaction as to whether such relationship was considered therapeutic. Patients in these nurse-patient relationships believed in its therapeutic effect however, nurses expressed their doubt about the therapeutic value of the relationship with the patient. The fact that the relationship was not seemingly purposeful or goal oriented made the researcher conclude that the relationships are not therapeutic. Some interviewed nurses were said to have berated colleagues who fostered therapeutic relationships with their patients while they were also involved in varied levels of nurse-patient relationships.

According to Altschul (1971), patients and nurses alike reported an awareness of a nurse-patient relationship but the nurses seemed oblivious of the patients view. In quantifying the frequency and length of nurse–patient interactions it was found that nurses ‘were not in frequently interacting with the patients’ However, this finding however, did not exclude nurses from relationships with patients; in three of four examples (on one psychiatric unit), the researcher observed only one interaction of a short interval initiated by the patient). Therefore, the nurse–patient relationship was not dependent on prolonged periods of multiple interactions. These findings opposes the belief that time is important for the development of a nurse-patient relationship that is satisfactory, this is consistent with the report of Hagerty and Patusky (2003) who reported that extended time interval was not a necessary requirement for a relationship to be formed.

Altschul (1971) reported that some patients, spoke at length about certain nurses when asked what had helped them while in the hospital, mentioned specific names, each nurse was described vividly making it very obvious the depth of information patients had about nurses individually (Altschul, 1971). Common finding to Altschul (1971) and Shattell (2002) are that patients prefer genuine nurses, who are patient, not hurried, available and willing to talk to them which contrast the findings of shattell (2002) on the clinical environment.

Joan Halifax (2013) stated that nursing practice is grounded deeply in the experience of compassion-based relationships. A deficit of which might be relevant to the patients experience of care, affecting nurse-patient interaction. It is the capacity to feel concern for and attend to the experience of others, to sense what will serve others, and potentially be of service to them. Compassion is said to have two main valences: the affective feeling derivable from caring for a suffering one and the motivation to relieve them of the sufferings (Hoffman et al., 2011).

In 2002, in a study on the role of nurse-patient interaction on the wellbeing and recovery of patients in the critical care units, the following were identified as interactive characteristic behaviors of nurses and patients both negative and positive.

Nurses interactions that are positive:

Sharing: the nurse faces the patient and offers such items such as prescribed food, water, an audio cassette player, a radio, urinal or other materials used in the support of the patient’s treatment.
Praising: comments that involves approving, recognizing or commending the patient, such as “very well done”, “you look much better today”, and “you are really recovering fast”. All comments should involve audible, clear and a sonorous voice, this may or may not involve physical contact.

Visual contact: The nurse maintains eye to eye contact with the patient for as long as he is at the patient’s bedside regardless of whether the patient is looking at her/him unless when he is engaged in a procedure that would not allow for such.

Brief contact: The nurse maintains contact within the patient’s personal space which should be no longer than an arm’s length, for a period not less than five seconds.

Proximity: Same as above but involves contacts beyond five seconds

Smiling: looking the patient in the eye and lifting the corners of the lips.

Verbal request: making a request or suggestion verbally which must be audible? examples include “(patient’s name), “could you please lift your arm”, “please turn on your side so that I can raise your headrest”, “you are going to feel a mild sting but it will hurt very little”, “we will be giving you a sponge bath”.

Modeling: Body movements or changes accompanied by the corresponding verbalization, replicated by the patient within ten seconds.

Laughing: Opening the mouth congruently or lifting the corners of ones lips while emitting a voiced laughter sound sometimes accompanied by a comment such as “that was funny”

Physical contact: the patient is hugged or patted by the nurse

Characteristics negative interaction

Ignoring the patient: When the patient makes a request or ask a question, the nurse fails to respond congruently in more than five seconds, or does not carry out the requested action without rationalizing his inaction, or simply nods without establishing visual contact.

Yelling: Loud comments of disapproval. Examples: “Hey, that was really bad!”, “Don’t get out of bed!”, “Don’t remove that bandage!

Disapproving: Verbalizations implying disagreement, disgust or criticism by the nurse.

Patients positive interaction

Maintaining attention: The patient keeps sustained eye contact while the nurse provides an explanation, information, instruction or appropriate comment.

Requests: Includes verbal, digital or manual indications (in case of verbal impossibility) expressing a need or request, followed by the corresponding nurse appropriate behavior. Examples: requesting a glass of water, pain medication, etc.

Praise: A verbalization or clearly distinguishable gesture expressing gratefulness or approval of an action by the nurse

Acceptance: After the nurse offers or performs a health related or comfort providing function, the patient says “yes”, “mmhm”, thanks the nurse, nods affirmatively with the head, eyes or hands expressing agreement acceptance or satisfaction

Patients negative interaction

Disagreement (negativity): Verbalizations expressing opposition to nurse’s actions. Examples: “I don’t want that medicine”, “don’t move me”, “don’t touch me”, “I don’t want to eat”, “leave me alone”.

Yelling: Same as above in the absence of a justifying situation such as acute pain, extreme discomfort or other urgent need.
Ignoring: Same definition as above for nurses in absence of a justifying situation such as being asleep or unconscious.

**Patient perception of nurse–patient interaction**

Studies that explored patient perceptions of nurse-patient interactions sought to explore the perspectives of patients on the competence of nurses in terms of interpersonal interactions as well as the patients experience of care when labeled as non-compliant or difficult (Fosbinder, 1994 & Breeze and Repper, 1998).

In 1994, Fosbinder reported from the study on patients perception of the nurse-client interaction in which patients were asked about their experiences and feelings while accessing nursing care, patients talked mostly about the interpersonal interactions rather than the other aspects of care with emphasis on communication, friendliness, humor, personal sharing, trust and going the extra mile. It was also acknowledged that the patients role in the nurse-patient interactions be studied in future. Peplau’s psychodynamic nursing theory could aid our understanding of the nature of nurse–patient interaction in terms of reciprocity by helping us understand communication patterns.

Another study which explored patient’s view of the nurse-patient interactions in terms of exclusion and confirmation among patients hospitalized (Drew, 1986). Exclusion meaning utter disregard for ones feelings especially by a significant other on whom one depends while confirmation is the acknowledgement of one’s feeling especially by a significant other. Interviews were conducted to the participants individually in whom they were required to describe a negative and a positive experience with the nursing staff. Experiences of patients regarding exclusion in their interaction with nurses in the hospital settings were characterized by caregivers responses which were cold emotionally avoided eye contact and hurried. Caregivers that are enthusiastic, energetic, made eye contact and physically relaxed as well as indulged the patients in personal sharing were characterized as confirmatory.

Drew’s (1986) study also shows that caregiver communication and behavior impacts on patient. Patients negatively affected by experiences of exclusion reported feeling like energy was being sapped and confirmatory experiences was described as energy infusing thus the effect this interaction could be either confirmatory or exclusionary and helpful or harmful. These findings are consistent with those of Plaas (2002) and Shattell (2002) who reported that patients sometimes experienced the hospital environment as somewhat disconfirming and disconnecting. In a phenomenological study of the outpatient health care environment, Plaas (2002) reported that patients reported feelings of being treated like objects. Studies of both in-patient and out-patient environments have findings which are consistent with those of Drew (1986).

Based on previous studies on deviant behaviors (Lemert, 1972), social labelling of patients and moral evaluation is well outlined in the literature (Jeffrey & Stockwell, 1984).

The labeling of patients affects patient care in the hospital environment. The label “non-compliant”, ‘difficult’ and ‘bad’ has been associated with ‘demanding, uncooperative, and ungrateful patients, these patients create a feeling of ineffectiveness in the caregivers (Finlay, 1997). Patients who are labeled as “difficult” are usually avoided by the nursing staff which results in nursing care that is poorly supportive (Carveth, 1995).

Breeze and Repper (1998) in a study that was ethnographic on the experiences of mental health patients using nine mental health nurses focus groups to study the perception of patients on their experience of care by examining the characteristics of patients they deemed to be difficult. The following characteristics were identified: does not respond to intervention, diagnosis of personality disorder, does not conform,
multiple and complex needs, disruptive and aggressive, long-term mental health problem, demanding (of staff, time or resources), (Breeze & Repper, 1998). Six patients who met the ‘criteria’ of the ‘difficult’ label were then interviewed. The researchers initially compiled a list of 17 patients, but the researcher encountered difficulty in interviewing them. Even the patients interviewed by the researchers were not easy to contact. For example, they had to visit one participant about four times just to explain the study and give consent. From their data analysis, Breeze and Reper (1998), findings included three main themes- nursing interventions, patient response and control. Patients reported feelings of little or no control over their treatment; they were being coerced into more appropriate behaviors in the opinion of the staff. The response of participants to this situation was anger and a struggle for control. The following were nursing interventions that were positive in nature-addressing the patient with respect, empathetic, holding normal and regular conversations with the client, a good nurse-patient relationship, enhancing patients control over their care, listening to and believing in the patient (Breeze & Repper, 1998). The participants expressed a desire to be respected and valued as a person which is consistent with the report of Plaas (2002).

Patient care-seeking communication

Studies on the activities of patients in the nurse-patient interactions are very few. An implicit assumption among many others is that the care giver is empowered to effect changes and influence the care giving situation (Russell, 1994). The few studies that addressed patient activity in terms of communications were contextually in pain management and care seeking of the elderly (Pettegrew & Turkat, 1986; McDonald et al., 2000, Russell 1994 & 1996).

Two empirical studies performed at a clinic in a university medical centre reported that clinic patients were some mailed measurement tools - Patient Communicator Style Measure (PCSM), Illness Behavior Inventory (IBI), and measure of the utilization of medical treatment. The PCSM measured the construct communication style i.e. how people communicate- found to be valid and reliable. It consists of nine sub constructs- open communication style, dominant communication style, contentious communication style, friendly communication style, relaxed communication style, attentive communication style, animated communication style precise communication style, and dramatic communication style. The illness behavior Inventory measures the way people communicate in illness and has the following sub-constructs- social illness behavior and work illness behavior (Pettegrew and Turkat 1986). They also reported in their second studying which they videotaped seven patient–provider interactions to differentiate the personal reports of the clients and an independent rater’s assessment. There was no significant difference found between patient self report and the independent raters assessment of communication behavior. Although there were no significant differences in the two groups statistically, it was noted that the patients who reported an assertive communication style were found to be inappropriate, uncooperative and contentious by the independent raters. How do patient communication variables affect the nurse–patient interaction and health outcomes? How does the power differential impact the interaction? How could the use of psychodynamic nursing theory impact the nurse–patient relationship, both in research and practice? Further study is warranted and as Pettegrew and Turkat (1986) aptly conclude, ‘patients may have a far greater impact on and responsibility to the health-care relationship than previous provider-patient research has revealed’.

Russell (1996) in another study on patient communication and care seeking behavior used semi-structured interviews and participant observation with older patients in a long-term care facility to examine the insight of the care-receivers’ into ‘successful care interactions’. It was found that elders used their previous experience
to manage future interactions with caregivers; he also described a care seeking process which consist of care eliciting and engaging. This process emerged from experiences with formal and informal caregivers as was developmental and sequential in nature (Russel 1994 & 1996). It will be appropriate to explore in depth the sequence of events that take place when patients seek care. Peplau’s theory of Psychodynamic nursing would be an appropriate framework for use.

**Discussion**

Peplau’s theory of psychodynamic nursing was reviewed to further our understanding of the interaction between nurses and patients. Threats to face may be greater in situations in which patients and nurses interact and vulnerability is threatened but when the nurse is attuned to self and the patient, this threat is removed, nurses frequently find themselves in a position to probe about intimate matters, in this situation, patients will be comfortable to discuss personal issues with them when the nurse engages personal sharing as a tool to probe. Patients in highly vulnerable crisis depend upon nurses for basic needs. Both of these situations are illustrations of common nurse–patient interactions where the potential for the patient’s loss of face (autonomy, self-esteem) is high hence the need for high level of psycho-dynamism. A better understanding of the nurse–patient relationship using the psycho-dynamism theory may ‘provide an alternative viewpoint for the social phenomena of interest to nursing within the construction of verbal conversation’ socially. (Donald & Watson, 1996, Spiers, 1998).

Studies on the nurse–patient interactions increased our knowledge on the pattern of communication nurses adopt in their interactions with patients, patients’ perception of the relationship and their interactions with nurses. Nurses were found to be favorably empowered and exercised some level of control on patients. The communication skills of nursing students did not improve with training and work experience related to nursing. Nurses steered clear of patients labeled as ‘bad’ or ‘difficult’ which causes a decline in the quality of care afforded them. Nurse–patient relationships are formed after a few interactions irrespective of how relatively short the duration is. Patients attached some level of importance to these relationships much more than other aspects of the nursing care. Patients required that nurses to be genuine, available, not in a hurry and willing to communicate with them. Patients emphasized on their valued and self respect as individuals believing that social interaction was paramount but would not be treated as objects.

**Implications for clinical practice**

Findings from this review have many implications especially for clinical practice. The interaction between nurses and patients influences the patient’s care experience therefore, it should be considered vigilantly. McDonald et al. (2000) in a study on patient pattern of communicating the need for analgesics post-operatively reported that some patients avoided or delayed communicating their needs as they do not want to be noted as always complaining. Do patients have patterned ways of communicating with nurses in an effort to manage their relationship? Do nurses pay enough attention to recognize the subtle ways in which patients air their needs?

Most of the literatures reviewed on the subject explored the communicative action of nurses thus ignoring the patient’s contributions (May, 1990). Although a greater percentage concurred that the interaction is central to nursing practice, a few studies addressed patients as equal partners in the interaction. Morse et al. (1997) asserted that there has been a form of deliberate ignoring of the patient’s behavior when nurses examine the nurse–patient relationship, a further research is therefore needed to examine the patient’s contribution to this relationship.
Majority of the studies reviewed that examined patient communication have used linguistic that is non-theoretical, communication that is based on content and orientation which leads to a limited understanding of the role the patient plays in nurse–patient interaction.

**Suggestions for further studies**

Further research questions remain: How do ill patients transmit information to nurses? How does the patient’s style of communication affect nurse–patient interaction and the outcome of healthcare, quality of care and patient satisfaction? Will greater satisfaction be derived from nursing care when patients use a dominant or assertive style of communication? What methods are the best to access the ‘difficult’ patient in the clinical environment and for research purposes? The literature reviewed in this paper has presented the existing research on nurse–patient interactions. Much about the patient’s contribution remains unknown. The use of Peplau’s Psychodynamic theory could help us narrow this gap.

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Extent of Community Participation in Prevention & Control of HIV/AIDS in Akpulu, Imo State, Nigeria

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Introduction and literature review

HIV/AIDS place a huge burden on the health and national development of Sub-Saharan nation and Nigeria is not left out. Apart from being a public health concern, it is a threat to national security, affecting and disturbing social and economic order as well as putting national survival at stake. The fight against AIDS has been given top priority by the Nigerian Government and a multi-sectoral approach to fight the problem. (United National AIDS Survey, 2008). Although various intervention programmes such as President Emergency Plan For AIDS Relief (PEPFAR), United State AIDS Intervention Programme to halt AIDS transmission, National Action Committee on AIDS (NACA) and the HIV/AIDS Emergency Action Plan developed in 2001 have been established to fight the spread of HIV/AIDS and regardless of the increase funding, political commitment and progress in expanding HIV/AIDS treatment, HIV/AIDS has output the global response.

According to USAID (2012) on global AIDS epidemic report, Nigerian represents about 50% of HIV infection worldwide having the largest number of people living with HIV with following statistics on HIV prevalence rate: among adult age (15-49 years) 3.1%; Adults and children living with HIV at the end of 2007 being 2.6 million; AIDS related deaths for both adult and children in 2007 as one hundred and seventy (170) and AIDS orphans were one hundred and twenty (120); with some states having as high as 12% while some as low as 1.2%. In some states (Benue, Imo, Delta etc) the epidemic is more concentrated and is driven by behaviour while others have been more generalized epidemics that are sustained primarily by multiple sexual partnerships in the general population, which is common in Nigeria youth and young adults with young women being at higher risk than men (USAID, 2012). In addition, the fight against HIV/AIDS has attracted much attention from the Nigerian Government and the importance of handling the problem in a multi-sectoral approach has been recognized. Participation of Non-Governmental agencies in AIDS control and prevention is encouraged. Community participation seems to be giving little or no attention. Rural areas have always been a major challenge for disease control world-wide, but involvement and active participation of communities have been identified as a key factor for success in rural communities (Opiyo, Mukabana, Kiche, Kotten, Mathenge, Killeen & Fillenger, 2007).

Community participation as defined by Vincent (2012) is the process by which individuals and families assume responsibilities for their own health and welfare and for those in the community. Community participation has helped development. By knowing the community better, community members are motivated towards solving their own problems because they will become agents (participants) of their own development. Akinlami, (2007) affirmed that there are certain ways through which individuals can participate in health care matters. Such ways include: providing labour, money or materials, and working along with government personnel among others.
A dual help in organization of health functional programmes like immunization, providing selected health care workers from the community, building health centres, cottage hospitals and health institutions, constructing roads and bridges to facilitate movement of health care personnel as well as communication, identifying real health care needs, planning, implementing and evaluating health programmes, participating in health decision making and the existence of effective mechanism for people to express demands and needs, preparing relevant information that will increase literacy and the development of the necessary institutional arrangements which will help individuals, families and communities assume responsibilities for their health and well-being, defining community health problems and priorities, contributing labour, finance and other resources, promoting self-reliance and social awareness and so on.

Cellhorn and Fulop (2007) outlined the advantages of community participation as: accomplishment in health maintenance and promotion; providing service at lower cost; participation has an intrinsic value for population groups; it is a catalyst for development efforts; participation leads to a sense of responsibility for a health project; guarantees that community felt needs are taken care of; ensures that things are done the right way; it uses indigenous knowledge and expertise; it is a starting point for con-scientization, as a result, primary health care strategies are based on effective community participation.

Akinlami (2007) noted that community participation in HIV/AIDS programme has been hampered by the following: lack of finance; community conflict; poor administrative framework; insufficient supply of skilled and experienced field workers and change agents; poor administrative resources; poor attitude of planners; administrators and community members towards self-help. Akinlami also emphasized that communities need to identify AIDS as a service health problem that needs utmost attention if they are to participate in partnership with Government, NGOs and community base organizations (CBOCs) in developing and implementing actions that will halt the spread of HIV/AIDS in the communities.

Vincent (2013) equally affirmed that communities have been seen as key factors to success of any disease control programme. Often community participation has been interpreted to mean mobilization for government resources of money, labour and materials for government planned and controlled programmes.

The organizations that can promote community participation include: The RED Cross; Save The Children Fund; Rotary Club; Oxford Committee For Famine Relief; Alcoholic Anonymous; Young Men Christian Association (YMCA); Boy’s Brigade; World Council of churches and United Nations Organization (Demehin, 2008) among others.

HIV/AIDS can be controlled and prevented at the grass root level; this can be done by considering the socio-economic and cultural contact of the community. Emphasis on community based strategies peculiar to the community must be made. In specific terms, communities can participate in the control of HIV/AIDS by creating awareness on HIV/AIDS, promoting control practices, AIDS treatment seeking behaviour and support; as well as care for AIDS victims. Success in any of these control programmes depend on a greater extent of community participation in HIV/AIDS prevention and control in Akpulu, Ideato North L.G.A, ImoState.

Research questions

Two research questions guided this study:

i. What is the extent of community participation in creating HIV/AIDS awareness in Akpulu?

ii. What is the extent of community participation in HIV/AIDS promoting control practices in Akpulu?
Methodology

The design adopted for the study was survey research design to examine the extent of community participation in HIV/AIDS prevention/control in Akpulu, Ideato North Local Government Area of Imo State. Ejifugha (2008) defined survey design as a research style of finding out the current status of a phenomenon from a population who should supply the required information and to whom the information is generalized. A sample survey is the fraction of population (Vincent, 2013). The researcher adopted the sample survey because it helps in obtaining relevant information about the issue being treated. Also Xiaohui&Yukai (2014) used survey research design to ascertain the effectiveness of school-based education on HIV/AIDS in India. This justified the use of similar design in a study of similar nature.

Accessible population of the study consisted of an estimated three thousand two hundred and thirty four (3234) adults from the four randomly drawn villages from the five (5) existing villages in Akpulu. Using the “rule of thumb” (Rick, 2006), the sample for the study consisted of three hundred and twenty three (323) adults i.e. 10% of the estimated population drawn from the four villages. Multi-stage which is a form of cluster sampling procedure was adopted for the study. During the first stage, four villages were drawn from the five existing villages through simple random sampling technique. By balloting with replacement, each of the villages was given equal opportunities of being drawn. In the second stage, sixteen kindred were selected, four kindred from each village. Then using cluster sampling, five families each was used in each of the four kindred of the study thus making a total of eighty families/houses from each village. Adults from the families were interviewed.

The main instrument for data collection was a structured interview schedule. The instrument was made up of two sections (A & B). Section A contained four patterned questions that answer the extent of community participation in creating awareness while Section B contained thirteen questions that expose the extent of community participation of HIV/AIDS in prevention and control. The questions were close ended and patterned into four (4) - point scale of very often, often, rarely and not at all. The point scale were ranged between (70-100) was rated high (69-50) moderate, (44-40) low, and below (40) very low. The data collected were analyzed manually using mean deviation. A mean score of below 2.5 was considered low extent, a mean score of 2.5 - 3.49 was considered moderate extent while a mean score of 3.5 and above were considered high extent.

A total number of 323 copies of the questionnaire were distributed a copy got lost and two were incorrectly filled which gave a return rate of 99.1%. Based on this return rate, the responses were tailed and put into frequency distribution tables and analyzed manually using mean deviation.

The presentation of result was organized using the research questions of the study.

Section A

What is the extent of community participation in creating HIV/AIDS awareness in Akpulu?

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEM</th>
<th>VERY OFTEN</th>
<th>OFTEN</th>
<th>RARELY</th>
<th>NOT AT ALL</th>
<th>MEAN DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mounting of billboards on the road</td>
<td>60</td>
<td>70</td>
<td>100</td>
<td>90</td>
<td>2.31</td>
</tr>
<tr>
<td></td>
<td>Mounting of posters in (a) Churches</td>
<td>84</td>
<td>77</td>
<td>80</td>
<td>79</td>
<td>2.51</td>
</tr>
</tbody>
</table>
Market places & Town union halls
Village halls

3. Use of local languages to create HIV/AIDS awareness for:
Market men & women
Age grade members
Town union members
Kindred members
Church members
Youth members
Village members

4. Use of resource persons to create awareness on HIV/AIDS in:
Town union meetings
Youth meetings
Church meetings
Kindred meetings
Village meetings

Grand Mean

Section B

What is the extent of community participation in HIV/AIDS promoting control practices in Akpulu?

<table>
<thead>
<tr>
<th>S/ITEM</th>
<th>VERY OFTEN</th>
<th>OFTEN</th>
<th>RARELY</th>
<th>NOT AT ALL</th>
<th>MEAN</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Advising unmarried member from premarital sexual</td>
<td>122</td>
<td>101</td>
<td>69</td>
<td>28</td>
<td>2.99</td>
<td>Moderate</td>
</tr>
<tr>
<td>Activity</td>
<td>Percentage 1</td>
<td>Percentage 2</td>
<td>Percentage 3</td>
<td>Percentage 4</td>
<td>Score</td>
<td>Rating</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>2. Advising married adults from extra marital sexual activities</td>
<td>64</td>
<td>61</td>
<td>98</td>
<td>97</td>
<td>2.29</td>
<td>Low</td>
</tr>
<tr>
<td>3. Emphasizing abstinence from sexual intercourse</td>
<td>40</td>
<td>60</td>
<td>120</td>
<td>100</td>
<td>2.13</td>
<td>Low</td>
</tr>
<tr>
<td>4. Advising members to avoid unprotected sex</td>
<td>18</td>
<td>51</td>
<td>126</td>
<td>125</td>
<td>1.88</td>
<td>Low</td>
</tr>
<tr>
<td>5. Advising members especially youths to avoid seductive environment</td>
<td>20</td>
<td>45</td>
<td>125</td>
<td>130</td>
<td>1.86</td>
<td>Low</td>
</tr>
<tr>
<td>6. Encouraging members with HIV/AIDS to go for treatment</td>
<td>68</td>
<td>58</td>
<td>97</td>
<td>100</td>
<td>2.28</td>
<td>Low</td>
</tr>
<tr>
<td>7. Emphasis on consistence use of condom</td>
<td>40</td>
<td>62</td>
<td>108</td>
<td>110</td>
<td>2.10</td>
<td>Low</td>
</tr>
<tr>
<td>8. Insisting that members go for HIV/AIDS voluntary counseling and testing</td>
<td>28</td>
<td>75</td>
<td>110</td>
<td>107</td>
<td>2.17</td>
<td>Low</td>
</tr>
<tr>
<td>9. Advising members to accept only screened blood</td>
<td>40</td>
<td>60</td>
<td>101</td>
<td>119</td>
<td>2.07</td>
<td>Low</td>
</tr>
<tr>
<td>10. Advising members to desist from sharing skin piercing objects like razor blade, needles etc.</td>
<td>50</td>
<td>60</td>
<td>101</td>
<td>109</td>
<td>2.16</td>
<td>Low</td>
</tr>
</tbody>
</table>
Research Question 1 sought to ascertain the extent of community participation in creating HIV/AIDS awareness in Akpulu? Result from table 1 reviewed that the awareness is low in grand mean with a mean score of 2.25. The table shows moderate community participation in mounting of posters in churches, use of local languages to create HIV/AIDS awareness for church members, youth members and village members. The table also shows moderate community participation in use of resource person to create awareness on HIV/AIDS in church meetings. The table shows low community participation in mounting of billboards on the road, mounting of posters in market places, town union halls and village halls. Use of local languages to create HIV/AIDS awareness was low for market men and women, age grade members, town union members and kindred members. Also use of resource person to create awareness on HIV/AIDS was low in town union meetings, youth meetings, kindred meetings and village meetings. It is a welcome development that the community members can participate through use of local languages to create awareness for church members, youths and village gathering. This could be so because most CBOs target youths meeting, churches and village gatherings in HIV/AIDS awareness programme. Also National Action Committee on AIDS (NACA), 2006 conducted a study on effective practices in getting religious community committed and involved in the fight against HIV/AIDS in Umuahia, Abia State, Nigeria. The study turned out to be effective breakthrough as most church members became aware of HIV/AIDS. The findings of this study especially on moderate community participation in churches could be as a result of mandatory testing of HIV/AIDS to all intending couples before sacrament of marriage could be performed by the church leaders. Also community leaders could easily reach out to community members in churches, youth meetings and village gathering than any other place. The community members may consider that market may not be adequate to create awareness. Use of billboards and posters are effective tools of sending messages across. Fortunately, youth meetings are not
neglected in the target group area of community participation in AIDS awareness. This may likely be because this is a vulnerable group that needs HIV/AIDS awareness programme of their sexual activities.

For any community participation disease control programme to be successful and effective their awareness level must be high (Osoba, 2008 and Roodie, 2008). There is need for the community to have clear understanding of their health problem if effective community participation could be achieved.

Research Question 2 sought to ascertain the extent of community participation in preventing/controlling HIV/AIDS practices? Table 2 reveals that community participation in HIV/AIDS prevention and control is generally low with a grand mean score of 2.11. The table shows moderate participation for control of HIV/AIDS only on advising unmarried members from premarital sexual activities. There was absolute low participation on control/prevention of HIV/AIDS on placing laws against alcohol and drug use which contribute to HIV/AIDS high risk behaviour, advising members to avoid unprotected sex and minimizing disco parties which catalyze sexual activities. Low participation was also on insisting for periodic HIV/AIDS voluntary counseling and testing, advising members to desist from sharing skin piercing objects (like razor blade, needles etc), placing laws against female circumcision, scarification and tattooing. There was no emphasis on consistency use of condoms and abstinence from extra marital sexual activities. Community does not encourage infected members to seek for medical help through the use of antiretroviral drug therapy.

This does not go well for HIV/AIDS control. When individuals are not aware that they are HIV positive, control and prevention practices are jeopardize. Since they do not know they are positive and are thus unaware they are likely to transmit the virus to others. In the absence of an increase in HIV testing up-date, HIV infected persons would only become aware of their status when they become symptomatic, which can limit the potential benefit of antiretroviral treatment (UNAIDS, 2012).

If the community does not encourage positive treatment seeking behaviour of infected members, there is risk of infecting other members as well as shortening their lives. Antiretroviral drugs therapy is believed to improve general health and quality of life of HIV positive victims as well as increase survival time by between 4 and 12 years (Idu&Obinna, 2008). Antiretroviral drugs are free in Owerri, Imo State of Nigeria in Government hospitals. However, some of these centres are far from the rural communities (Akpulu). Community levels need to be more actively involved in treatment emphasizing abstinence, avoid sexual marital sex, multiple sex partners, delay in sexual debut as correct and consistent use of condom are the key behaviours that can present or reduce the likelihood of sexual transmission of HIV/AIDS. Low community participation in the area of avoiding seductive environment, seductive communication, and making laws against alcohol and drug use, female circumcision, tattooing, scarification as well as disco parties will increase spread of HIV/AIDS in the community. Bandura (2007) opined that alcohol, and drug use is creating a lot of problem in the environment in terms of sexual activities. If there are no sanctions or control on these activities particularly among youths, community effort in HIV/AIDS prevention may be jeopardized. Community participation in prevention/control practices must address these socio-cultural and environmental characteristics that may prevent individuals from HIV/AIDS infection. There is absolute need for positive action to check socio-cultural forms that might heighten the risk behaviours that expose the people to HIV/AIDS.

Conclusions

Based on the result, it was observed that the extent of community participation on HIV/AIDS awareness was low with a mean score of 2.25. Creation of awareness on HIV/AIDS by the community were low on mounting of billboards, posters in market
places, town unions and village halls also in the use of local languages in reaching market men and women, age grades, town unions and kindred members. Community participation in HIV/AIDS prevention/control is generally low with a mean score of 2.11. Community participation was only moderate on advising unmarried members from premarital sexual affairs. There was absolutely no emphasis on the use of protective device (condom) for sexual intercourse, HIV/AIDS voluntary counseling and testing and antiretroviral drug therapy for infected members.

**Recommendations**

Based on the findings the following recommendations were made:
1. There is need for Local, State and Federal Government to strengthen community actions by providing fund and technical support vis-à-vis sponsoring media programmes aimed at educating the general public on the ways of preventing and control of HIV/AIDS.
2. Communities should come up with measures to control certain socio-cultural norms that predispose the people to high risk behaviours.
3. The communities, NGO’s, CBO’s and Government should target HIV/AIDS awareness and preventive programmes for unmarried members in the rural communities.
4. Empowerment programmes for People Living With HIV/AIDS (PLWHA) should be initiated in the communities with the help of community leaders.
5. Communities should encourage voluntary counseling and testing of every member of the community.
6. During August meeting, community members should organize health educators to sensitize and enlighten parents on the prevention/control of HIV/AIDS through talks and inter-active sessions.

**References**


Effective Implementation of Rehabilitation Therapy for In-Patients of Federal Psychiatric Hospital, Calabar

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Abstract

The study was carried out to examine effective implementation of rehabilitation therapy for in-patients of Federal Psychiatric Hospital, Calabar, Cross River State of Nigeria. Four objectives and four research questions were formulated to guide the study. Ex-post facto research design was used for the study. The population of study comprised of 150 in-patients in Federal Psychiatric Hospital, Calabar, Cross River State, Nigeria. Simple random sampling technique was used to select 50 stable in-mates for this study. An instrument titled "Effectiveness of Implementation of Rehabilitation Therapy for in-patients of Federal Psychiatric Hospital Calabar", was used for data collection. Simple percentages, mean, standard deviation and r-value of Pearson Product Moment Correlation were used for answering the research questions, the result of the study revealed that there are few rehabilitation programmes available for the patients. The result also revealed that the patients have positive attitude towards the rehabilitation programmes. The result further revealed that parent's level of involvement in the rehabilitation programme is low. And lastly, the result revealed that there is a relationship between instructors' qualification and effective implementation of the rehabilitation therapy. Based on the findings, it was concluded that rehabilitation programmes are effectively implemented in the Federal Psychiatric Hospital Calabar, Nigeria. It was recommended among other things that more rehabilitation programmes should be introduced into the hospital, this will help to meet the needs of the various patients.

Keywords: Rehabilitation, Psychiatry, Institutionalization, Effectiveness, Psychosomatic, Implementation, Preponderant

Introduction

Psychiatry illness was believed to be an irreversible disorder where sufferers are never expected to be useful or productive to self and society. Obviously most psychiatric patients are dependents, irresponsible, unproductive and problematic to environments. Most families exclude them from others and when sharing rights; theirs may be allotted to a third party who may, or may not deliver to them. This is not peculiar in all psychiatric cases especially where the dysfunction does not cause a permanent brain damage and the psycho-somatic apparatus are active and intact. The concept of Rehabilitation is a way of helping an inflicted, injured or ill patient to resume self activity, regain independence and mobility. It is a recovery approach to guide someone attains self effort. Ikpeme, E. (2015) declares that the hospital rehabilitation is very useful to every patients referred to the centre, even to out patients from out side visiting to acquire vocational/skill acquisition and job placement.

Psychiatric disorder is of varying degree depending on age of onset and cerebral involvement. Mental illness occurring at adolescence when learning and memory centre was established can not render subject useless in life. The problem of institutionalization which emanates from long stay, separates patients from socialization, work opportunities and recent life styles. This is worsened by stigmatization and prejudice of being a psychiatric and good for nothing. living, work and re-function in his choiced social environment--PRA (2015). Rehabilitation service
is delivered so as to provide hope for hopeless patients. Here recovering clients obtain their lost regard of worthiness as he’ll be taught to develop his wellness plans. From regular rehabilitation, his lost social network will be re-established while concerned relations will be permitted to visit him. Here activities like recreation, exchange of pleasantries, verbal interactions and discussions are permitted for exchange of ideas.

At the rehabilitation unit, patients are measured with Activity Therapy Evaluation (ATE) and Compulsive Occupational Therapy Evaluation Scale (COTE) for occupational diagnosis. E. Ikpeme (2015) explained that individualized treatment plan would be created for each patient after this assessment, giving room for prescribed activity best for each patient. Activities at psychiatric had progressed from era of entertainment, praise band and special numbers. Activities are now administered professionally by artisans to meet their dysfunctional areas.

**Statement of problems**

A whole lot of obscurity prevails over effectiveness of psychiatry rehabilitation in Calabar Psychiatry Hospital. Patients still goes on with idleness and laxity after several sessions with the therapist.

There is no sign of improvement in the learning facilities met since 2000 till now and most facilities are in dilapidated state. Ikpeme, E. (2015) expressed that the centre obtains no grant, subvention nor support from the hospital, State Government, Federal Government, or Non Governmental Organizations and Philanthropies. This supports the view from Babatunde, V. (2015), that there not enough facility in the centre, and the available facilities and service is below standard. This reveals that patient have been going on to relax in the hall till their time elapse while staff paid no heed to ensure learning and skill acquisition is impacted. Some staff might not surface on duty as they have no personal attachment to any of the patient.

When patients are granted trial leave, relatives only border on how to settle hospital bills. Patient's acquisition in rehabilitation therapy is not conveyed to the family for follow up and trade establishment. When patients fall back to recidivism and relapsed mental state the society will not trace blame to idleness but to any other precipitating factor.

Based on above facts it reveals that the rehabilitating service of Federal Psychiatric Hospital is useless. This prompts the researcher to investigate on the effectiveness of rehabilitation therapy on the in-mates of Calabar Psychiatric Hospital.

**Objectives of the study**

The purpose of this study is to assess the effectiveness of the ongoing rehabilitation program in Federal Psychiatric Hospital Calabar, its usefulness to patients and possible ways of improving the program. Specific objectives of the study are:

1. To determine the different types of rehabilitation therapy present in Federal Psychiatric Hospital, Calabar
2. To evaluate the patient's attitude towards the rehabilitation therapy
3. To determine the level of involvement of the patients family towards the rehabilitation programmes
4. To determine relationship between instructors qualification and effective implementation of the rehabilitation therapy

**Research questions**

1. What is the different rehabilitation therapies present in Federal Psychiatric Hospital, Calabar?
2. What is the attitude of patients toward the rehabilitation therapy?
3. What is the level of involvement of patients' family towards the rehabilitation programmes?
4. What relationship exists between instructors' qualification and effective implementation of the rehabilitation therapy?

Significant of the study

Despite the preponderant view that psychiatry prognosis is ever un-productivity; it is not entirely true, and should not be allowed same. It's for the reason of disapproving that view that such program was introduced in psychiatry to rebuild lost abilities which were destroyed at the psychotic phase.

This study will direct on what to do about repairs, refurbishment, installation and replacement of aged machines and facilities to encourage patients the delight, desire and interest in our psychiatric rehabilitation; rather than feel there's nothing important going on there. Other unemployed youths finding where to belong in the society may be attracted down the centre to learn one trade or the order, yielding credit and interest to the hospital management.

The staff of our psychiatric rehabilitation would be more encouraged, retrained and empowered to be serious and put in their most for patients to be interested in their learning. The management at the hemp would have a footing to approach Federal and State Government, agencies and organizations on our rehabilitation refurbishment, in giving grants and supports to help the in-mates.

This solution will also provide outlet for further research study.

Theoretical framework

Theoretical framework of this study is community support theory; which links integration and community integration, psychosocial and rehabilitation theories.

Racino, J. (1999), supported the community support theory of involving total participation of every body in their community life; where disabled, psychiatric and the normal are important and should be merged together in formation of any great nation. Erickson in his psychosocial theory posited of the 8 essential stages of developments which every human undergoes, and along this cadre he learns new challenges involved in each stage. Clare Ovey (2013) stresses the need of re-integrating a convicted and unwanted fellow back to community in her rehabilitation theory. Hence every body is useful; society should not deride their citizen but help each other, and with love and peaceful co-existence one can learn from his errors and amend his ways for a fruitful relationship.

Literature review

Wikipedia—free encyclopedia regards psychiatry rehabilitation like psychosocial rehabilitation or psych rehab; as a program of restoring to community functioning and well-being of a person who was diagnosed as mental or emotionally sick with psychiatric disabilities. From antiquity when King Nebuchadnezzar became insane and was driven out from among men to the bush to eat herbs like beast—Daniel 4:32, the fulfilment of time came when his senses returned he was sought by his Counsellors and Lords who rehabilitated him and restored him back to his throne—Daniel 4:36. Rehabilitation therapy commences after pharmacologic treatment and mental stability is established. It involves physical participation, independent living, skill training, psychological support of patient and family, vocational rehabilitation and employment--Psychosocial Rehabilitation Services (2015). Core principles of effective psychiatric rehabilitation (how services are delivered) must include: providing hope when the client lacks it, respect for the client wherever they are in the recovery process, empowering the client, teaching the client wellness planning, and
emphasizing the importance for the client to develop social support networks--
PSR/RPS (2014).

Babatunde, Victor (2015) said that the available and accessible psychiatry rehabilitation involves indoor games, physical exercise and vocational activities like weaving, tailoring, barbing and craft work.

Anthony W. Cohen M. Farkas M, et al. (2002) confirmed that the goal of psychiatric rehabilitation is to help individuals with persistent and serious mental illness to develop the emotional, social and intellectual skills needed to live, learn and work in the community with the least amount of professional support

PSR/RPS (2014) further states the type of services delivered depends on provider's ability; and these includes: Psychiatric (symptom management; relaxation, meditation and massage; support groups and in-home assistance), Health and Medical (maintaining consistency of care; family physician and mental health counselling), Housing (safe environments; supported housing; community residential services; group homes; apartment living) and Basic Living Skills (personal hygiene or personal care, preparing and sharing meals, home and travel safety and skills, goal and life planning, chores and group decision making, shopping and appointments), Social (relationships, recreational and hobby, family and friends, housemates and boundaries, communications & community integration), Vocational and/or Educational (vocational planning, transportation assistance to employment, preparation programs (e.g., calculators), GED classes, televised education, coping skills, motivation), Financial (personal budget), planning for own apartment (start up funds, security deposit), household grocery; social security disability; banking accounts (savings or travel), and Community and Legal (resources; health insurance, community recreation, memberships, legal aid society, homeownership agencies, community colleges, houses of worship, ethnic activities and clubs; employment presentations; hobby clubs; special interest stores; summer city schedules).

RCPsy. (2013), said rehabilitation is ability to restore to previous capacity, restore previous rights and prepares a subject to resume normalcy after mental illness, even to assume former status. People who are unable to cope with their daily activities or interact with others could do well to regain their independence and confidence through rehabilitation. It further revealed that rehabilitation team comprises Nurses, Psychologists, Psychiatrists, Occupational therapists and Social workers. Patients in need of rehabilitation are diagnosed schizophrenics, bipolar disorders and the schizoaffective. These have problems in organizing and planning their daily activities, hearing hallucination with communicative disabilities, they suffer people’s condemnation, could not be easily understood by others, and were using alcohol with street drugs. Also recommended for rehabilitation are those with minimal medication effect in their system, and whose illness have hampered their concentration, interest and self coordination, clients with anxiety and depression, and those struggling to manage their daily activities.

Delimitation of study

The study is delimited to five variables: different type of rehabilitation on patients of Federal Psychiatric hospital, Calabar, attitude of patients toward rehabilitation therapy, level of involvement of patient’s family towards the rehabilitation programmes, and instructors’ qualification and effective implementation of rehabilitation therapy. It is also delimited to only the stable in-patients in Federal Psychiatric Hospital, Calabar.
Limitation of the study

The study was hindered by patient’s unwillingness to co-operate, which was overcome with thorough explanation of the relevance of the study to them.

Research method

This section is concerned with the method used for carrying out the study. It is organized under the following sub-headings: research design, area of the study, population of the study, sampling and sampling technique, research instrumentation, and validation of instrument, reliability of the instrument, research procedure and method of data analysis.

Research design

The ex-post facto research design was used for the study. This design was considered suitable for the study because the variables under investigation had presumably occurred and could not be experimentally manipulated in the process of the study.

Area of study

The study was conducted at Calabar, the capital city of Cross River State of Nigeria. The city is divided into two major local governments: Calabar Municipality and Calabar South Local Government Area. It served as the first Nigerian seat of government, blessed with Sea port, Airport, integrated stadium and an Export Free Zone where international commercial activity booms. Calabar is also blessed with Teaching Hospital, General Hospital, and Specialist Hospital, Health Centres and Primary Health Centres which takes care of healthcare delivery of the inhabitants.

Population of study

The population of study is the number of all in-mates of the hospital, which numbers 150 patients from ward 1 to 7—(OPC/FPHC).

Sampling and sampling technique

The 50 stable patients used for this study were randomly picked from the four acute wards as they passed through the hospital rehabilitation centre for their rehabilitation learning.

Research instrumentation

An instrument titled “effectiveness of implementation of rehabilitation therapy for in-patients” was the instrument used for data collection. It consisted of 32 items expressed in check list and Likert format to measure the variables of the study.

Validation of instrument

The validity of the instrument was established using face validation method. This was done by giving copies of the instruments which initially consisted of 48 items to three experts to check if the items in the instrument appropriately measure the variables they were supposed to measure. Based on the observations, corrections and comments made by the experts, most of the items were either modified or deleted leaving only 32 items which made up the final version of the instrument. In this way, face validation was established for the instrument.

Reliability of the instrument

In order to establish reliability estimate for the instrument is was administered to 20 in-mates who were drawn from area of study were not to be included in the main study. The scores obtained were subjected to internal consistency methods using
Cronbach Alpha Analysis, a reliability estimate of 0.801 was obtained for the instrument.

**Administration of instrument**

The researcher personally visited these acute wards and obtained permission from their ward charges. He administered the instrument to the selected stable in-mates with the help of the duty Nursing Officer. The respondents were asked to be sincere in their responses as the data sought will be kept confidential and will only serve the purpose of this research.

**Method of data analysis**

Simple percentages will be used for answering research questions one, two and three while mean, standard deviation and r-value will be used for answering research question four. In taking decision, r-value between 0.1 to 0.39 is low; between 0.40 to 0.59 is average while between 0.60 to 0.99 is regarded as high relationship.

**Data analysis and results**

The results obtained are analysed in the light of the research questions formulated to guide the study

**Research question one**

What are the different rehabilitation therapies present in Federal Psychiatric Hospital, Calabar? Simple percentage was used to answer this research question. The result of the analysis is as presented in table 1.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Rehabilitation Programmes</th>
<th>Available Freq</th>
<th>Available %</th>
<th>Not available Freq</th>
<th>Not available %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Moulding work</td>
<td>50</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Tailoring</td>
<td>50</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Designing</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Carpentry</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Laundering</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Knitting</td>
<td>22</td>
<td>44</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>7</td>
<td>Catering</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>Weaving</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>Hairdressing/barbing</td>
<td>41</td>
<td>82</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>10</td>
<td>Carpentry</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>ICT</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>12</td>
<td>Art Work</td>
<td>50</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The result in the above Table 1 revealed that all the 50 respondents representing 100% indicated that moulding work, tailoring and artwork are available in the hospital. The result also revealed that 50 respondents representing 100% indicated that designing, carpentry; laundering, catering, weaving, carpeting and ICT programmes are not available in the hospital. The result further showed that 22 respondents representing 44% indicated that knitting is carried out by the patients in the hospitals while 28 respondents representing 56% indicated otherwise. And lastly, the result revealed that 41 respondents representing 82% indicated that hairdressing/barbing is available while 9 respondents representing 18% indicated otherwise. This therefore implies that the types of rehabilitation programmes available for the patients of psychiatric hospital Calabar, Nigeria includes moulding work, tailoring and artwork, knitting and hairdressing/barbing. The implication of these findings is that there are only few rehabilitation programmes available for the
patients; hence there is need for more programmes to be introduced so as to make varied skills available for the patients.

**Research question two**

What is the attitude of patients toward the rehabilitation therapy? Simple percentage was used to answer this research question. The result of the analysis is as presented in table 2.

**Table 2.** Responses of the patients on the attitude of patients toward the rehabilitation therapy available in the hospital

<table>
<thead>
<tr>
<th>S/N</th>
<th>Attitude of patients towards the programme</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>I have an interest in the hospital rehabilitation programmes</td>
<td>45</td>
<td>90</td>
<td>5</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>I am doing well in my desired rehabilitation activity</td>
<td>12</td>
<td>24</td>
<td>21</td>
<td>42</td>
<td>13</td>
</tr>
<tr>
<td>15</td>
<td>I am always excited during training sessions</td>
<td>36</td>
<td>72</td>
<td>12</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>I really enjoy the programme</td>
<td>32</td>
<td>64</td>
<td>15</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>I will develop on what I have learnt at home</td>
<td>28</td>
<td>56</td>
<td>10</td>
<td>20</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2 shows that 45 respondents representing 90% of the respondents strongly agreed that they have interest in the hospital rehabilitation programmes while 5 respondents representing 10% agreed and none of the respondents disagreed or strongly disagreed. The table also shows that 12 respondents representing 24% of the respondents strongly agreed that they are doing well in their desired rehabilitation programmes, 21 respondents representing 42% agreed whereas 13 respondents representing 26 disagreed and 4 respondents representing 8% strongly disagreed.

The table further revealed that 36 respondents representing 72% strongly agreed that they are always excited during training sessions, while 12 respondents representing 24% agreed; only 2 respondents representing 4% disagreed and none strongly disagreed. The table also shows that 32 respondents representing 64% strongly agreed that they enjoy the programme, 15 respondents representing 30% agreed, 2 respondents representing 4% disagreed and 1 respondent representing 2% strongly disagreed. And lastly, the table shows that 28 respondents representing 56% strongly agreed that they will develop on what they have learnt, 10 respondents representing 20% agreed while 5 respondents representing 10% disagreed and 7 respondents representing 14% strongly disagreed. This result implies that the patients have positive attitude towards the rehabilitation programmes.
Research question three

What is the level of involvement of patients’ family towards the rehabilitation programmes? Simple percentage was used to answer this research question. The result of the analysis is as presented in table 3.

Table 3. Responses of the patients on the level of involvement of patients’ family toward the rehabilitation programmes

<table>
<thead>
<tr>
<th>S/N</th>
<th>Involvement of patients family</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
</tr>
<tr>
<td>18</td>
<td>My parents are aware of the hospital rehabilitation programmes</td>
<td>50</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>My parents promise to provide required tools and operating shop for me when I get home</td>
<td>8</td>
<td>16</td>
<td>14</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>20</td>
<td>My relatives advice me to be attending and partaking in the hospital rehabilitation</td>
<td>50</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>My relatives promise my further training</td>
<td>10</td>
<td>20</td>
<td>15</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>22</td>
<td>My relatives appreciates my progress in the programme</td>
<td>17</td>
<td>34</td>
<td>18</td>
<td>36</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3 shows that 50 respondents representing 100% of the respondents strongly agreed that their parents are aware of the hospital rehabilitation programmes. The table also revealed that 8 respondents representing 16% of the respondents strongly agreed that their parents promise to provide required tools and operating shop for them when they get home, while 14 respondents representing 28% agreed, 25 respondents representing 50% disagreed and 3 respondents representing 6% strongly agreed. The table further showed that 50 respondents representing 100% of the respondents strongly agreed that their relatives advice them to be attending and partaking in the programme. The table also showed that 10 respondents representing 20 % strongly agreed that their relatives promise them further training, 15 respondents representing 30% agreed while 22 respondents representing 44% disagreed and 3 respondents representing 6% strongly disagreed. And lastly, the table shows that 17 respondents representing 34% strongly agreed that their relatives appreciates their
progress in the programme,, 18 respondents representing 36% agreed, while 5 respondents representing 10% disagreed and 10 respondents representing 20 % strongly disagreed. This result implies that parent’s level of involvement in the rehabilitation programme is low.

**Research question four**

What relationship exists between instructors’ qualification and effective implementation of the rehabilitation therapy? Mean standard deviation and r-value of Pearson Product Moment Correlation was used to answer this research question. The result of the analysis is as presented in the table below:

**Table 4.** Mean, standard deviation and r-value of the relationship between instructors’ qualification and effective implementation of the rehabilitation therapy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>r-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructors’ qualification</td>
<td>16.56</td>
<td>2.34</td>
<td>0.713</td>
</tr>
<tr>
<td>effective implementation of the rehabilitation therapy</td>
<td>17.04</td>
<td>4.35</td>
<td></td>
</tr>
</tbody>
</table>

The result in the table above revealed that the r-value of 0.713 is greater than 0.55 which is regarded as average relationship. This means that there is a relationship between instructors’ qualification and effective implementation of the rehabilitation therapy.

**Summary of the results**

The findings of the study are summarised below:

1. There are few rehabilitation programmes available for the patients
2. The patients have positive attitude towards the rehabilitation programmes.
3. Parent’s level of involvement in the rehabilitation programme is low.
4. There is a relationship between instructors’ qualification and effective implementation of the rehabilitation therapy

**Discussion of findings**

The result of the first research question revealed that there are few rehabilitation programmes (moulding work, tailoring and artwork, knitting and hairdressing/barbing) that are available for patients in the hospital. The few rehabilitation programmes may be the reason why parent’s involvement in the programme to be low. This is because the few programmes available may not appeal to parents as they may wish their patients to engage in other programmes other than the ones that are available.

Hence, rehabilitation programmes for the patients should be one that is able to provide every type of educational opportunity, experience or sound reasoning that may be of interest or benefit to their family member.

The result of the second research question revealed that the patients have positive attitude towards the rehabilitation programmes. This finding is possible because the patients are always looking for opportunities to leave the wards such that any such opportunity will keep them excited. Once again to make the programme more interesting to them, more programmes should be introduced so that it will meet the needs of the patients.

The result of the third research question revealed that parent’s level of involvement in the rehabilitation programme is low. The reason that may give rise to this result could be that since the programmes available are few, the parents may not find them relevant and beneficial to their patients. The implication of this finding therefore, is
that efforts should be intensified towards diversifying the programmes and providing appropriate guidance to the patients in choosing courses that are related to them.

The result of the last research question revealed that there is a relationship between instructors’ qualification and effective implementation of the rehabilitation therapy. The result is not surprising since almost all the instructors have undergone training in their areas of skills and as such they have the skills needed to facilitate their teaching.

**Conclusion**

Based on the findings of the study, it was concluded that rehabilitation programmes are effectively implemented in the Federal Psychiatric Hospital Calabar, Nigeria.

**Recommendations**

The following recommendations were made:
1. More rehabilitation programmes should be introduced into the hospital, this will help to meet the needs of the various patients
2. Social education and not just vocational education should be introduced as part of the rehabilitation programmes for patients. This social education should include courses in psychology and sociology for the readjustment of patient’s thought.
3. The government through the media should create awareness to the parents on the importance of the rehabilitation programmes towards the recovery and functioning of the patients.
4. More qualified instructors and equipment should be made available to ensure effective implementation of the programme.

**Reference**

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Self-Image and Workplace Relations

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Abstract

The article outlines the effects transformational leaders impart among their followers. The outcomes inspired and aligned values obtained along with those of the organization. The purpose of the article, to give correct data on how transformational leadership affects self and personal outcomes; the need for personal advances, increased job satisfaction and both interpersonal and social relations. The article analyzed self-image and its impact on relations in the workplace. The last section reviewed recent advances related to the topic. The literature reviewed provided definitions of key terms. Many subsections, headings used to guide the reading process.

Keywords: self-image, self-concept, human relations, interpersonal skills, leadership

Self-image and its impact on relations in the workplace

The first part of the article critically analyzed self-image and its impact on relations in the workplace. The last aspect dealt with recent advances related to the topic. Many subsections with headings used to guide the reading process.

The literature review provided definition for key words. The article carefully evaluated and critiqued on its objectivity, authority, accuracy and theories relevant to the area of study. The major focus on transformational leadership discusses how leadership style affected followers on meeting their desired goals.

The analogy on transformational leadership and self-efficacy theory discussed. The use point method employed aided in outlining on how self-image impacted on relations in the workplace.

Review of literature

Every organization continues to develop as well as an increase in the services of their customers. Relationships are now more important than the real product. Employees must not only able to get along with customers, but ably project a positive image of the organization they represent. One source of literature defined self-image environment as the belief that one can carry out scrupulous behavior to meet a desired goal related to one’s health in the healthcare environment. Additionally, self-image is one’s perception of their skills and uniqueness (Pastorino & Doyle, 2013). Another source of literature clearly outlined Carl Rogers and Abraham Maslow two humanistic psychologist as the first two people develop the concepts of self. Moreover, “healthy people psychologically enthused move away from task created by others’ prospect and look within themselves for justification. On the other hand, people who were afraid to accept their own experiences as applicable, change them to protect themselves or to win others approval”(Pastorino, 2013).

The self-categorization theory developed by John Turner stated that self-concept consisted of two levels, a personal identity and a social one. In other words, one’s self-evaluation relies on self perceptions and on how others perceive them (Guimond, Serge; Chataet al 2013).

Another article described human relations as an interdisciplinary field. This field of study entails human behavior in an organizational setting which involved communications, management, psychology and sociology. Both profit and nonprofit organizations defined human relations as fitting people into work situations. The literature further attested this strategy helps to
motivate employees to work together in harmony. The course of action allowed for higher levels of organizational achievements and productivity, and had brought to employees economics, psychology and social satisfaction. However, human relations cover all aspects of interactions among people and their conflicts, as a cooperative efforts and group relationships (Encyclopedia of Business, 2007).

One of the most significant developments in recent years had been the increased importance of interpersonal skills in every job setting. Many employers believe interpersonal skills represent an important group of transferable skills that any worker ought to bring to the job. Technical abilities only are not enough to make career success the literature asserted. Studies indicated that many people who had met difficulties in obtaining or holding a job have the needed technical competencies, but lack of interpersonal competencies (Encyclopedia of Business, 2007).

Nemov (1998) described leadership as a shining and fascinating phenomena that arose in the course of human relations. According to the author interpersonal relation seen as part of human nature and a need in communicating. One author affirmed, the major principle of transformational leadership theory allows leaders to encourage their followers to do more than what planned. The form of leadership allowed to idealized influence, inspirational motivation, intellectual stimulation and personal consideration (Krishnan, 2005).

**Article summary**

Psychological perspective viewed the self as ‘holism’, an individual’s behavior connected to people inner-feelings and self-image. Moreover, each person is unique, has the free will to change at any given time throughout their life span. Everyone is responsible for his or her own happiness and well-being, more so, has an innate capacity for actualization. Each person experience is personalized.

Human relation an interdisciplinary field and the images portrayed in the working environment significantly has an impact on both profit and nonprofit organizations. The hypothesis formed the basis for improving self-image and its relations in the healthcare environment. The literature provided on transformational leadership theory imparted positive linked to different outcomes in organizations. Convincingly, transformational leaders influenced employees’ behavior, improve relations and contributed to the changing trends in the workplace.

Transformational leadership has associated with personal outcomes. Therefore, the article provides detailed information on self-image, relationships and how these factors affected the workplace. The facts made available readily used to improve self-image and workplace relationships. “Leaders are the ones who motivate followers to do more than what initially expected to do. Also, leaders urge followers to go beyond self-interest for the good of self, team or organization” (Bass, 1995).

**Article structure**

The article specifically outlined the point of view; the effects transformational leaders imparts on their followers. The effects inspired morals and helped to align the values obtained with those of the organization. The goals of the article- to give defined evidence how transformational leadership affects the self-image and personal outcomes; and allowed for personal progress, improved job satisfaction and improved both interpersonal and social relations.

Each topic sentence identified by headings, short paragraphs and evidently stated. However, no specific studies conducted. Previous studies had documented importance connections between transformational leadership and organizational operation. The literature provided contained conventional information about the study and defined key terms. Background information underpins how employees’ behavior influenced by transformational leaders and the positive impression on the working environment.
Method and data collection were not present, tables used for evaluation of technique, test self-categorization and personal outcomes. The synopsis showed positive effects and personal outcomes of earlier studies. Proposal made for added research. Hence, empirical research related to the results will give better approach into theory development related to organizational behavior and the direct connection between transformational leadership. Also, further study could investigate possible mediators of transformational leadership and personal behavior. References cited in-text and set out in the literature.

The structure was logically developed with very short paragraphs which made reading easier and access main points. The article, a PDF document and no link included. Links to author, subjects and journal allowed for proper evaluation of article.

Article critique

Authority

Review on author: Author Roger Given was a senior publisher at the Green River Ramblin’s Publication, Morgantown, Kentucky University, United States of America. Roger Given retired; a newspaper publisher who used images from the Kentucky Library and private people to create photographic essay. This author credibility established in many ways, as a Regent University Doctoral Student. His interest was in understanding transformational leadership, socialization, and psychological empowerment with emphasis on the relationship between leader and followers in the 21st century especially in the African-American Church.

Roger Givens serving on the Morgantown, Butler Country Chamber of Commerce, Board of Directors, Green River Museum, Boards of Director, and Kentucky Historical Highway Marker as Chairperson. Presently, he is the Vice President of the Charles Duncan Chapter, Sons of the American Revolution and an amateur historian.

The former co-publisher of the Butler Banner newspaper and co-author of Images of America. Roger Givens also, wrote several weekly articles on historical events, people and places. He published his current book “African American Life in Butler Country, Kentucky-Black Culture, Contributions and Community” and the 200th Anniversary saga and historical booklet.

Accuracy

The source of information provided was relatively current. References recent and list with the necessary sources cited in-text to support the literature review. An example of the accuracy of sources used; “self-efficacy belief has been a focus of organizational research for nearly three decades” (Bandura, 1986; Luthans, 2002).

The stringent editorial and refereeing processes contributed to the accuracy of the article “Emerging Leadership Journeys”. The viewpoint investigated the effects of transformational leadership style on organizational and personal outcomes and linked to other expert sources:

• The exegesis advances a spirit-empowered leadership model,
• The effect of follower self-concept and self-determination of organizational behavior
• The concept paper reflects on organizational metaphors
• The relationships between organizational mission, power, structure and resources

Therefore, these linkages of editorials contributed to the accuracy and skills of the journal.

Currency

The journal published in April 2008 and accepted for publication the same year. The research described was current. The article cited up-to-date references in the body of the text ranged from 1954 to 2007. Due to the fact, mentioned made on Maslow Hierarchy Theory (1954) and the effects of the theory on self-actualization.
There were many volumes issued from 2008 to 2013. For these reasons, the article is considered current.

Relevance

The journal received high credibility at a doctoral level. The article is relevant to any group due to its contextual content. The commentary has been proven pertinent from a group perspective and nursing academia. The editorial is accessible and comprehensible. The innovative aspects focused on self-efficacy principles an individual’s belief in his or her capabilities to successfully carry out specific or set task.

In addition, self-image described as the confidence in which followers had successfully achieved and the values attached to particular personal outcomes. S elf-efficacy had since influenced patterns of thoughts, emotions and actions. Leaders and followers had spent much effort searching goals and exercising control over events that had affected their lives. The article is pertinent to first year nursing students. According to one author “individual success requires training, skills and personal belief. Hence, transformational leaders are able to augment self-efficacy of followers by self-assurance. Moreover, help people to work through identified problems and significant challenges” (Luthans, 2002).

Being committed is much applicable to nursing students. The concept of commitment is an internal agreement and the enthusiasm when carrying out a request or task (Yukl, 2002). In addition, individual’s work experiences and personal factors serve as antecedents to organizational commitment and can only be achieved through leadership.

Objectivity

The evidence found involved the following:-

• The transformational leaders ably motivate, be committed and empowered followers. The performance motivated beyond expectations, through the ability to influence attitudes
• Followers inspired and motivated by their leaders as role model recognizing the uniqueness and creativity. Transformational leader built an interactive relationship based on trust that positively changed both leaders and followers.
• The relations developed allowed for leaders and followers to focus, created unity and wholeness.
• The high performance of leadership style showed a high commitment to the profession and the organization, challenged obstacles by using group learning and created a synergistic environment and enhanced change. The change occurred due to futuristic leadership focus and values. Additionally, the leader’s value of organizational culture perpetuated the importance and staff behavior.

Evidence well acknowledged and supported by current references. Previous research conducted had clearly established the effects of transformational leadership and its impacts in the workplace. The leadership style encouraged followers to go beyond self-interest and the direct effects of organizational citizenship, behavior and performance. In general, it idealized influence, inspired enthusiasm and allowed followers to think critically.

The distinctiveness of transformational leader test in the workplace and the necessary skills displayed practically. Referring to the literature review pertinent terminology was clearly defined.

Stability

Emerging Leadership Journal (ELJ) is an academic journal. It provided a forum for emerging scholars in the field of leadership studies. Philosophy of Doctorate students enrolled in the program, Organizational Leadership in Regent University School of Business and Leadership are contributors.
Biannually the best research papers submitted during the first four terms of their doctoral journey published. These papers reflected the students’ academic understanding the phenomenon of leadership.

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Analysis of tables

Two tables used to critically analyze personal and organizational outcomes Organizational outcomes- the following analysis characterized:-

- Organizational citizenship behavior and performance based on related studies showed positive benefits and improved employee’s performance (Nguni, 2006).
- Cultural perspective- studies proven- the influence of leaders on employees, its impacts of commitment and revision of shared assumptions and values (Jones, 2007).
- Vision- followers became critical thinkers and new opportunities revealed. Followers aspired to reach their potential (Zaccaro, 2001).

Critical areas identified personal outcomes, commitment, trust, self-efficacy beliefs, enthusiasm and empowerment.

- Empowerment – the participating environment and followers as critical thinkers (Masi, 2000).
- Commitment –being enthused, the evident skills and experiences. Organizational and personal factors serve as the antecedents (Nguni, 2006).
- Self-efficacy beliefs- increased as leader showed confidence in their followers. Also, influenced patterns of thoughts, emotion and actions (Bandura, 1977).
- Motivation- the extra effort an indicator and increased when leader showed confidence in followers (Bass, 1988).

Recent advances related research to the topic

Today, nursing leaders need to change their organization’s values, beliefs and behavior. Through reforming their clinical knowledge and ability on professional practices, vision, influence and personality. Efforts achieved through the capable ventures of transformational leaders. Followers who inspire change should work toward their expectations, perceptions and motivations on attaining common goals. Additionally, transformational leaders garner trust, respect and admiration from their followers.

However, recent findings identified key components of transformational leadership:- Strategic Planning

- Align nursing’s vision, mission, values, quality strategic planning with organizational plan.
- Provision of the necessary mechanisms for all staff to advocate for resources, these factors will help to improve the organization’s effectiveness and efficiency.

Advocacy and influence

- Guide the changing process by supporting, encouraging, implementing and reward innovations.
- Performance management – mentoring, coaching, evaluation of staff performance and succession planning

Visibility, accessibility and communication

- Communicate or ask for comments to enhance working environment and most importantly patient care
- Establish lines of communication across the hierarchy “everyone must sing from the same song sheet” in order to build a good and support relationships (Alnabuls, 2014).
Self-efficacy theory

Self-efficacy theory (SET) attested that one has the power to produce and complete any given task or activity related to the competency. However, these qualities can only be realized based on several factors—

- Individual’s perception and ability to meet the goal
- The ability to do
- The mastery of the situation, procedure to produce a positive outcome
- The importance of self-efficacy

Factors that influence self-efficacy according to Bandura’s Social Cognitive Model (2012).

- Behaviors
- Environment
- Personal or cognitive factors.

Self-efficacy plays a major function on how goals, task and challenges set about. The theorist further explained beliefs began to form in early childhood. “Children experience great deal and variety of experiences, tasks and situations. The growth of self-efficacy continues to develop throughout the life as people acquire new skills, experiences and understanding”. The theorist further stated, learning occurs based on three aspects self-reflective, self-regulating and self-organizing and the process take place through observational learning (Feist, 2009).

Humanistic Psychologist Maslow believes love and belonging are the primal needs to fulfilled. Maintaining relationship with others, making friends and family are vital and necessary for levels of people success (Feist, 2009). Perspectives of humanistic psychologists viewed interpersonal relationships as part of human lives. Also, allowed for growth and development and healthy psychological well-being, vital components in personal development (Hoffman, 2004).

Social constructivism claimed information, behavior and personality originate from social engagement. Individual build new ideas and concepts based on current knowledge and experience. Social psychologists believe learning derived from observation and stunted without social experience growth and development (Feist, 2009).

Conclusion

Roger Given a senior publisher at the Green River Ramblin’s Publication, in the United States of America. The article Emerging leadership Journeys received high accreditation. The various literature sources critically defined key terms and importance of theory in the review. The article very relevant to leadership in the 21st century and first year nursing students in the field of leadership, actualization and enthusiasm.

The transformational leadership style is valuable in the field of nursing administration to guide the profession forward and to meet efficient organizational outcomes. Background information underpins how employees’ behavior influenced by transformational leaders and the positive impression on the working environment.

PDF article with information clearly outlined, headings and tables allowed for easy access the information. The summary showed the positive affects organizational and personal outcomes based on connections of earlier research.

Recommendation made for further research. Hence, empirical research on outcomes provided a more insight into theories developed no organizational behavior and the direct connection between transformational leadership.

Also, further research could investigate any possible mediators of transformational leadership and personal behavior.
References

[22]. Yukl, g. (N.d.).
Vicious Cycle Between Stress and Infertility

Article Review by Sisy Jose
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Abstract

The vicious cycle between stress and infertility was developed on the basis of a Quasi experimental study in Kerala, India on “Quality of life of couples with infertility before and after adoption of child”. A pre test post test control group design was used in the study. The study was designed to investigate the effect of adoption on quality of life of infertile couples. One of the dependent variables of the study was psychological distress. The major objective of the study was to identify the effect of adoption on psychological distress among infertile couples. The study investigated the perceived psychological distress and assessed the difference in level of psychological distress among couples at various points after adoption among Indian infertile couples.

It is noticed that some couples who are medically certified as infertile, which is a mandatory document for adoption spontaneously conceive after adoption. Though infertility is considered and managed as a physical entity, the psychological component which has a vital role is often neglected or overlooked. An effective reduction in psychological stress will not unblock obstructed fallopian tubes, create sperm or resurrect declining ovaries but may help fertility problems of an unexplained or hormonal nature.

The study explains the phenomena behind spontaneous conception after adoption. The improvement in the wellbeing of couples experienced after adoption may improve reproductive functions and fertility among couples which points to the possibility for better outcome of infertility treatment or even spontaneous conception after adoption. This study invites attention to the psychological component of infertility.

The findings of the present study observed that infertility is a major cause of psychological distress and adoption of child result in reduction of psychological distress. The findings of the study also revealed that spontaneous conception among infertile couples is a reality and it can be explained in terms of improvement in quality of life as a result of adoption. The results of the study indirectly throws light to the hidden corner of psychological component of infertility with regard to menstrual irregularities, polycystic ovarian diseases, sexual problems of unexplained nature, poor fertility and poor outcome of infertility treatment.

The findings of the present study identified a vicious cycle operating between infertility and psychological distress. The vicious cycle formulated in the study is also based on theories and studies related to infertility. The present findings are supported by an already existing vicious cycle between emotional tension and infertility. Findings of the present study are put together to develop a vicious cycle between psychological distress and infertility and is presented in figure 1.
It is a fact that infertility results in stress for couples. It is also a fact that psychological distress has an adverse effect on the endocrine and immune systems of the body. There can be a possible connection between infertility and resultant stress on perpetuation of infertility or failure of infertility treatment. This can be due to a change in endocrinology or reproductive functions as a result of infertility related stress. Understanding the connection between the two is therefore very important in dealing with infertility. Infertility is mainly of two types, namely structural and functional infertility. Structural Infertility is due to structural defects of male and female reproductive systems like congenital or acquired anomalies of testes, uterus, ovaries and fallopian tubes. Psychopathology has no role in this type of infertility. Functional infertility is attributed to abnormal psychological functioning on the part of one or both individuals of the couple. It is the major cause of failure to conceive in as many as 80% of cases and also denoted as psychogenic infertility. Psychogenic infertility is supposed to occur because of unconscious anxiety about sexual incompetence, ambivalence toward motherhood or due to conflicts of gender identity.

The impact of stress changes the pattern of personal relations of infertile couples. Being stressed disrupts sexual intimacy and results in marital distress among couples. The hurdles in investigations, diagnosis and treatment of infertile couples affect sexual relationships and marital relationships adversely resulting in low quality of marital life. As duration of infertility increases infertile couples are not in a position to comfort each other since both are equally in distress. The marital relationships can be strained because of the fear that the fertile partner will leave the infertile partner. It can also alienate the couples from friends and relatives cutting off sources of support. Since such couples are always irritable, tense, and angry they get a reputation as being
‘difficult individuals’. In order to escape from social questions related to childlessness couples generally avoid social situations where children are present. Infertile couples demonstrate social withdrawal and isolation due to the social stigma of infertility. Altogether the general wellbeing of couples deteriorates markedly as they experience unpleasant emotions, negative moods and poor life satisfaction.

Psychological distress has got negative effects on general endocrinology and glandular functions which in turn alters reproductive endocrinology and reproductive functions. In response to stress the hypothalamus produces a hormone called Corticotrophin Releasing Factor (CRF) which activates the hypothalamic-pituitary-adrenal (HPA) system. This system releases neurotransmitters (chemical messengers) called catecholamine as well as cortisol, the primary stress hormone. Stress boosts levels of stress hormones such as cortisol that inhibit the body’s main sex hormone, Gonadotropin Releasing Hormone (GnRH). Subsequently it suppresses sperm count, ovulation and sexual activity. Since the hypothalamus regulates both stress responses as well as the sex hormones, it is easy to see how biologically stress could cause infertility in some women. Excessive stress may even lead to complete suppression of the menstrual cycle and this is often seen in female marathon runners who develop ‘runner’s amenorrhea’. In less severe cases it could cause an ovulation or irregular menstrual cycles. It is revealed that when activated by stress, the pituitary gland also produces increased amounts of prolactin and elevated levels of prolactin could cause irregular ovulation. Since the female reproductive tract contains catecholamine receptors, catecholamine produced in response to stress may potentially affect reproductive functions. It could interfere with the transport of gametes through the fallopian tubes or by altering uterine blood flow. Also many women start overeating in response to the stress of infertility. The increased fat cells then disrupt the hormonal balance, making the situation even worse.

It is found that stress can reduce sperm counts as well. Testicular biopsies obtained from prisoners awaiting execution who were obviously under extreme stress revealed complete spermatogenetic arrest in all cases. Researchers have also found significantly lower semen volume and sperm concentration in such men. In addition to these direct effects stress can also suppress libido, cause erectile dysfunction, and result in a reduction in the frequency of intercourse which in turn could also reduce fertility.

Stress and infertility often have a circular relationship and they can aggravate each other setting up a vicious cycle. Infertile couples who are under stress start blaming selves. This increases their stress levels and further aggravates the problem. As one mind-body expert said “Stress causes illness causes more stress which causes more illness”. In brief, although infertility has an effect on a couple’s mental health, different psychological factors have been shown to affect the reproductive ability of both partners. Proposed mechanisms through which stress could directly affect infertility involve the physiology of the depressed state such as elevated prolactin levels, disruption of the hypothalamic-pituitary-adrenal axis and thyroid dysfunction. Depression is associated with abnormal regulation of luteinizing hormone which in turn regulates ovulation. Changes in immune function associated with stress and depression may also adversely affect reproductive functions. Since stress is also associated with similar physiological changes, this poses the possibility that a history of high levels of cumulative stress associated with recurrent depression or anxiety may also be a causative factor of infertility. Therefore ignoring the psychological factors related to infertility and merely considering these problems as medical will create huge obstacles in understanding human beings as an integrative whole. There is no doubt that infertility like other physiological phenomenon has social and psychological aspects and it is classified in the realm of behavioural sciences.
The improved general wellbeing among couples experienced after adoption carries the possibility of improved reproductive physiology, endocrinology and higher fertility. On analysing the psychosomatic effects of infertility, it is found that psychological distress alters levels of hormones cortisol, prolactin, and progesterone which influence reproductive functions in women. Abnormal hormone levels have an adverse effect on conception. There is a vicious cycle between psychological distress, reproductive functions and infertility. Adoption is thought to break this vicious cycle, thereby improving general psychological wellbeing among couples. The improvement in the psychological wellbeing may not bring about any change in the structural anomaly in the reproductive system. However, psychological wellbeing is a factor which can disrupt or enhance psychogenic infertility. It may help infertility problems of an unexplained or hormonal nature at least. The results of the study point out that the occurrence of spontaneous conception after adoption is a reality. One can explain the phenomena of spontaneous conception after adoption meaningfully only with the help of psychological dimensions in the case of infertile couples.

Infertile couples experience improved general wellbeing due to positive effects of adoption on the quality of life. The general wellbeing of couples has a clinical perspective and psychological perspective. Clinical perspective defines wellbeing as absence of negative clinical conditions like anxiety and depression which in turn regulate reproductive endocrinology. Psychological perspective is the prevalence of positive attributes. It include some of general characteristics like a positive affect or life satisfaction, personal optimisation, prosocial behaviours, optimism, positive spouse relationships and a balance of attributes in multiple dimensions. Altogether infertile couples as adoptive parents experience positive levels of pleasant emotions. They demonstrate relatively low levels of negative moods.

Spontaneous conception after adoption can be explained in terms of breaking the vicious cycle that exists between stress and infertility. A schematic model is developed to explain spontaneous conception that is observed after adoption in the present study. The schematic model developed based on the findings of the present study to explain spontaneous conception after adoption is given in Figure 2.
High quality of life and improved general wellbeing occur among couples as a result of adoption. This in turn results in positive changes in total human physiology related to all systems of the body. It is reported that positive changes in the general endocrine system results in production and regulation and functions of hormones in the following manner. The hypothalamus produces GnRH (Gonadotrophin Releasing Hormones) which stimulates the pituitary gland. The pituitary gland secretes peripheral hormones namely luteinizing hormone and follicle stimulating hormone. This in turn stimulates production of testosterone and estradiol. These hormones control menstrual cycles, ovulation, reproduction and fertilisation. Significant reduction in psychological distress as a result of adoption alters the levels of cortisol, prolactin, and progesterone to an optimum level. A marked reduction of stress corrects hyperprolactinemia which is one common endocrinological abnormality behind infertility. Reduction in stress also rectifies the altered reproductive functions like vaginismus, erectile disorders, and low sexual desire which interfere with conception.

The effect of relaxation and improved general wellbeing could also improve fertility rate in couples with subfertility. Normalisation of reproductive endocrinology and physiology can also result in a favorable outcome of infertility treatment and

Figure 2. Schematic Model explaining Spontaneous Conception after Adoption
continuation of pregnancy after conception. Hence reduction of stress can enhance pregnancy rates, irrespective of subtypes of functional infertility. Many of the infertile couples with functional infertility on failure of treatment modalities are certified as structural infertility for the sake of child adoption. Such couples could be benefited if the psychological component of infertility is taken care of in a better way. Studies to establish correlations between levels of stress and reproductive endocrinology in various phases of infertility treatment are necessary for evidence based conclusions with regard to the findings in the present study. The relationship between levels of stress and reproductive hormones could be done in couples before and after adoption. Estimation of hormonal levels in relation to stress levels may be done in couples with success and failure of infertility treatment. These types of studies are also applicable in evaluating or modifying the effectiveness of counselling packages used for infertility treatment and adoption counselling.

However, more complex mechanisms may be at play and researchers still do not completely understand how exactly stress interacts with the reproductive system. This is a story which is still unfolding and during the last twenty years the new field of psycho neuroimmunology has emerged, which focuses on how mind can affect the body. Research has shown that the brain produces special molecules called neuropeptides, in response to emotions. These peptides can interact with every cell of the body by either degenerating or protecting, including the immune system. In this view the mind and the body are not only connected but also inseparable so that it is hardly surprising that stress can have a negative influence on fertility. The schematic model (figure 2) proposed in the discussion is helpful in explaining spontaneous conception after adoption. Though the present study do not collect data on psychoneuroimmunology, neuropeptides or reproductive endocrinology, the findings throw light into the role of these factors on subfertility, infertility and management of infertility. It paves way for a new area of research in the field of infertility and spontaneous conception.

References

Attitude of Student Nurses and Midwives Towards Research: Study of Schools of Nursing and Midwifery Mkar, Gboko Benue State, North Central Nigeria

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Abstract

The research is a cross-sectional descriptive survey conducted at school of Nursing and Midwifery Mkar, Gboko Benue State, North Central Nigeria to study the attitude of student nurses and midwives towards research study. The specific objectives of the study were: to assess students’ knowledge on importance of research in client care, to determine the attitude of students towards research study, to identify reasons for frequent repetition of some research topics among students and to find out barriers to effective research study among students. The study will help the students to have positive look towards research thereby helping them to develop a positive attitude towards research in order to maintain evidence based practice in Nursing. Simple probability sampling technique was used in selection of samples used for the study. Data were collected from the respondents through self-structured and validated questionnaire. Data obtained were presented and analyzed using frequency distribution table. Based on the findings, all the students are aware of importance of research in client care but attitudes towards research is unfavorable as most of the students believe that research in general is difficult and time consuming, hence their cold attitude towards research. This research also find out that one of the reasons for frequent repetition of some research topics is because of excessive academic workload which leave them with little time for research work. Based on the findings, the following recommendations were made: that more time should be allocated for research studies in nursing and midwifery schools, thus helping the students develop interest in research; the students must also change their attitude towards research in order to learn and practice evidence based nursing.

Keywords: Attitude, Student Nurses and Midwives, Research, Study

Introduction

In the fast moving world, research has important intellectual equipment for the human beings to change their lifestyles according to needs and necessities of the society. Research opens new frontier in all fields like medicine, agriculture, business, education and also in nursing (Alba, 2009). Nurse education and practice places emphasis upon the use of evidence from research in order to rationalize nursing intervention (Polit and Beck, 2010).

The focus of this study is on the attitudes of students nurses and midwives towards research study in schools of nursing and midwifery Mkar, Gboko local Government Area of Benue state.

Operational definition of terms

1. **Attitude**: The way that one behaves towards something that show how the person think and feel about that thing.
2. **Student nurses and midwives**: persons who are undergoing training to become a nurse/midwife at a nursing and midwifery school respectively.
3. **Research**: A process which has to be undertaken according to scientific rules and consist of a sequence of steps which include mental activities, designed to increase the sum of what is known about a certain phenomenon.
4. **Study**: The activity of learning or gaining knowledge, either from books or by examining things in the world, as well as writing a project.

**Methodology**

**Research Design**: This is a cross-sectional descriptive survey design to study the attitude of student nurses and midwives towards research study in school of Nursing and Midwifery Mkark, Gboko, Benue State.

**Research Setting**: The study was conducted in schools of nursing and midwifery Mkark, Gboko LGA of Benue State. The school is located along Gboko Mkark-Katsina/Ala road. It has a population of about 270 students in Nursing arm and about 217 students in Midwifery arm.

**Target Population**: The target population consists of all the final-year students including those awaiting their final qualifying Nursing and Midwifery Council examination result in both schools of Nursing and Midwifery Mkark Gboko LGA of Benue state. The study population numbered 252 students.

**Sample/Sampling Technique**: In determining sample size, Nwanna (1981) stated that if a population is a few hundreds, 40% of the population could be used. If few thousand 10% could be used. If many hundreds, 20% sample could be used, if few thousand 10% could be used and if a several thousand 5% sample could be used. In line with the above assertion 40% of the population was used, thus percentage to be used = 40% ... \( \frac{40}{100} \times \frac{252}{1} = 100 \)

Thus the sample size is 100 students from both schools. A simple random sampling technique was used in selecting 100 students out of 252 students. It was done using ballot method without replacement. Here “yes” and “no” were written on papers of equal size and the papers were folded, then every member of the sample unit was given equal opportunity to pick from the papers. Only those who picked the ones with “yes” were eligible to participate in the study, whereas those that picked the ones with “no” were not eligible to participate in the study.

**Description of Data Collection Instrument**: A self-designed, structured questionnaire was used for data collection. The questionnaire was designed in lined with the objectives of the study. It has sections, with each section eliciting information on the research question.

The questionnaire has first introductory part, where the researcher introduces herself to her respondents, instructing them on what is expected of them and how to answer the questions. Section “A” of the questionnaire has to do with the socio-demographic data of the respondents. Section “B” was designed to initiate information on research questions number one and correspondingly section “C” “D” and “E” taking care of research questions 2, 3, and 4. The questionnaire was given to other researchers for face validity, criticism and corrections of the instrument after which it was pre-tested on similar target population who were not from school of Nursing and Midwifery Mkark. The researcher conducted the pre-test of the questionnaire using 10 questionnaire on students of School of Nursing Makurdi, Benue State.

**Method of Data Collection**: A hundred (100) questionnaires were distributed by the researchers to all the students of nursing and midwifery who were selected from the population using simple random sampling method, making use of ballot paper method as described under sample and sampling techniques above. The questionnaires were given to the respondents in the class and respondents who could not fill theirs immediately took it home and were allowed to return it to the researchers in school on the second day.

**Method of data Analysis**: The data obtained from the distributed questionnaires was analyzed using frequency distribution table which show responses of the respondents and analyzed in percentages. The data collected were also presented in
pie charts and bar charts.

**Ethical Consideration:** The researchers sought for permission from the principals of the schools who gave the approval for the study to be conducted in their respective schools. Privacy and confidentiality was maintained in getting information from the respondents by demanding for neither their names nor address. The researcher ensured that the subjects understand the nature and purpose of the research, and how they will benefit from it. Their consent was obtained before they were included in the study.

**Results**

<table>
<thead>
<tr>
<th>Age</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-24 years</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>25-30 years</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>31 years and above</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Female</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Married</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Widow</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Divorcee</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religion</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Christianity</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Islam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Age status**

The age of respondents shows that out of 100 respondents, 45% fall within the age range of 19-24 years, 42% fall within the range of 25-30 years and 13% fall within 31 years and above. This indicates that both the young adult and the aged are represented in this research study.

**Sex status**

Sex Status of respondents shows that out of 100 respondents, 89% are female and 11% are male. This shows that both men and women were used for this study.

**Marital Status**

The marital status of the respondent’s shows that out of 100 respondents, 72% are single, 28% are married and non is widow and divorcee this is to say that all were considered.

**Religious Status**

Religious status shows that 100% of respondents are Christians. This is possible due to the school is a mission own.
Are Students aware of importance of research in client care.

The data answering this research question is presented in table two, three, figure one and two below.

**Table 2. Awareness of Importance of research in client care**

<table>
<thead>
<tr>
<th>Item</th>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is research important</td>
<td>Yes</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>In client care</td>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table two above shows that 100% of the respondents said yes that research is important in client care. This shows that all the respondents are aware of importance of research in nursing.

**Table 3. Knowledge of the importance of research**

<table>
<thead>
<tr>
<th>Item</th>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In what way is research important</td>
<td>Promoting health lifestyles</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>in care of clients</td>
<td>Aid patients recovery</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Reduce number of diseases in the</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>community</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table three above which answers the question, in what way is research important in client care indicates that 40% of the respondents said it helps in promoting healthy lifestyles, 30% said it aid patient’s recovery and 30% said reduces number of disease in the community.

**Figure 1. Information from research ensured what?**

Figure one above which answers the question information from research ensures what shows that 223o represented by 62% said it ensures all of the above, 94o represented by 26% said it reduce complications, 29o represented by 8% said it promote satisfaction and 14o represented by 4% said it reduces cost of health care.
The Figure Two above which reveal the goals of respondents research project indicates 295° represented by 82% said it is to make a significant discovery while 65° represented by 18% said to fulfill the requirement for qualification only.

**Figure 2.** The goal of research project of respondents

What are the attitudes of students towards research study?

The data answering this research question is presented in table four, table five, figure three and figure four below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research in general is difficult and many students do not like researching</td>
<td>Strongly agreed</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Agreed</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Disagreed</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagreed</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The table four above shows that 31% of the respondents strongly agreed that research in general is difficult and many students do not like researching, 55% agreed, 4% disagreed and 10% strongly disagreed. This indicates that majority of respondents have negative attitude toward research study.
Table 5. Students Attitudes towards research study II

<table>
<thead>
<tr>
<th>Item</th>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students lack confidence in doing their research</td>
<td>Strongly agreed</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Agreed</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Disagreed</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagreed</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table five above shows that 18% of the respondents strongly agreed, 56% agreed, and 26% disagreed that students lack confidence in carrying out their research. This indicates that majority of students lack confidence in doing their research. This also indicate unfavorable attitude towards research study.

**Figure 3.** Many Students get frustrated when corrected several times by supervisors

The figure above indicates that 58% of respondents strongly agreed that many students get frustrated when corrected several times by supervisors, 39% agreed and 3% strongly disagreed while 0% disagreed. This indicate negative attitude towards research study.

**Figure 4.** Many students do not understand research process

This pie chart above indicates that 93.6o represented by 26% strongly agreed that many students do not understand research process, 208o represented by 58% agreed and 57.6o represented by 16% disagreed. And this indicates unfavorable attitudes towards research.
Reasons for frequent repetition of some particular research topics among students?

The data answering the research question is presented in table VI, VII and figure Five respectively.

<table>
<thead>
<tr>
<th>Table 6. Frequent repetition of topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your research topic been researched on before by other senior students</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

The table above shows that 70% of the respondent’s research topics have been researched on before by other senior students while 30% have not been researched. This indicates increase repetition of research topics among students.

<table>
<thead>
<tr>
<th>Table 7. Frequency of repletion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>How many times has your topic been researched on by other senior student</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

The table VII above shows that 30% of the topics have not been researched on, 3% have been researched on once, 48% have been researched on twice, 14% have been researched on three times and 5% have been researched on four times. This indicates increase rate of repetition of topics among students.

Figure 5. Reasons for frequent repetition of topics

The pie chart above indicates that 148° represented by 41% said it’s to make the research work easy, 36° represented by 10% said it's because all students have the same interest and 176° represented by 49% said it’s because of excessive academic

Barriers to effective research study among students

The data answering the research question is presented in table VIII and IX below.
Table 8. Barriers to effective research study

<table>
<thead>
<tr>
<th>Item</th>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The common barrier to effective research are</td>
<td>Inadequate statistical data</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Time factors (inadequate)</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Inadequate lectures on research</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Insufficient prior research</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table VIII above shows that 17% of respondents said that the common barriers to effective research among student is adequate statistical data, 62% said it’s time factors, 5% said it’s inadequate lectures on research and 16% said it’s insufficient prior research. This means that time allow for research is short and then hinders effective research among students.

Table 9. Staff (Lecturers) attitude towards research

<table>
<thead>
<tr>
<th>Research often taught seem not actually inspiring students passion for research</th>
<th>Yes</th>
<th>30</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>70</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table IX above indicates that 30% of the respondents answer yes to the question while 70% of respondents answers no to the question. This means that staff (lectures) does justice to the course, research. Student should add more effort in learning research.

Discussion of findings

According to Royal College of Nursing (2009) Research is an indispensable part of a modern, effective and essential to the provision of effective and safe and social care. One of the important objectives of research in nursing and midwifery schools is to create awareness and understanding of important of research in the class-room, thus action research become a part of the syllabus where in the students are expected to prepare action plans and implement the same during their final year sessions in nursing school. This in turn is strengthened in post graduate programme in university (Ofoegbu, 2009).

The main aim of research in nursing course is to provide capabilities of serving community in general and developing research attitude and skill among the students in specific. Those students in future have to promote interest towards research in nursing profession when they take up their jobs as nurse practitioners or educators.

Abba (2006) defined nursing research as an investigative process of finding reliable solution to problems of nursing through a planned and systematic selection of data relating to the nursing problems. A broad definition of research was given by (Martyn, 2008) in the broadest sense of the word, the definition of research includes any gathering of data, information and facts for the advancement of knowledge. An attitude may be defined as a predisposition to respond in a favorable or unfavorable Manner with respect to a given object (Oskamp and Schults, 2005).
Objective one: to assess students’ knowledge on importance of research in client care

Analysis of table two clearly revealed that 100% of students are aware of importance of research in client care. This finding is supported by that of Khalid et al (2014) whose work revealed that 97.1% of medical students studied agreed that research is important in medical field. According to Royal College of Nursing (2009), Research is an indispensable part of a modern, effective and essential to the provision of evidence based care which modern nursing entails.

Analysis of table III which answers the question on: in what way is research important in care of client reveals that 40% of respondents said it help to promote healthy lifestyles and prevent onset of preventable diseases, 30% said it help in developing advancement that aid patient in recovery, and 30% said it help in developing standards that help to reduce the number of diseases in the community. This shows that all the students are very much aware of the importance of research in nursing.

Analysis of figure one which shows what students said that information from research ensures (940 represented by 26%) said it ensure reduction of complication, (290 represented by 8%) said it promote satisfaction, (140 represented by 4%) said it reduces cost of health care and (2230 represented by 62%) said it ensures all of the above. According to Marita (2013) Nursing profession has more recently provided major leadership for improving health care through application of research findings in practice.

Analysis of figure two which answers what is the goal of your research project reveals that (2950 represented by 82%) said to make significant discovery while (650 represented by 18%) said to fulfill the requirement for qualification only. This shows that while majority of students carryout researches for new discoveries, some students often undertake research for the sake of pre-requisite for qualification only and not with a goal to make a significant discovery. This finding is in agreement with Basavanthappa (2007), that one of the major goal of research is to make significant discovery that will aid in solving problems of man.

Objective two: to determine the attitude of students towards research study

It was discovered in table four which shows that 31% of respondents strongly agreed that research in general is difficult and many students do not like researching, 55% agreed, 4% disagreed and 10% strongly disagreed. This is in line with the study of Newell and Cunlife (2010) which reveal that 54% of 119 students belief research in general is difficult, 42% belief it is interesting while 75% consider it necessary.

Analysis of table five reveals that 18% of the respondents strongly agreed that students lack confidence in doing their research, 56% agreed and 26% disagreed. This indicates unfavorable attitude towards research study. This work differs with that of Sridevi (2010), whose findings revealed that majority (92%) of education students studied have favourable attitude towards research. In same vain, findings by Sadia et al (2014) revealed that majority of post graduate students studied have positive attitude towards research. The observed disparities could be due to differences in motivation by the school and lectures on students towards research. The difference in the findings could be in line with the finding of Adamsen et al (2006) whose finding reveal that earlier introduction of research method course to students had positive effects on the nurses’ research activity and increases their commitment to research compared to group that were not early introduced to research methods course.

Analysis of figure four indicates that (208.8o represented by 58%) strongly agreed that many students do not understand research process (93.6 represented by 26% agreed) while (57.60 represented by 16%) disagreed and this also indicates
inattentiveness in the class and unfavorable attitude.

**Objective three: to identify reasons for frequent repetition of some particular research topic among students.**

Table six shows that 70% of the students research topics have been researched on before by other senior students, while only 30% of the topics have not been researched on before by other senior students. This means that student repeat research topic.

Table seven shows the rate at which the topics have been repeated. 30% of the topics have not been researched on before by senior students, while 3% have been researched on once, 48% have been researched on twice, 124% have been researched on three times and 5% have been researched on four times. This indicate increase rate of repetition of topics among students and this agrees with Orjih (2009) that students are research phobic and that research has then become imitative and repetitive.

Analysis of figure five reveals the reasons for repetition of topics among student (148o represented by 41%) said it is to make the research work easy, (36o represented by 10%) said it was because all students have the same interest and (176o represented by 49%) said it was because of excessive academic workload thus not having enough time for research work. This finding is in agreement with Lilian (2012) that when students possess a positive attitude towards research methods and statistics, they tend to put more effort into studying the subject.

**Objective four: to find out barrier to effective research study among students.**

Analysis of table eight reveals that 17% of respondents said that the common barrier to effective research is inadequate statistical data, 62% said it was time factor, 5% said it was inadequate lectures on research and 16% said it was insufficient prior research. This finding is in agreement with Khalid (2014) which result showed obstacle that prevented students from conducting research as:84.7% lack of professional supervisors, 88.8% lack of training courses, 72.3% lack of adequate time and 54.1% lack of funding. Bosa (2012), stated that evidence based practice depends on a number of factors including attitude towards and knowledge of research, the availability and access to relevant research, adequate resources and supervisors support. It is important that students be given adequate time to research, making them actively involved in order to ensure evidence base practice in nursing.

**Limitation of the study**

The constraints faced by the researchers were the following:

1. **Insufficient prior research:** Research is a cumulative process, present research builds on the prior research, however there are relatively few investigations who have examined the attitude of students nurse and midwives towards research study and this made literature review difficult for the researcher.

**Conclusion**

Based on the findings from the study and statistical analysis, the following conclusions were reached; awareness of importance of research in client care is high, as all the students testified that but the attitudes towards research is unfavorable as most of the students belief research in general is difficult and time consuming, so they dislike researching.

Little thing that make a big difference is attitude. Students should endeavor to change their unfavorable attitudes towards research and they will find research very interesting. Students should also note that discovering a fact or thing on your own or learning it from literature reviewed improves ones competence.
Recommendations

The researcher after the research findings came up with the following recommendations.

1. Nursing and Midwifery Council of Nigeria should look into the curriculum of nurses and if possible introduce research right from 200 level for students of school of nursing and midwifery as against the current practice in which teaching of research starts only in 300 level (final year) which normally clash with their other preparation for final qualifying exams.

Suggestion for further studies

Following the findings of the study the researcher hereby suggest the following for further studies.

1. Knowledge and utilization of research findings among nurses.
2. Knowledge and impact of research on nursing students.

References

Student Nurses’ Attitude Towards Research at Ndola School of Nursing: A Case Scenario for Social Marketing

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Email: - v.mwiinga@yahoo.com

Abstract

This paper evaluates third year student nurses’ attitude towards research at Ndola school of nursing. Research has been described as a keystone of service delivery. What is the attitude of student nurses towards research?

Methodology: A non-experimental descriptive cross section study conducted among all (43) third year student nurses between 26th march and 8th April 2015. Convenient sampling was done. Semi-structured questionnaire used. Qualitative and quantitative data analyzed through Content analysis and Epi-data version 3.

Results: Eighty-six percent of the respondents were females, while 14% were males and 65.9% were aged 18-30 years. Findings revealed that 55% don’t like research and 72.7% had poor attitude. Problems encountered comprised; time consuming 57%, don’t know methodology 18%, difficult 16%, expensive 7% and 2% lacked interest. Additionally, 68% of respondents would conduct own research and 91% would utilize other people’s findings. However, 75% have never read a scientific journal. Suggestions are: allocation of more time, simply the content, introduce at degree level, improve access to computers and library at 47.7%, 27.2%, 13.6%, 6.8% and 4.5% respectively.

Discussion: Over 50% of respondents were uninterested in research due to factors like time consuming and minimal knowledge on methodology and poor attitude. However, they showed interest to conduct research at a later stage in their career. Therefore, there is need to employ social marketing strategies in research using public health communication tool.

Conclusion: Student nurses lack interest in research and their attitude is influenced by problems encountered, which should be changed through social marketing of research.

Keywords: Interest, Attitude, Student nurses, Challenges, Research

This paper evaluates third year student nurses’ attitude towards research at Ndola school of nursing: A case scenario for social marketing. Research is fundamental to evidence based practice. Nursing research is a systematic inquiry designed to develop knowledge about issues of importance to nurses, including nursing practice, nursing education and nursing administration (Polit & Beck 2006) and research has been incorporated in the curriculum of the trainee nurses. However, most of the students lack interest to undertake research and do not meet the deadlines. What is the attitude of student nurses towards research? Findings will help in designing social messages to address the gap.

Background Information (not requested information given as overview)

Importance of research

According to Royal College of nursing in Scotland importance of research includes the following:

- Making health and social care more cost effective as it improves productivity and efficiency.
- Helps to improve the health of the people as it improves the practice.
- Supports the delivery of key health outcomes and health inequalities.
- It equips nurses with knowledge and analytical skill they need to make informed decisions and contribute effectively to new developments, from individual improvements in practice to wholesale design of service.
Nursing research and evidence implementation are essential parts of the education and training of existing and future nursing workforce and improves the quality of care given to patients and so increases public confidence in health and social care services. Review of literature revealed that there are limited studies that have looked at student nurses’ attitude towards research in Zambia and related studies have been done in other countries.

In Thailand a study was conducted among nurses to identify factors influencing research among nurses, findings revealed that only 20% of the nurses had experience in conducting of research of their own, of these 67.4% had good attitude towards doing research (Petchnoy & Salee). Analysis of factors included funding support, availability of research advisors, knowledge of research methodology and attitude towards conducting research were found to be statistically significant and had influence. Another study was conducted by National Nursing council from 1982 – 1986 reported that 17.5% research projects were done by nurses from public health (Srisuphan 1996). Lynn documented that nurses who had negative attitude towards conducting research did not do much research. While those that had positive attitude had conducted research before (Poster et al 1992).

A study done in Ghana by Dorothy et al (2013) on student nurse’s attitude towards clinical work revealed that 41% of the respondents reported that students did not show commitment to clinical work. The attitude portrayed by students had an influence on the way the medical and nursing staff related to them.

In Zambia no studies have been done related to student nurses’ attitude towards research, hence the need to conduct research.

**Social marketing**

Social marketing is the strategy which can be incorporated to device health messages that can help to change student’s behavior and attitude. Research should be promoted to students when they just come in first year so that they understand it better. Concepts of social change will focus on cognitive change, action change, behavior change and value change. Therefore research is the strategy that can be used to generate new body of knowledge and innovations when student’s attitudes are good towards research. According to communication theory, public health communication can be defined as the scientific development, strategic dissemination, and evaluation of relevant, accurate, accessible, and understandable health information, communicated to and from intended audiences to advance public health (Bernhardt 2004). The national cancer health institute stated that public health communication can increase knowledge and awareness of a health issue, influence perceptions, beliefs and attitudes.

**Statement of the problem**

A study done in united states revealed that many nurses have negative attitude towards research and this is mainly due to the manner in which they have been taught (Melnyk 2008) and similar negative attitudes of students to research have been reported by Dyson (1997). Currently there are no studies that have been done in Zambia, hence the need to determine student nurses’ attitude towards research at Ndola school of nursing. Majority of the students at Ndola school of nursing don’t submit their research within the stipulated time while in training. What is the attitude of student nurses towards research?

**Justification of the study**

The study finding will be able to highlight program needs in research, provide strategic direction for future programs by ensuring that best approaches are explored.
and used to refine the implementation process. Also the findings may be incorporated into policy process to ensure that interventions that are effective are implemented through social marketing. At the same time this study will generate first hand data based on lived local experiences and this will strengthen planning and implementation of research at undergraduate level. It is believed that from this project, policy makers like GNC, service providers like lecturers and the student community at large will understand some of these problems, which must be explored, and solutions put in place.

**Research objectives**

**General objective**
To evaluate third year student nurses’ attitude towards research at Ndola school of nursing.

**Specific objective**
To identify factors influencing student nurses attitude towards research?

**Research question**
What is the attitude of student nurses towards research?

**Operational definitions**
Attitude: is an opinion or general feelings or a settled way of thinking about something.
Research: is a way of inquiry to answer a research question.
Student nurse is a trainee nurse who is still undergoing training to become a nurse

**Methodology**
This paper evaluates third year student nurses’ attitude towards research at Ndola school of nursing: A case scenario for social marketing.

**Research design**
A descriptive cross sectional study was conducted at Ndola school of nursing. It is descriptive because it involved description and analysis of researchable objects with no intervention required. It is cross-sectional because the phenomena under study were captured during one data collection period. It also describes what exists about the phenomena and gives a clear picture of the situation on student nurses’ attitude towards research.

**Research setting**
The study was carried out at Ndola school of nursing which was purposely selected as it has similar characteristics with other Registered Nursing Schools in Copperbelt. This school is based at Ndola Central hospital in copperbelt province of the republic of Zambia. The study was conducted from 26th march to 8th April 2015.

**Study population**
The study population comprised of all third year student nurses at Ndola school of nursing (population study). This population has been selected because it is a group that is currently under taking research projects and understands research process, and is able to bring out in-depth information on problems experienced.
Sample selection

Convenient sampling method was used as it involved the use of research subjects at the research site and all 43 student nurses were interviewed and the response rate was 100%.

Inclusion criteria: All third year student nurses at Ndola school of nursing in 2015.

Exclusion criteria: All third year student nurses who are not students of Ndola school of nursing in 2015.

Data collection tool

Semi-Structured questionnaire modified from other research studies on attitude, done by Collins et al 1997. The tool comprised of closed ended questions for quantitative data and open ended questions to obtain in-depth information for qualitative data.

Validity: This study used a semi-structured interview schedule. To ensure validity of data collection tool, pre-testing of the instrument was done at copperbelt nursing polytechnic to ensure clarity, precision and consistency of questions and where necessary adjustments were made on content and sequencing of questions.

Reliability: The tool was modified from other research study questionnaires that had similar methodology like Collins et al 1997. Reliability of the instrument was achieved by conducting a pre-test study in order to test the degree of accuracy with which the tools measured student nurses’ attitude towards research. After the evaluations of the pilot test to assess the extent to which the original questionnaire would grant us reliability, the researcher had an opportunity to perfect the questionnaire from the observed reactions of the respondents to the research instrument and their willingness to answer the questions. Deficiencies in the tool were overcomed by making necessary changes where there were gaps. Also use of open ended questions helped to bring out in-depth information so that all issues relating to attitude were discussed. The pilot testing also helped to determine how much time was needed to administer the questionnaire and to analyse it. The lessons learnt from the pre- test, helped the researcher to develop a reliable and locally focussed modified questionnaire.

Data collection technique

This study used a semi-structured questionnaire to gather information on student nurses' attitude towards research. The Semi-structured interview schedule contained all the study variables on which data was to be collected which included; interest, attitude, challenges and research. The purpose of the study was explained to the participants and permission was sought from them to allow the researcher to conduct the interview. Privacy and confidentiality and anonymity were maintained by not writing names on interview schedule, instead serial numbers were allocated to all participants. Interview lasted for 5 minutes. The questionnaire was self administered to ensure free opinion without external influence. Filled in questionnaires were checked for completeness and put in a lockable bag for privacy.

Sample size

The sample size was 43 student nurses who are currently in third year at Ndola school of nursing and this was a population study, therefore findings can be generalized. Calculation of sample size not done since it is a population study.

Ethical consideration

Consent was obtained from respondents and Ndola school of nursing management. Respondents were in a natural setting and hence were not exposed to emotional or physical harm. Confidentiality and anonymity were maintained to all questionnaires
as their names did not appear; instead the serial numbers were used. Privacy was maintained as all questionnaires were kept under lock and key after each interview.

**Dissemination of findings**

The study findings of this project will be disseminated to ministry of health in Zambia

The General nursing council of Zambia and Ndola school of nursing management.

**Data presentation and analysis**

The study aimed at evaluating third year student nurses’ attitude towards research at Ndola school of nursing: a case scenario for social marketing. A Total of 43 third year student nurses were interviewed and assessed for attitude toward research and there was 100% response rate. The respondents were third year student nurses who are currently doing research. Findings of the study were based on analysis of data collected from the student nurses. Point prevalence and 95% confidence interval was set together with estimates. Cut off point for significance was set at 5%. Statistical significance achieved if P value is 0.05 or less, thereby rejecting the null hypothesis.

The data was sorted out for completeness, categorized and coded. Data was analyzed using Epi Data version 3. The data was analyzed by content analysis, univariate and bivariate analysis. The data was presented using tables, Pie charts and graphs for easy communication.

**Demographic data**

![Figure 1. Sex (n=43) This figure shows that majority (86%) of the respondents were females, while males accounted 14%

<table>
<thead>
<tr>
<th>Age</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30</td>
<td>4 (9%)</td>
<td>25 (56.8%)</td>
<td>29 (65.9%)</td>
</tr>
<tr>
<td>31-40</td>
<td>1(2%)</td>
<td>11(25%)</td>
<td>12 (27.2%)</td>
</tr>
<tr>
<td>41-50</td>
<td>0</td>
<td>2 (4.5%)</td>
<td>2 (4.5%)</td>
</tr>
<tr>
<td>Above 51 years</td>
<td>1(2%)</td>
<td>0</td>
<td>1 (2.2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6 (13.6%)</strong></td>
<td><strong>38 (86.3%)</strong></td>
<td><strong>44 (100%)</strong></td>
</tr>
</tbody>
</table>

This table shows that majority 65.9% of the respondents are aged between 18-30 years.
Table 2. Do you like research?

<table>
<thead>
<tr>
<th>Like research</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>45%</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>55%</td>
</tr>
</tbody>
</table>

The above table shows that more than half of the respondents (55%) said they don’t like research, while 45% said that they like research.

Table 3. Attitude towards research

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>1</td>
<td>2.2%</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
<td>13.6%</td>
</tr>
<tr>
<td>Average</td>
<td>32</td>
<td>72.7%</td>
</tr>
<tr>
<td>Bad</td>
<td>3</td>
<td>6.8%</td>
</tr>
<tr>
<td>Very bad</td>
<td>2</td>
<td>4.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The table shows that majority (72.7%) of the respondents had an average attitude towards research, while 4.5% said had a very bad attitude.

Figure 2. Problems experienced n= 43

The graph above shows that respondents gave varied reasons. 57% of the respondents said that research was time consuming, 18% said did not know methodology, 16% said it was difficult, 7% said it was expensive and 2% said lacked interest.

Figure 3. Ability to conduct own Research (n=43)

This figure shows that most respondents (68%) said they would conduct own research, While 32% said they would not.
Figure 4. Utilization of findings done by others (n=43)

The figure above shows that majority 91% of the respondents said that they would utilize the findings of other people, while 9% said they would not.

Figure 5. Have you ever read a scientific journal before? (n=43)

The above pie chart shows that majority 75% of the respondents said they have never read a scientific journal, while 25% said they have read.

Table 4. what should be done to improve research at undergraduate level (n=43)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocate more time for research &amp; start in first year</td>
<td>21</td>
<td>47.7%</td>
</tr>
<tr>
<td>Simplify content &amp; methodology</td>
<td>12</td>
<td>27.2%</td>
</tr>
<tr>
<td>Start research at degree level not able to understand</td>
<td>5</td>
<td>13.6%</td>
</tr>
<tr>
<td>Intensify lectures and improve ways of teaching</td>
<td>2</td>
<td>4.5%</td>
</tr>
<tr>
<td>Improve access to computers &amp; library for information</td>
<td>3</td>
<td>6.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4 shows that respondents gave varied recommendations and almost half of 47.7% said should allocate more time for research and should start in first year, 27.2% said lecturers should simplify content and methodology, 13.6% said research should start at degree level, 6.8% said access to computers and library for information should be improved and 4.5% said teachers should intensify lectures and improve ways of teaching.
Discussion of finding

The study aimed at evaluating third year student nurses’ attitude towards research at Ndola school of nursing: a case scenario for social marketing. A Total of 43 third year student nurses were interviewed and assessed for attitude toward research.

The study revealed that majority 86% of the respondents were females, while males accounted 14%, and majority 65.9% were aged between 18-30 years. This could be attributed to the caring attitude of females and nursing was perceived as a job for females and most males shun it.

The findings further revealed that more than half of the respondents 55% said they don’t like research, while 45% said they like research. These findings compliments the findings for a study done in Canada on medical students which revealed that 24% had no interest in any research endeavors (Siemens et al 2010).This could be attributed to a lot of factors that impinge on understanding research due to barriers. The study further revealed that majority 72.7% of the respondents had an average attitude towards research; good attitude accounted 13.6%, while 4.5% said had a very bad attitude. Findings on negative attitude can be liken to a study done by Lynn & Laymun (1998) who stated that nurses with negative attitude did not do much research, while the study done in Thailand among nurses revealed that 67.4% had good attitude towards doing research or had conducted research before (Petchnoy & Salee: Poster et al 1992).The findings can be likened to a study by Siemens who revealed that Negative attitude of medical students towards research is an obstacle to learning and is associated with poor performance in research.

A study done among nurses in United States revealed negative attitude towards research due to the manner in which they were taught. This shows that exposure to research early acts as a basis for future undertaking of research once one qualifies as a nurse.

The findings further revealed that respondents gave varied reasons on problems experienced towards research and more than half 57% of the respondents said that research was time consuming, 18% said did not know methodology, 16% said it was difficult, 7% said it was expensive and 2% said lacked interest.

The findings are comparable to a study done by Akerjordet et al (2012) among clinical nurses who revealed some barriers which include: lack of designated time 60%, interest 31% and knowledge 31% and lack of research supervision and support 25%. Research supervision was one of the most significant needs to enhance clinical nurses' research skills, management and organization of research activities 30% . Further studies were done by Siemens et al (2010) among medical students highlighted barrier in research associated to lack of supervision 84.7%, Lack of time 72.3% and lack of funding 54.1%. Therefore there is need to address these barriers to bring about positive change towards research.

Also the findings revealed that most respondents 68% said they would conduct their own research, while 32% said they would not. This compliments the study which was done in Thailand among nurses to identify factors influencing research among nurses, findings which revealed that only 20% of the nurses had experience in conducting of research of their own. (Petchnoy & Salee).

The study further revealed that majority 91% of the respondents said that they would utilize the findings of other people, while 9% said they would not. This shows that if students are able to read other people’s articles, they would also be motivated to undertake research of their own if barriers are addressed. Findings showed that majority 75% of the respondents said they had never read a scientific journal, while 25% said they have read. Therefore there is need to encourage and motivate students to participate in research so that they can gain the skill of undertaking research even when they qualify.
Findings shows that respondents gave varied recommendations and almost half of 47.7% said should allocate more time for research and should start in first year, 27.2% said lecturers should simplify content and methodology, 13.6% said research should start at degree level, 6.8% said access to computers and library for information should be improved and 4.5% said teachers should intensify lectures and improve ways of teaching.

**Social marketing**

To promote behavior change related to bad attitude towards research, public health communication can be incorporated in the dissemination of information as it can increase knowledge and awareness of health research, influence perceptions, beliefs and attitudes that factor into social norms, illustrate healthy skill, and debunk misconceptions towards research. In view of this I can say that social marketing programs are successful when implemented using research driven process, hence public health communication is a tool which can be used to change student nurses’ attitude towards research

**Limitation of the study**

Lack of adequate resources such, as funds and the time frame, in which the capstone project was to be completed, were major limitations. Ndola school of nursing has been selected for convenience purposes.

**Technological limitation:** power outages, limited internet access and network availability.

**Strength of the study**

This is a population study and the characteristics of the respondents are similar to those in other registered nursing schools in Zambia and are using the same curriculum, therefore the findings can be generalized. Also the findings will be used to strengthen research and for policy prescription to address challenges experienced by students during research at national level and globally. The findings can be utilized globally as a basis for replication in other countries and has contributed to the body of knowledge.

**Conclusion**

Conducting research at undergraduate level is very critical if we are to develop the body of new knowledge that encompass the current health trends and be able to provide quality evidence based care to our patients. More than half of the respondents showed lack of interest in research due to factors like time consuming and minimal knowledge on methodology, difficulty, expensive and poor attitude. However, they showed interest to conduct research at a later stage in their career. Therefore attitude of undergraduate student nurses should be improved towards research as most of them don’t like it and had poor reading attitude as shown in the study. The above Challenges must be addressed using Social marketing strategies by using public health communication tool. Research must be promoted as it is the basis to generate new body of knowledge which will improve service delivery based on evidence based practice.

**Recommendations**

1. There is need for Nursing Schools and General Nursing Council to utilize social marketing strategies to sensitize students in nursing schools and the public at large to embrace research so that they can come up with health innovation to address current health trends.
2. Need for another study done to assess lecturers /teacher’s perception, attitude and practice towards research.
South American Journal of Nursing
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Nursing Workforce Education and Its Implication On Maternal Health In Borno State

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Abstract

The relationship between nursing and maternal health presents a legitimate policy discussion. In this qualitative descriptive study, the views of nurse experts on the current status of nursing and midwifery education, and workforce development issues as they relate to maternal health in Nigeria was explored. Focus was on experts as they constitute important players in policy decisions related to nursing workforce and maternal health services delivery. Qualitative content analysis was used to analyze interview data. The findings of this study indicated that nursing and midwifery schools utilize a rigorous curriculum mandated by the Nursing and Midwifery Council of Nigeria (NMCN). It was also found that nursing workforce development is plagued by pedagogical issues, gender issues, and multi-faceted health systems challenges. These findings suggest that Nigerian nursing workforce is highly unstable and broader policies on workforce training, recruitment and retention are needed to improve maternal health outcomes.

Key words: Nursing education, midwifery education, nursing workforce development, health policies, maternal health, Nigeria.

Introduction

Nurses in Nigeria play significant roles in maternal health services provision. The high levels of maternal mortality ratio (MMR) in Nigeria, estimated at 630 per 100,000 live births (WHO, 2011), is an indicator of serious maternal health needs. Recruitment and retention of appropriate number of health personnel, particularly trained nurses and midwives (the core of health services delivery in Nigeria) are crucial for maternal death reduction. Although Nigeria has a relatively high number of nursing personnel (a pool of 210,306 nurses compared to other African countries) (WHO, 2009), there is still a significant shortage of nurses that are required to meet the health needs of a country of over 160.7 million people (WHO, 2013) that lags in positive maternal health outcomes. With a population of 4.2 million people (Borno State Government, 2011a); Borno state is one of the densely populated States in Nigeria with an estimated 1,500 to 2,000 persons living within every square kilometer (Borno State Government, 2011b). Women make up 53% of this population (National Bureau of Statistics, 2012). Evidence shows that as the density of health workers increase, maternal mortality falls; and a 10 percent increase in the density of the health workforce correlates with about a 5 percent decline in maternal mortality (The Joint Learning Initiative (JLI), 2006).

1.1 Rational of the study

The purpose of this study is to describe the system of nursing and midwifery education, the challenges to nursing workforce development and their impact on maternal health in Borno State, Nigeria.

1.2 Significance of the study

This study is design to look at nursing educational workforce challenges towards maternal health. The study will in one way or the other, proffer solution to improve the quality and quantity of nursing services towards maternal health. It is also expected to provide additional awareness to nurses to further their education. It may also be valuable for interested researchers to formulate and implement some new polices on nursing education and their
workforce development, with a view to minimize nurses migration.

1.3 General and specific objectives of the Study

1.3.1 General objective

The objectives of the study were to access the system of nursing and midwifery education as related to its workforce development towards maternal health in Borno state, Nigeria.

1.3.2 Specific objectives

1 To find out how nurses and midwives educational qualification would reduce maternal mortality rate.
2 To find out if increase in density of nurses and midwives workforce help reduce maternal mortality rate.
3 Find out measures to retain and recruit appropriate numbers of nurses and midwives.

1.4 Hypotheses/Research questions

1 There is no significant relationship between nursing workforce and educational development.
2 There is no significant difference between nursing staff motivation and workforce.
3 There is no significant relationship between workforce and maternal mortality rate in Borno state, Nigeria.

1.5 Operational definitions

1 Nursing education: -Knowledge of professional task towards looking after people who are sick or injured by nurses.
2 Midwifery education: -Knowledge of the technique or practice of helping to deliver babies and offering advice and support to pregnant women.
3 Nursing workforce: -The physical or mental effort directed at completing nursing function or carrying out nursing task.
5 Maternal health: -General condition of the body in terms of presence or absence of illness relating to motherhood.

Review of literature

Studies also show that countries with more nurses per proportion of the population have less maternal deaths than those with fewer nurses (Shiffman, 2007; Buor and Bream, 2004; Bulatao and Ross, 2003). For example, United Kingdom and United States have nurse density to population ratios of 12.12 and 9.37 per 1,000, respectively, while Nigeria has only 1.7 per 1,000 (WHO, 2006). United Kingdom and United States also have corresponding MMR of 12 and 21 per 100,000 live births, respectively, while Nigeria has a MMR of 630 per 100,000 live births in 2010 (WHO, 2011).

Chankova et al. (2006) estimated that there were 122,000 nurses and midwives in the public sector in 2005 and for Nigeria to meet the health-related MDGs, it would need 157,315 public sector nurses and midwives by 2015 (a deficit of about 39,880 taking the annual population growth into consideration).

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Nurses are the backbone of maternal health services delivery. Emphasis on nursing and midwifery education, recruitment, and retention is therefore important in pursuing efforts to improve maternal health. Nigeria is among 57 countries (36 in Africa) that lack the critical mass of health workers necessary to meet the health-related MDGs (WHO, 2006). Nurses are important part of the health workforce as they constitute 45 to 60% of the entire workforce in sub-Saharan Africa (Dovlo, 2007).

Furthermore, staff nurses and midwives direct and provide most obstetric care more than any other providers, and they are highly preferred in Nigeria (Ezeonwu, 2011). However,
nursing education and workforce development had been beset by multiple challenges including health systems issues, and various structural push and pull factors that drive migration (Hagopian et al., 2005; Gerein et al., 2006). Several evidence indicated continuous hemorrhaging of the nursing workforce. For example, between 2004 and 2007, 16,383 nurses sought employment outside Nigeria (Labiran et al., 2008). As of 2007, twenty-five international recruiting firms were still recruiting from Africa and seven of those firms were active in Nigeria (Pittman et al., 2007).

WHO (2006) estimates that about 3% of the nursing workforce (5,375 nurses) in Nigeria was registered in Organization for Economic Corporation and Development (OECD) countries in 2006. A 3% loss appears minuscule but could translate into zero nurses for millions of Nigerians based on the WHO’s estimation of nurse-to-population ratio of 1.7 nurses per 1,000 population. Dovlo (2007) concurs that even minor losses of nurses to migration will magnify the existing shortages in sub-Saharan African countries. Furthermore, the effect of each loss is significant, considering the length of time and resources it takes to train a nurse and the country’s high maternal mortality rate. These factors are broad and include the health system’s inability to create jobs and absorb nurse graduates, debilitated infrastructures, poor remunerations, poor working conditions, and occupational risk exposures that push the employed out and away from the system.

People migrate for a variety of reasons: to escape oppressive political climates, to pursue better economic opportunities for themselves and their families, to better their education or those of their children, or even just for adventure (Kingman, 2011). Nurses want access to resources so that they can learn and practice in a better way. Some migrate to be more autonomous. Other still just doesn’t find the employment opportunities in their own countries (Kingma, 2011).

Despite most people would prefer to remain in their home countries, there are a series of ‘pull’ and ‘push’ factors that motivate a person to leave home and family to pursue other opportunities. Other factors play a key role in “pushing” nurses out of their home country including an unsafe work environment, lack of political stability, high workloads, or lack of economic remuneration. The “pull” factors address some or all of those concerns and promise a better situation elsewhere.

In some countries nurses work full time and still earn a salary below the poverty line (Kingman, 2011). Many of these nurses are also single parents and when you’re faced with not only the financial needs of your children or perhaps elderly parents or even siblings, those financial constraints can become enormous.

Unemployment is very common among nurse professionals in Nigeria in the midst of acute nursing shortage. Schools continue to graduate a good number of nurse professionals, many of whom are either unemployed or underemployed (Chankova et al. 2006). Nigeria produces an estimated 5,500 nurses per year; however, only 1,331 are absorbed by the public health sector. The high number of unemployed nurses does not imply overproduction or “excess supply” in a country of over 160.7 million people, but a failure of the government to effectively manage its most critical labor force through recruitment, strategic distribution and retention (Olabode, 2012).

The efficiency of the Nigerian health care system stagnated over the past decades due to the impact of the International Monetary Fund’s structural adjustment program, a reform policy to promote fiscal responsibility and stabilize the economy (Awofeso, 2010). These fiscal austerity measures imposed by the international financial agencies are important contributory factors to the health system’s failures. (Dovlo, 2007). Fiscal restraints imposed by international loan conditional ties cause countries to freeze employment and retrench workers, particularly in the public sectors, making it hard for those countries to expand their workforce significantly even when supply is available. Training, successful recruitment and retention of nurse professionals in Nigeria will involve strategic efforts to address underlying structural health systems issues that negatively affect nursing and health outcomes for mothers, from the academic institutions to the points of care delivery (Olabode, 2009). These
result in shortage of nurses who are actively engaged in providing health services in the country. Although Nursing and midwifery education in Nigeria have continued to evolve, the Nursing and Midwifery Council of Nigeria (NMCN), a parastatal of the Federal Government of Nigeria and the only professional regulatory body for all cadres of nurses and midwives in Nigeria (NMCN, 2007), which strives to upgrade and standardize the nursing and midwifery programme curriculum.

The path to higher degree is still complicated for Nigerian nurses; nurses have to go through routes that are not clearly defined to obtain higher qualifications. Nursing education at the baccalaureate level and beyond is still not popular and only offered by few universities in the country (Ndatsu, 2011). For example, of the 124 federal, state and private universities approved by the National Universities Commission (NUC) in Nigeria (NUC, 2012), only four universities have fully accredited departments of nursing; eleven universities have provisional accreditation status; and one of these eleven schools is located in Borno State (NMCN, 2010). Despite the slow movement toward university-based program, and the many logistical challenges, the schools engage in strong and competitive curriculum and produce different cadres of competent practitioners in the country.

Methodology

The chapter deals with the research design which includes the target population; sampling technique, interview, administration and collection of information from respondents.

3.1 Design of the study

A qualitative, descriptive, cross-sectional, survey was used to assess the situation of nursing workforce education and its implication on maternal health in Borno state. This design will elicit the current nursing education of nurses and midwives workforce and determine various factors responsible for the shortages, migration, and low pursue of nursing education.

3.2 Study area

This study will be carried out in Borno state, Nigeria. It will be conducted in university of Maiduguri, state school of nursing and midwifery, hospitals management board headquarter, and nursing and midwifery council of Nigeria, Borno state.

3.3 Study population

The population of study consists of twenty-four (24) nurses from various areas from Borno state. Based on the number of nurses used for the study, six staff nurses and midwives with certificate in general nursing; four midwives with diploma in midwifery education; four nurses with bachelor degree in nursing and midwifery education; two with masters in nursing education; two with masters in nursing administration and management; and two with masters in educational planning and policy.

3.4 Study duration

The total time period required for completion of the study from day of conception to submission of project, based on series of activities is six months. Activities involving drafting of concept, drafting and revision of proposal, data collection and analysis, various corrections from co-guide and other researcher assistants. Activities commenced in the month of October through the month of March.

3.5 Sample method

The researcher is using the sample subject of twenty-four (24) and will make use of random sampling method

3.6 Sampling size

A convenient sample size of twenty-four participants was recruited for this study, and
simple random sampling technique was employed for selection through interview of nurse experts at different institutions.

3.7 Sampling technique

This sampling was heavily influenced by accessibility factors such as the insurgency (boko haram), weather, and transportation (road conditions) during the study period. Four of the participants were members of the top management staff of the NMCN. Ten were nurse educators, with the job title of “principal” or “director” of their respective nursing or midwifery schools. Ten were health administrators, and they direct nursing care services at their respective hospitals.

3.8 Pretesting

Personal interview carried out in a structured interview, which involved use of a set predetermined question and of highly standardized techniques of recording among randomly selected six nurses. Cooperation gained furthered better chance to conduct the research work proper.

3.9 Method of data collection

Participants were interviewed in their offices at their respective institutions. This study was conducted primarily in Borno State, Nigeria. However, participants affiliated with the Nursing and Midwifery Council of Nigeria was interviewed at their respective offices located in major cities outside Borno State. The nurse educators were interviewed at their respective academic institutions. The nurse administrators were interviewed at their respective hospitals.

3.9.1 The general inclusion criteria include:

(1) All participants must be over 18 years of age, (2) they must speak and understand English, (3) the management staff of the NMCN must be active representatives of the governing body of the Council, (4) the nurse educators must direct their nursing and midwifery schools, and (5) the hospital administrators must direct the relevant health facility. All participants were high-level administrators who influence policy decisions in their respective institutions and impact nursing workforce development and women’s health in the country. Each of the participants has extensive practice, teaching, and leadership and management experiences. Hitherto, under-aged, retirees and inactive rural nurses and midwives were excluded.

3.9.2 Data collection

Participants were identified by physically walking into the facilities and obtaining the names of the potential participants who met the inclusion criteria. Arrangements for interview appointments were not possible prior to each encounter, as attempts to contact potential participants through regular contact protocols including telephone, fax, and e-mail, were unsuccessful due to communication and accessibility difficulties, bomb explosions and road blocks from security outfits. Face-to-face, on-the-spot recruitment at different institutions was done. There was no official schedule for the meetings. Each participant was approached and given detailed information about the study and the procedures. All their questions were answered. Written informed consent was obtained from each participant and interview arrangements were made. Interview questions focused on admission, training and graduations processes, challenges to nursing and midwifery workforce development, and their implications on maternal health. The interviews were semi-structured, lasted twenty-five to sixty minutes, and were audio-recorded. Interviews included open-ended questions. Examples of questions included: (1) what are the nursing and midwifery admission and graduation processes and requirements in Nigeria? (2) What in your view are the current issues and challenges related to nursing workforce development in the country? (3) How does the availability of adequately trained midwives affect maternal health services provision in Nigeria? Four participants declined audio recording of their interviews; however, detailed
notes were taken. All data collected were coded appropriately. Three senior researchers from the author’s institution reviewed and concurred with the coding process.

**Presentation of results**

4.1 Data analysis

Analysis of data from face-to-face interviews and field notes was done to provide a clear qualitative description of the participants’ perspectives on the status of nursing education and workforce issues within Borno state of Nigeria.

The interviews were transcribed verbatim by the researcher. Transcripts of data were confirmed and manually analyzed using qualitative content analysis procedures and processes outlined by Graneheim and Lundman (2004) and Elo and Kyngas (2007). The text was read through by the researcher from beginning to end several times. Texts of recorded interviews of participants regarding their views on nursing education and workforce issues constitute the units of analysis for this study. Themes and subthemes that account for all the data in the interview transcript related to nursing education, workforce challenges and maternal health emerged from this reduction process and constitutes the findings of this study.

In view of the above selected interviewed respondents, the research questions are presented in tables as below:

**Research question I:** there is no significant relationship between nursing workforce and educational development.

**Specific objective I:** To find out how nurses and midwives educational qualification would reduce maternal mortality rate.

**Table I:** Percentage of nurses’ educational qualifications.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Nurses educational qualifications</th>
<th>NO of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Staff Nurse and midwifery certificate</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>Diploma in midwifery education</td>
<td>4</td>
<td>16.7%</td>
</tr>
<tr>
<td>3</td>
<td>Baccalaureate in nursing and midwifery education</td>
<td>4</td>
<td>16.7%</td>
</tr>
<tr>
<td>4</td>
<td>Masters in public health</td>
<td>2</td>
<td>8.3%</td>
</tr>
<tr>
<td>5</td>
<td>Masters in nursing administration and management</td>
<td>2</td>
<td>8.3%</td>
</tr>
<tr>
<td>6</td>
<td>Masters in public administration</td>
<td>2</td>
<td>8.3%</td>
</tr>
<tr>
<td>7</td>
<td>Masters in educational planning and policy</td>
<td>2</td>
<td>8.3%</td>
</tr>
<tr>
<td>8</td>
<td>Masters of science in nursing education</td>
<td>2</td>
<td>8.3%</td>
</tr>
<tr>
<td>9</td>
<td>PHD</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>


25% respondents have the highest number of nurses with general nursing certificates, while the least percentages of 8.3% representing masters in various discipline. This represents less than 50% of significant value. Hence, the hypothesis is accepted.

**Research question II:** there is no any significant difference between workforce and nursing motivation?

**Specific objective II:** Find out measures to retain and recruit appropriate numbers of nurses and midwives.

**Table II:** predisposing factors to nurses migration.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Options</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor remuneration</td>
<td>16</td>
<td>66.7%</td>
</tr>
<tr>
<td>2</td>
<td>Poor condition of service</td>
<td>6</td>
<td>25.0%</td>
</tr>
<tr>
<td>3</td>
<td>Occupational risk</td>
<td>2</td>
<td>8.3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>
66.7% representing 16 respondents indicates that poor remuneration is suggestive of nurses' migration. This hypothesis is therefore rejected.

**Research question III:** there is no relationship between nursing workforce and reducing maternal mortality rate.

**Specific objective III:** To find out if increase in density of nurses and midwives workforce help reduce maternal mortality rate.

**Table III:** representing nurses and midwives role in reducing maternal mortality rate.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Options</th>
<th>Respondent(s)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conducting deliveries and care during perurperium</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>2</td>
<td>Inserting uterine contraceptive devices and prescription of oral pills</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

50% of respondents is considered significant base on this study; hence, the hypothesis is rejected.

### 4.2 Observations and findings

The system of nursing and midwifery education in Nigeria influences nurses’ broader responsibilities. The findings of this study showed that nurses go through a rigorous integrative curriculum in order to get licensed. The curriculum discussed in this research is reflective of the basic and general nursing and midwifery programs since university-based programs that could produce master and doctorate level graduates are still emerging. Although general and basic program graduates are skilled and do bits of everything, their earned non-degree diplomas and certificates limit their capabilities in the field. Majority of the nurses are locked into clinical practice through their educations and training in the basic nursing and certificate programs. This presents roadblocks for professional advancement to higher level leadership and policy positions; and to compete with their peers in other health-related fields such as medicine and pharmacy.

These findings are consistent with an earlier report by Munjanja et al. (2005) that preparation of nurses in African countries has been more for clinical systems management than for strategic policy development. Efforts toward advanced nursing education should be unrelenting as policy decisions related to maternal health issues should be spearheaded by nurses and midwives. They deserve strategic positions of leadership in academic, policy, and higher-level health services administration in Nigeria.

This study revealed that the lower social position accorded to women impacts policies related to nursing education and practice in Nigeria. This may not be surprising considering the nation’s paternalistic culture. In Nigeria, men dominate all spheres of women’s lives, and the social relations and activities of women are governed by patriarchal systems of socialization and cultural practices which favour the interests of men above women (National Coalition on Affirmative Action (NCAA), 2009). The domination of the nursing profession by women and medical profession by men explains in part the unequal political landscape that is evident in clinical practice settings. Ndatsu (2004) and Olade (1996) concur that the subordinate role of the nurses in relation to physicians indoctrinated in early nursing education in the country intensifies this problem.

In this descriptive study, qualitative content analysis was utilized to analyze the views of nurse experts in Borno State, Nigeria on the current status of nursing and midwifery education, and nursing workforce issues as they relate to maternal health. Specific interview data collected include admission and graduation requirements of the nursing and midwifery schools, theoretical and clinical training, workforce development challenges and their implications for maternal health services provision and utilization.
4.2.1 Admission

Admission requirements to the schools of nursing and midwifery were described by the participants as strict in comparison to schools of medicine and pharmacy, because of quota systems used for admission criteria. General nursing and midwifery programs are common. All programme admission requirements were mandated by the Council. Each school of nursing and midwifery represented by the educators in this study admitted a maximum of 60 students per calendar year, as allowed by the Council. The post-basic midwifery program admits a maximum of 30 students per calendar year. Data on graduate programs (master’s and doctorate) were not obtained. They pointed out that all nursing and midwifery institutions in Nigeria undergo reviews and re-accreditations by the Nursing and Midwifery Council. When significant problems are identified through the reviews, student intake is suspended until programme deficiencies are rectified. Four of the participants confirmed that intakes of students at their respective schools were at some point suspended while they instituted remedial activities in order to graduate their backlog of students. Information on the regularity or frequency of such reviews was not obtained for this study.

4.2.2 Training

The educators emphasized that formal lectures and clinical instructions in the field constitute the core curriculum. They explained that the NMCN develops the framework, and sets the programme standard for schools. The framework determines the sequence of specific courses required in the nursing and midwifery curriculum. The Council’s comprehensive curriculum integrates classroom lectures, practical demonstrations in the laboratories, and clinical experiences at health facilities including primary care settings and hospitals. Basic and general nursing training programs produce versatile and well-rounded nurses who do bits of everything such as general nursing, psychiatry, education, administration, public health, and midwifery. Midwifery programmes further prepare students to perform physical examinations and health needs assessments; palpation, early detection of abnormal risk factors and timely referral, labor, delivery, and child welfare including nutrition, growth monitoring, and immunization. The theoretical and clinical components of the curriculum, according to the participants help prepare the students to be competent nurses and midwives.

4.2.3 Theoretical preparation

Findings on the theoretical preparations showed that students were equipped with the fundamental knowledge of nursing and midwifery. The curriculum includes extensive and rigorous coursework that exposed students to the use of the nursing process in the care of individuals, families, and communities. Basic and general nursing training programmes emphasize human anatomy, physiology, and fundamentals of nursing and midwifery practice, but also reproductive health, including family planning, infant and child health. The midwifery programme also embraces a rigorous curriculum according to the participants. The programme has extensive course work including applied anatomy and physiology, with emphasis on midwifery (an important course that supports the midwife’s role in understanding physiologic changes during pregnancy, and locating the female anatomical landmarks during delivery). After examples of other courses include; fundamentals of midwifery practice, community-based midwifery practice, family planning, ethics in midwifery, and research methods and statistics. Seminars in midwifery practice provide students with opportunities to practice presentation techniques in giving health and antenatal talks to different audiences. Students are also prepared for physical examinations and health needs assessments. Theoretical foundation on family planning, abortion and post-abortion care, and pharmacology related to obstetric practice also command emphasis in the classrooms, according to the participants.

4.2.4 Clinical training
The participants emphasized the importance of integrative curriculum by explaining that theoretical learning supports and reinforces clinical training in skills related to patient monitoring, stages of labor, actual birthing processes, and postpartum care. Students are posted to both antenatal community clinics and antenatal wards in the hospitals. These settings provide students with opportunities to observe and actually assist in clinical activities. The educators reported that in the field, students work under the supervision of public health nurses, staff nurses, midwives, and their clinical instructors. One participant noted that practical exposures hold the key to students’ achievement of their competency goals in birth attendance, postpartum care, placement of contraceptive devices, and other important obstetric and gynaecologic clinical activities. For example, before sitting for the qualifying examination for licensure, students in the post basic midwifery program are required to have done a minimum of 30 deliveries, cared for 40 or more clients during puerperium, inserted minimum of 10 intra uterine contraceptive devices, fitted 2 diaphragms, prescribed 15 oral contraceptives, and performed at least 5 manual vacuum extractions. These are stipulated by the NMCN. Participants explained that theoretical knowledge gained in the classroom supports students’ experiences in the real world.

4.2.5 Graduation

The findings showed that the number of students that graduate each year are variable and depends on students’ academic performances, levels of clinical competencies, and skills acquisition. Evaluations of students under these criteria were conducted by the academic staff, field preceptors and clinical instructors. One participant described their graduation requirements this way:

“Students’ assessments and evaluations are based on their continuous progress in the program, after the introductory block, semester examinations are given by the respective schools, and the Council’s qualifying final examinations.”

Registration and licensing follow successful completion of the program.

4.3 Challenges to nursing and midwifery workforce development

Pedagogical challenges

This study showed that unavailability of teaching resources greatly impacts the teachers’ abilities to teach. Lack of basic educational items that facilitate teaching and learning hinder efforts on nursing workforce development. Such items include academic journals, books, projectors, computers, and laboratory and demonstration equipment such as midwifery kits. Others include office supplies such as papers, ink, printers, copiers, and telephones. One participant talked about books and electronic materials and stated:

“Most of the books that are reasonably written are American or British-based. We don’t have too many African authors and Nigerian authors, or books contextualized to the health problems of our population. We have just started making use of the internet but we are not able to subscribe or pay in order to access new online research or teaching materials.”

Financial constraint

Furthermore, many current and prospective students find it difficult to meet the financial obligations of nursing and midwifery schools, making it difficult for qualified individuals to start and complete their education. One participant said:

“Most students that come to our school are from poor families. One of them now is qualified but not able to pay ‘kobo’ (local currency denomination equivalence of one cent or less).”

Such students are unable to pay their tuition or acquire the required books and other items needed to complete their programs successfully.

Gender issues

Participants noted that Nigeria is a paternalistic society and issues related to gender affect nursing as a profession. At the familial level, there is lack of spousal support as some men do not allow their wives to reach their maximum academic potential. One participant put it this
way:

“Some women are capable, but the type of ‘Nigerian mentality’ men we marry – they won’t even allow you to go to school or further your education. They feel that when you come back, you become the master of the house.”

Few participants expressed optimism that things will change in relation to family dynamics in favor of women, and their potential in pursuing academic careers such as nursing. Nursing remains a profession with the greatest proportion of women in Nigeria, and as such, participants believed that policies related to nursing are not taken seriously by the government, compared to other professions such as law or medicine. Data on gender ratio in the nursing workforce were not obtained for this study.

**Certification**

Participants agreed that the multiple certifications in nursing provide no benefit to nurses in terms of ascending the career ladder in leadership roles such as in education and administration, since the certificates are not recognized by the universities. One educator expressed deep frustration about the poor recognition accorded to nursing qualifications:

“…. the certificates, a whole staff nurse midwife, you get your midwife certificate and it is not even a diploma. It does not belong to diploma; neither does it belong to a degree.” It has no define academic classification in certification.

**Practicum**

Nurse educators and their students experience practice handicaps during their practicum as more attention is paid to resident doctors and medical students. One participant used the word ‘red tapeism’ to describe this situation. For example, student nurses are often not allowed to perform key obstetric functions when there are medical students or resident doctors in the wards that also needed the experiences. She explained that nurses are often not given full practice opportunities particularly in tertiary facilities, thereby limiting their prospects for learning and professional growth. The subordinate role of nurses and lack of respect for the profession in the context of gender differences affect the image of the profession. A participant stated:

“…. but you know, in Nigeria, the women, the stigma, the high position accorded to men and doctors from the colonial days still obtains.”

### 4.4 Health system’s challenges

Participants attributed most problems confronting nursing workforce development to Nigeria’s weak health system such as inadequate physical and human infrastructures, fiscal constraints in absorbing trained nurses, and poor salaries. Students and staff are squeezed into tight classrooms and office spaces, creating teaching and learning challenges. They emphasised that schools of nursing and midwifery do not get significant financial support from the government and mission schools and hospitals in particular are heavily affected. These mission institutions were established by British missionaries many decades ago, resulting in numerous dilapidated infrastructures that are never upgraded or equipped. They lack critical resources for effective teaching and learning, and most importantly fail to attract young people. They are therefore financially dependent on tuition and local churches whose memberships include the very poor in rural villages. One participant simply stated:

“We have no money to run our academic institutions.” Another stated, “They (people in government) need to realize that we are part of this country and we are doing good service to humanity. They should help us and give us grants to train many more nurses… equip the wards and the training areas. If they can help us, it will be nice, because where there is money there is everything, and where there is will, there is hope”.

Participants noted that despite tough challenges, schools continue to train and graduate a good number of nurses and midwives even though the jobs are not always there. They acknowledged that it is difficult to witness high nursing unemployment in the midst of surging maternal health care needs. They explained that the government often places embargo on employment because it lacks the fiscal resources to create health care jobs, leaving many
highly qualified nurses and midwives unemployed in a society that is in dire need of their services. Information on specific dates of embargo on jobs in Nigeria was not provided by participants in this study. A participant believed that many highly qualified nurses are produced each year that they could meet a significant proportion of the health needs of the country. Unfortunately, significant numbers of them are unemployed, and those who are employed are unhappy and eventually leave. Poor remuneration was repeatedly pointed out by all participants as one of the biggest impediments to the growth of the profession and workforce development. Employed nurse educators get low salaries and go unrewarded for most of the work they do. They explained that with the meager salaries, they could not afford continuing education through conferences and workshops, or attain higher degrees to advance their careers in addition to meeting their basic family needs. Furthermore, delayed promotions and inadequate compensations create frustrations and affect the morals and performances of nurses, thereby causing them to consider alternative options. One participant put it this way:

“We have nurses and midwives that are skilled ... the unfortunate thing is that nurses overall are not favored in Nigeria because of the pay. Remuneration is very low, so they keep leaving the country to South Africa, America and even Cameroun, neighboring country. Participants noted that although graduates could be employed in variety of positions, first and second tier jobs (federal and state agencies) are preferred but highly competitive, and therefore not readily available. Private hospitals absorb significant number of graduates despite their very low remuneration. Some of the participants’ who are working in Government Hospitals also work with private Hospitals for part time to augment their remuneration.

“They do not want to pay them well, but rather saturate their hospitals and clinics with those who dropped out of school because they failed in the programme and are therefore, not licensed to practice”.

For qualified nurses, one participant stated: “The nurses’ graduate, and we throw them into the job market where there are no jobs. Some nurses find themselves in the private hospitals where they ‘use them’ because you cannot imagine that the staff nurse midwife would be paid between 4000 and 7000 naira (approximately $30 to $50) per month”.

Another participant expressed dissatisfaction about the uncertain future for new graduate nurses by summing it up this way:

“... We are throwing them out in the job market. Some going to South Africa, some going to Tanzania, all these places, go all over the world, you see Nigerian nurses. Because they cannot get employment in Nigeria, and when they have the employment, the pay is weaker, otherwise if you are well paid, how can you leave your family in Nigeria and go abroad?”

Nigerian nurse and midwife graduates, according to participants, are highly interested in overseas employment, particularly in the United States. They were concerned about the high number of nurses who are leaving the country to unknown destinations. Participants stated that they do not keep any data on their employees’ or graduates’ whereabouts after they leave their jobs or the schools. However, the educators reported an increasing trend in the number of transcripts requested by their graduates. One participant said:

“This year, of all the 29 that qualified and graduated, we confirmed that five midwives have already left the country (within six months of their graduation).”

A participant commented that many Nigerian nursing students have no zeal anymore to study and learn contextual clinical issues, with the plan of practicing within the country post-graduation. They study with the intent to migrate overseas. The participant stated:

“They are just in to ‘pass examinations’. It has not been like that all this time. We used to have students who are committed and know what they are doing. I don’t know whether it is this ‘American check-out’ that is causing this because all they do now is to pass exam and then take the Commission on Graduates of Foreign Nursing Schools (CGFNS) certification examination.”

Another participant noted that the United States and United Kingdom opened their doors for Nigerian nurses, but their activities are definitely a problem for Nigeria. “We do however,
encourage and welcome our nurses to go and train abroad, where there are better opportunities for them to learn, and then come back to teach here in our nursing and midwifery schools. That does not happen. That’s the problem.”

New and experienced practitioners and educators are always on the lookout for better opportunities. One educator revealed that advanced nurses in academic institutions have the greatest opportunities to go overseas because they are often more exposed to foreign opportunities through networking. She said:

“I have lost very many well-educated nurses, especially lecturers. Such losses are irreplaceable.”

4.5 Implications for maternal health in response to the question

“How does the availability of adequately trained nurses and midwives affect maternal health services provision in Nigeria?”

Participants indicate that the answer starts from the schools and extends to the points of care. The quality of instruction provided, the quality of nurse graduates, and the quality of care delivered to clients’ impact maternal health outcome. They explained that the lack of necessary financial and technical support for nursing and midwifery education means that most classrooms are not well equipped, and instructors do not have the necessary tools to support students’ learning. The instructors’ readiness to provide students with solid knowledge base with which to go out and practice with confidence and improve maternal health outcomes are affected. This directly affects theoretical preparation and clinical skills training for students. In most cases, nursing students are not adequately prepared for their roles. One respondent was worried about the outcome and stated:

“When students are not well prepared for clinical practice, their care delivery skills will be compromised”.

Participants indicated that despite the availability of trained nurse professionals in the job market, there are still not enough educators and clinicians that are actively employed by the system that could impact the health outcome of women, particularly in the rural areas. This simply means that large numbers of women are not accessing the necessary consultations and antenatal care they need. They cited instances where women spend an entire day in queue waiting to see a provider and could not (situations that often discourage some women from going to the health facilities in the first place). For rural clients, they fall back to the services of traditional birth attendants and other alternative providers. They were concerned that as fewer nurses handle high patient loads under difficult work environments, their care effectiveness diminishes.

Discussion

This deals with results of selected findings of the study in relationship to the answers given to the interviews conducted.

Twenty four nurses were interviewed but twenty three answered as per interview questions. This represents 95.8% of the study population respondents answered reasonably and well utilized. One person declined from answering few questions, representing 4.2%. Frequency of 50% above is significant support. Selected findings from the interviewed questions are discussed below.

The result obtained from interview in respect to unemployment, poor infrastructure, less than adequate teaching and clinical work condition, and poor remuneration were consistent with findings of labiran et al; (2008), Pittman et al; (2007) that revealed there were significant effects of continuous hemorrhaging of nursing workforce thereby creating shortage of nurses’ workforce within the country.

This study suggested that increasing numbers of Nigerian nurses are interested in, and actively pursuing across-the-border employment opportunities. This result also is supported by Dovlo (2007) who concurred that even minor losses of nurses to migration will magnify the existing shortage in sub-Saharan countries. Furthermore, the effect of each loss is
significant, considering the length of time and resources it takes to train nurse and the country’s high maternal and mortality rate.

Further findings from the study revealed that most nurses, who migrate internally are very high skilled clinical care professionals with several years of working experience. This is in agreement with Clemens (2010) and Hancock (2008) who also supported that experience and sophisticated nurses are the first to be targeted for recruitment from any country, as they are those that have language skills and confidence to negotiate the complex immigration procedures and processes. Findings from the above study reveal that 95% affirmed migration of nurses to other countries affect the workforce productivity as related to material mortality rate.

Delay promotion, meager salaries and inadequate compensations is identified by Kingman (2010), as this creates frustration and affect the morals and performance of nurses thereby causing them to consider alternative options; this negatively affects nurses’ productivity towards reducing maternal mortality rate in the country. The future of nursing and midwifery in Nigeria might be endangered.

Dovlo (2007) Furthermore, the effect of each loss is significant, considering the length of time and resources it takes to train a nurse and the country’s high maternal mortality rate. Highly educated nurse professionals such as educators and other high level practitioners are usually the first to find external opportunities.

Another finding of the study is on nursing and midwifery education, recruitment and retention which are important in pursuing efforts to improve maternal health. This is in conformity with Ezeonwu (2011) who state that staff nurse and midwives direct and provide most obstetric care more than any other providers. This study also supported Ndatsu(2011) who identified the path to higher degree is still important for Nigerian nurses; nurses urged to go through universities to obtain higher qualifications. NMCN (2010) agreed with nurses improve educational qualification for increase workforce. It emphasized that despite the slow movement towards university-based programme, and the many logistical challenges, the schools engage in strong and competent practitioners in the country. The above finding is supported by 24 respondents representing 100% of study population.

5.1 Limitations

A methodological limitation of this study is that the findings capture the views of a convenient rather than random sample of nurse experts. The views of experts in university-based academic program are not so much included. Furthermore, the number of participants is small based on number of graduates in the state. However, the number is appropriate for a qualitative study that utilizes the analysis of interview texts.

5.2 Conclusion

Nurses are at the center of health care delivery in Nigeria. Although schools continue to produce significant number of competent nurses and midwives annually under tough conditions and with minimal resources, the system fails to absorb the graduates, resulting in high nursing unemployment. Furthermore, the push and pull factors related to global labor market forces such as poor salaries and benefits, and poor working conditions force more nurses to exit the pool. These issues result in inadequate number of nurses that are actively involved in tackling the health needs of a nation whose population continues to grow exponentially.

5.3 Recommendation

1. The National University Commission (NUC) should prioritize the approval of more nursing programmes at the Baccalaureate and graduates level in Nigerian universities.
2. Nursing and midwifery council of Nigeria should design curriculum for university-based programmes that could be offered for master and doctorate
level graduates in the country.

3. The nursing and midwifery council of Nigeria should look into the subordinate role of the female nurses in relation to physicians’ indoctrination in the early nursing education in the country.

4. Employers of nurses need to be considerate in boosting the morale of employees positively towards effecting promotion, increase salaries and adequate compensation.

5.4 Summary

Nigeria desperately needs an efficient health system that is committed to not only continued training of highly qualified nurses and midwives, but also to creating attractive well-paying jobs that could boost competitive recruitment and retention. Such efforts will help in addressing the surging maternal health needs in the country.

References


Peer Support Program for Cancer Clients – South Indian Experience

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Abstract

Background/Purpose: Peer support program for cancer clients was well known and accepted one all over the world. In India peer support for cancer is informal and not as a support model in care. Clients show good coping with peer support. A journey started with an aim of bringing in standard training program for peer support in India and to make them as part of healing team.

Methods: A Training module was prepared with expert validation. The criteria’s for becoming volunteer were completed treatment successfully, healthy on regular follow up, completed at least primary education and willing to spend one hour in a day. A 2 half day workshop with pre test of self rated skill checklist followed by post test evaluation of self after one month and client rating of satisfaction with peer was planned. Incentives were provided for undergoing the training and also for providing peer support. Informed consent was obtained.

Results: Peer identification process was a huge challenge as people are stigmatized over the diagnosis and not willing to volunteer even with incentives. In about 3 months, 40 eligible clients were asked and only 5 clients with breast cancer consented for training. Training was given and they faced difficulty with providing face to face support which was changed into telephonic support. Clients and peers expressed satisfaction over the process. The Initial hiccup was overcome and now many volunteers willing to undergo training.

Conclusion: A formal training program for peer support has been initiated in India and effectiveness is being tested with a randomized trial and results so far are promising for the care of clients with cancer.

Key words: Peer Support, Cancer support, Peer training, Peer support for cancer, Breast cancer support, Peer volunteer.

Introduction

Cancer diagnosis and treatment creates a lot of psychological and social agony in the clients and they are left blank many times during the treatment journey and look up for someone who could support. Psychological support plays a major role in cancer treatment and successful recovery. Health care professionals provide a very good support for the cancer clients; instead there is always a gap in improving the quality of life of those clients. Health care professionals use peers as a support model for many diseases all around the world. Peer support is recognized as an important source of support in providing care for chronic health problems such as addiction, Diabetes, Cancer etc.

Peer support refers to support offered to people with a particular illness by people who have also experienced the same illness. Sharing experiences is the essence of peer support and enables a peer to offer experiential empathy, something generally beyond the scope of health professionals. The emotional, informational and appraisal support as core attributes of peer support, with the mutual identification, shared experiences and sense of belonging developed through peer support thought to impact psychological outcomes positively. Peer support
programs are based on the premise that support from others who have been through a similar experience can help reduce the negative impacts of this disease.

Louisa M. Hoey et al did a systematic review of peer support programs for people with cancer using electronic search in CINAHL (Cumulative Index to Nursing and Allied Health Literature), MEDLINE and PsychINFO databases published from 1980 to April 2007. Data on characteristics of the peer-support program, sample size, design, measures, and findings were extracted and papers were also rated with respect to research quality (categories ‘poor’, ‘fair’ or ‘good’). The results of the search showed that Forty-three research papers that included data from at least 1 group comparative papers, and 10 papers reporting eight randomized controlled trials (RCTs). Five models of peer support were identified such as one-on-one face-to-face, one-on-one telephone, group face-to-face, group telephone, and group Internet. They concluded stating that papers indicated a high level of satisfaction with peer-support programs; however, evidence for psychosocial benefit was mixed. They said that one to one face to face peer support program will be more effective and should be given priority.

Many Studies have showed positive benefits of peer support on not just cancer but also in various other illness and special mention towards recovery from addiction. In India peer support for cancer is informal and not as a support model in care. Clients show good coping with peer support. A journey started with an aim of bringing in standard training program for peer support in India and to make them as part of healing team.

**Aim**

To train the peers to provide psychological support to cancer clients.

**Objectives**

1. To test the self rated skills in becoming peer volunteer for cancer support before and after training.
2. To test the satisfaction of cancer clients towards their peer’s support.

**Methods**

Peer Volunteer support model for cancer clients was planned in a step wise manner. The various steps and activities undertaken are as follows,

**Step 1: Preparation of training module**

A training module was prepared to create peer volunteer support for cancer client. The training module was prepared after extensive literature review and expert validation. The module consisted of 5 sections as given in table 1.

<table>
<thead>
<tr>
<th>Module Section</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Peer volunteer support, goals &amp; standards</td>
</tr>
<tr>
<td>2.</td>
<td>Self care</td>
</tr>
<tr>
<td>3.</td>
<td>Specific cancer type review (e.g. Breast/ Cervix)</td>
</tr>
<tr>
<td>4.</td>
<td>Communication &amp; counseling skills</td>
</tr>
<tr>
<td>5.</td>
<td>Peer support process</td>
</tr>
</tbody>
</table>

The training module consisted of section I on peer volunteer support goals and standards which give a brief introduction about the need for peer support, do’s and don’ts of peer support and principles of peer support. Section II dealt with self care activities as self health is most important for a cancer conqueror before providing support to his/her peer. Section III was a customized package where the review of specific cancer type was dealt based on the peer’s type of cancer. Section IV dealt about the various communication and counseling skills which are required for providing counseling/peer support for the cancer clients. Section V dealt about the actual peer support process which was about how to do the peer support in
practical scenario, steps in doing the peer support, here specific guidelines for face to face and
telephonic support provided to the volunteers.

Step 2: Identification of peer volunteers

Peer volunteers were identified based on the criteria determined by the experts.

Criteria for selection of peer volunteers

1. Must have completed cancer treatment successfully.
2. Willing to spend at least one hour every day.
3. Agree to a background check, health screening provided at no cost to volunteer
4. Exhibit a patient, resourceful and friendly demeanor
5. Capable of working with a diverse group of people
6. Have completed at least primary education.
7. Understand and able to communicate orally in Tamil or Telugu.

Step 3: Training of peer volunteers

Peer volunteers were identified based on the criteria and the training was provided in a 2
half day session with one week interval between each session for reflection. The training
program was planned as a group session starting with self introduction followed by pre test of
self rated skills on becoming a peer volunteer and first three modules were delivered on the
first half day which had four hours with a break of Half hour in between. The first day session
was followed by one week reflection and peers were asked to follow the self care activities as
taught. 2nd half day training began with reflection of peer volunteer and the remaining
modules were delivered in 4 hour session with a half hour break in between. The mode of
delivery of the contents were in a form of discussion, debriefing session of peer volunteer’s
experience, role play of counseling sessions and practice of skills needed for peer counseling.

Step 4: Evaluation of peer volunteers

After one month of training peer volunteers were assessed for the self rating skills and
clarifications given on areas where they lack skill. Clients were then given to the peer
volunteers to provide their psychological support through face to face sessions and telephonic
follow ups. After one month of peer support clients provided their feedback over the peer
counseling. Constant motivation and support provided to the peer volunteers during the
support session.

Results and discussion

1. Selection of Peer Volunteers

Peer identification process was a huge challenge as people are stigmatized over the
diagnosis and not willing to volunteer even with incentives. In about 3 months, 40 eligible
clients were asked and only 5 clients with breast cancer consented for training. The idea of
peer support was very informal and the support system was once in a while and not as regular
part of the medical team.

2. Training of Peer Volunteers

Peer Volunteers were called for training in a group, but group training was not able to be
done with constraints like peer volunteers not able to come on a particular day (day feasible
for one person was not feasible for another) and lack of supportive personnel to accompany
them to the training centre. Hence, individualized training was given for the peer volunteers at
their convenient places such as in their Home and Hospital. Individualized training was also
found to be more supportive as they opened up much better and their queries were addressed
more clearly.

3. Self rating of skills

Pre and post skill rating on becoming a peer volunteer was taken from the clients and all 5
clients trained so far expressed high level of confidence in performing the role of peer
volunteer. The pre and post skill was assessed using a rating scale and the results are given in table 2.

**Table 2:** Findings of Pre and Post Self skill rating of peer volunteers

<table>
<thead>
<tr>
<th>Questions</th>
<th>Excellent or a great deal</th>
<th>Above Average or much</th>
<th>Average or somewhat</th>
<th>Below Average or Seldom</th>
<th>Extremely Poor or None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre test</td>
<td>Post test</td>
<td>Pre test</td>
<td>Post test</td>
<td>Pre test</td>
</tr>
<tr>
<td>1. How would you rate your previous knowledge of peer to peer counseling</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td></td>
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</tr>
<tr>
<td>2. How would you rate your current confidence level as a peer volunteer?</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How would you rate your current understanding for the rationale for peer counseling?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. How would you rate your knowledge of your boundaries as a peer counselor?</td>
<td>3</td>
<td>2</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. How would you rate your current confidence in supporting someone with breast cancer?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How would you rate your knowledge about self care strategies?</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. How would you rate your current understanding of effective communication and counseling skills?</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8. How would you rate your current knowledge about breast cancer and its treatment?</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. How confident are you in conducting a face to face and telephonic counseling with your peer?</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10. How would you rate your current comfort level to recognize an individual that needs additional help from a professional?</td>
<td>3</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
4. **Peer Counseling Session**

Peer support was initially planned as face to face sessions with telephonic sessions and peer volunteers were not able to come in person to the hospital most of the time and hence a complete telephonic support model was finalized and each peer volunteer was given clients periodically and they have provided good psychological support and the clients have expressed high level of satisfaction with the peer support.

5. **Lessons Learnt**

1. Peer support was highly useful in reducing the psychological problems of the clients.
2. Telephonic support model was found to be effective and many Peer volunteers are willing to provide telephonic based support.
3. Individualized training will be more effective than group training.

**Conclusion**

A formal training program for peer support has been initiated in India and effectiveness is being tested with a randomized trial and results so far are promising for the care of clients with cancer. Peer volunteer training and support will be brought under the formal stream of care for cancer clients soon.

**Acknowledgement:** Indian Council of Medical Research Fellowship Grant to carry out the project work.

**References**


**Abstract**

This study was carried out in order to review nursing education and its administration in Usman Danfodiyo University Teaching Hospital, Sokoto, Nigeria. The aim is to determine how nurses view the ever expected shift from hospital based nursing training to University nursing education. The transformation and the overall outcome of this change on the health sector and the clients. The research will be of great assistance to all cadres of nurses who wish to advance their career to the highest grade. A random sampling technique was employed in selecting respondents. A total number of 200 questionnaires were distributed and 191 were returned after filling by respondents. Based on educational level, 85% are diploma holders, while 15% (30) respondents are BNS holders. Fig. 4.1 shows that 95% are fully aware of university education. About 65% of respondents also argued that nurses could be good administrators. Based on the above findings, it was recommended that nurses should be encouraged to improve on their education so as to be able to face challenges facing the health sectors in the 21st century. Such challenges include advancement in medicine and nursing giving room to tele nursing and e-conferencing.

**Introduction**

Nurse means “to care” or “nourish” the term nurse suggests attendance and service, having its antonym as “neglect”. The meaning of a nurse is a person formally educated in the care of the sick or infirm, especially a registered nurse.

Nursing begun as the desire to keep people healthy and provide comfort, care and assurance to the sick. Societal changing needs have also influenced the general goals of nursing in the present global world. As history will have it, nursing and medicine have been interrelated. During the Era of Hippocrates, medicine was practiced without nursing and during the middle ages, nursing was not named then as nursing. As history will have it, men and women have held the role of a nurse.

The nurse should be an independent practitioner and she is able to make independent judgments. It is true, that, now the role of nurses as providers of primary health care as those who diagnosis and treat, when a doctor is not available.

It is rightly said that the functions of the nurses as initiators of care are in fourfold; to sustain health, to prevent sickness, to restore health and to eliminate suffering. The need for nursing is universal; inherent in nursing is respect for life, dignity and rights of man.

**1.1. Background of the study**

According to the nursing and midwifery council of Nigeria (2005), detailed history of a profession that combines scientific principles, technical skills relayed, but documents revealed that caring profession came into awareness since 1854. In the very olden days, nursing was mainly practiced in a family setting, with mother caring for her children and nurturing care tremendously increased for acquaintances. About 1880, status of nursing greatly improved many females and religious individuals became involved in patient care. Then many school of nursing sprang up in Europe. The very first established in 1836 by Parker. The order fluentness, in Kevesworth Germany through the influence of Florence Nightingale. The first movement for the recognition and registration of the nurse occurred in
1882. Mary E. Mohney was the first African American graduate nurses, that promoted integration and better working conditions for black clients and healthcare workers.

In Nigeria, caring was initiated towards the wounded came through the British colonial master. Services and care were initiated towards the wounded soldiers at the “forte”. The first nursing home in Nigeria was established in Jericho, Ibadan by the British government.

Later on, missionary homes, dispensaries and a host of others started rendering nursing trainings and then started the training of nurses in Nigeria. Problems associated with this kind of training were that no real formal education, also language was today in Nigeria, institutions offering nursing education are inadequate, the schools of nursing offering three years nursing programmes with vast clinical training and practicum and the university programme offering five years bachelors of Nursing Science programme (BNSC). Also we have different institutions offering Post Basic Nursing Education Programme, with duration varying from one full calendar year to two years. Certificate being awarded is Diploma in such area of specialization like: Diploma in Pediatric Nursing, Accident and Emergency caring, Tutorial Nursing, otorhinolaryngology (ENT).

Each year, registration and enrollment in most of these courses is large, but a little percentage is admissible, this phenomenon has led to shortages in our hospitals. As at now, the crave ought to have ensured that standard is raised to meet the present challenges. More emphasis should be geared towards infrastructural development, teaching instruments to give room for the breakthrough. By 2020, all registered nurses in Nigeria ought to have upgraded themselves to meet the challenges in the heath sector. Is this achievable? Of course the answer is no, institutions are restricted in the number of students they admit per session, hospitals cannot release all their nurses at a time in pursuant of degree, if they do, who will then care for the teeming patients in the ward? Just as it’s a worthwhile venture, more time should be given for this kind of transformation in other to carry every along. Infrastructure development, teaching and learning aids. Human and materials resources should be richly enhanced to give room for the breakthrough. “Health for all” by 2020.

It is only when more personnel are developed that this can be reality. Opportunity should be given to students who want to choose career in nursing and allied health programmes, by expanding the number of students being admitted into various health care institutions provided they meet the criteria’s for admission and they are qualified.

On the other hand, administration in nursing has its challenges as well. Many organizations and institutions had previously side-lined nurses as part of the decision makers. This is due to the fact that, nurses were then regarded as non graduates. This has affected the profession then in Nigeria. With the state of things presently and the world being a global village, many courses are unveiling and e-learning, e-conferences, Skye chatting and webcam facilities have improved not only nursing education, but also medical breakthrough as well.

Administration in nursing has been faced with numerous shortcomings in Nigeria today. The word “administer” is derived from the Latin “ad” ministries” means to care for or look people to manage” affairs. (BT Bassavan Thappa).

Administration encompasses every human Endeavour, be it private public, military, small or large scale, which is practiced all over. Since administration perimeters all planned human activities, hence, it is at the centre of all human affairs. The main guiding principles of administration are policy formulation and implementation for the attainment in an optimum manner of stated end in the shape of service or products.

(L.D. white) define administration as the direction, coordination and control of many persons to achieve some purposes or objective.

**Nature of Administration**

The processes to be considered in administration is intellectual social dynamic and creative and as well continuous features of administration is as follows:

- It is universal, since irrespective of nature and objectives of the organization, all basic elements of administration such as planning, organizing, staffing, directing,
coordinating, reporting, budgeting all apply for its effective achievement of goals.

- It is intangible; since administration is visualized as abstract. It cannot be transferable to anywhere.
- It is continuous and ongoing process.
- Its goal oriented, since administration is always struggling to achieve the laid down goals and objectives of the organization.

The nature of administration cooperated with two broad views, i.e. integral and managerial. Integral Views: have to count the work of all fellows, ranging from very minute level to the highest degree for example group “D” official to the top level officials work in the setup. For e.g. taking care of clients requires and needs effort of whole health/medical team including Nurses, Doctors and Para medicals and group “D” officials.

Management positions: Regard the work of only those persons engaged in performing managerial functions in an enterprise/institutional organization as constituting administration. The activities concerning top managerial units, control and coordinate all those logistics undertaken in the institution/enterprise, the hospitals and health care institution. The acceptance of the integral view makes us count the entire personnel of an organization as in administrator, whereas managerial view holds that administration is the organization and use of men and material in the pursuant of a given objective.

Professor Luther Gullick (1937) summand up certain principles or elements in the word “POSDCORR” this acronym/pneumonic stands for:

- ‘P’ - Stand for Planning
- ‘O’ - for Organizing
- ‘S’ - for staffing
- ‘D’ - stands for Directing
- ‘CO’- stands for Coordinating
- ‘R’ - Stands for Reporting
- ‘B’ - Stands for Budgeting

1.2. Statement of the research problems

Education has led to more awareness in all ramifications of human endeavors. And vast opportunities have been created with more advancement in knowledge pursuit. Nurses occupy sensitive and even more landmark positions in the multidisciplinary health care team. Major and quality in-puts are being made by nurses in a bid to promote and maintain patient’s optimum wellness.

The above can mainly be achieved through a reform in nursing education. And this transition is all over the country (Nigeria) moving nursing education from hospital to university base. Majority of the nurses have the opinion that hospital trained nurses are more practical oriented than the university trained nurses. A lot of criticisms also result regarding the generic programmes in nursing education, emphasizing that the generic graduates are deficient in clinical practice (Erinosho, 2001).

The question now is that what are the views of nurses about this ongoing transition in basic nursing education from hospital to university based nursing education in Nigeria?

The study is designed to review nursing administration in Nigeria and also establish nurse’s opinion or views concerning the ongoing transition of basic nursing education from hospital environment to a university atmosphere.

1.3. Significance of the study

This is to emphasize on the transition of nursing education from hospital to university base. It is a positive innovation, yet a delicate one. More investigations needed to be carried out before fully subscribing into it. Most advanced countries that had keyed into it have both the human and material resources rightly in place.

The study is to seek the perception of nurses on this transition and as well to throw more light on the merit of the transition. This will help those at the level of decision making to
know nurses anticipated problem from the transition and enhance ways of articulating these problems.

1.4. Research objectives

1. To assess the benefits of university education among nurses in UDUTH.
2. To establish nurses opinion about move of basic nursing education, formal to university.
3. To determine the pattern of nursing administration in UDUTH, Sokoto.
4. To determine the effectiveness of nursing administration in UDUTH, Sokoto.

1.5. Research question

(1) What are the benefits of university based education among nurses in UDUTH?
(2) What are nurses opinions about moving from hospital based education to university level?
(3) What is the pattern of nursing administration in UDUTH, Sokoto?
(4) How effectiveness is nursing administration in UDUTH, Sokoto?

1.6. Scope and limitation of the study

The studies include clinical nurses in teaching hospitals (Usman Danfodiyo University Teaching Hospital, Sokoto State). The research intends to study the perception of nurses towards nursing administration and moving nursing from clinical to university based education.

1.7. Operational definition of terms

- **Administration**: Direction, coordination and control of persons to achieve some objective.
- **Code of Ethics**: Is the standard of conduct, guiding a profession.
- **Education**: Is the process of receiving or giving systematic instruction, especially at a school or university.
- **Hospital Based Nursing Education**: This is the nursing education offered in hospital setting.
- **Higher Nursing Education**: This symbolically refers to nursing education programme which is beyond the level of a nurse generalist (Okonie, 2004).
- **Nursing Education**: Encompasses theoretical and practical training provided to nurses with the purpose to prepare them through their professional career.
- **Nursing**: This is caring for an individual, sick or well in the performances of theory activities leading to health or its recovery (or a peaceful death) work which he/she may have performed unaided is gotten the necessary strength, ability or power.
- **Review**: To look over, study or examine again.

Literature review

Nightingale invented a better and more improved ways of carrying out nursing care which resulted infection control and tremendous reduction in death rate in Scutain (Janice, R.E et al, 1984). After recognizing education as very crucial, she founded the initial formal learning institution in St. Thomas Hospital with prescribed curriculum.

The modernized nursing education today in Nigeria has received lots of attention in some major areas. Owners, operators or proprietors of nursing colleges have been encouraged to assimilate such institutions into federal state or private universities.

According to (Mub, 2006) the expected change is expected to be gradual. Entry requirement for universities which schools will assimilate into, should be 5 credits, as endorsed by the nursing and midwifery council (In English Language, Mathematics, Chemistry, Physics, Biology).

The curriculum also have been reviewed and adopted to cover more grounds. Five years for programmes of generic studies in the university, with one year mandatory internship after
graduation. The new curriculum is said to have been adopted by some universities. Mobe (2006), identified the main purpose of nursing education transition from hospital to university based:

- The health system will more or less be strengthened and better health care delivery strategies incorporated to the system.
- The non-inclusion of nurses in strategic areas in the health care industry due to their low educational background which will be highly taken care of through the transition from hospital to university.
- The unpalatable image carved for nursing profession as a result of poor human relations by the nurses.
- Defective nursing services in the light of people who are aware of their rights. The transition will greatly assist nurses to face the numerous challenges of these people.

(www.nanm.com) (www.icn.ch) states rationale for improving education. University based nursing education will bring nursing to the highest level of professionalism. Furthermore, this advancement will bring about nurses involvement in health policy formation, strategic planning and implementation. This is due to the fact that nursing education is the grass root of nursing practice a more improved educational standard in nursing will yield better quality care to client and other consumers of nursing services.

In the 1960’s, the American Nurses Association (ANA) looked critically with concern at nursing education, delivery of nursing care. In the light if the Gideon et al (1960) looked into a study on the nurses perspective towards Baccalaureate degree programme. The study was conducted with 250 nurses who were randomly selected at five different hospitals. In the USA the research was based on sorting the opinion of nurses studied 210 nurses were of the level of Baccalaureate degree.

In another study conducted by Frances Kan et al (1990) in Hong Kong on health care reform, this has brought about a dramatic change to the nursing discipline. The study which aimed at exploring the transformation of nursing in a regional hospital in Hong-Kong during this era of innovation reveals that nursing restructuring work, its associated dynamic and resulting impacts upon the nursing profession were examined.

Nursing profession was examined methodologically, triangulation approach to data collection encompassing, interviews, participant documents were reviewed and observations were made. The findings gotten in the study suggest that the majority of nurses working in the case study hospital continued to be subject to medical dominance and are under management control. The emphasis on cost effective care has however, fostered qualified nurses to claim more ownership of their professional judgment and autonomy. The health reform confirmed the status of two newly established groups of nurses specialist and nurses manager.

Further study conducted by Dr. Jaime in 1998, on the view of nurses towards Ph.D in nursing education in Philippines, the study revealed that such nurses with Ph.D level, provided will be addressed as “Doctor” in the clinical areas. It was confirmed that in the above studies that the Philippines nurses want Ph.D in nursing for aesthetic reason not for upgrading the nursing care standard.

2.1. Nursing administration and nurse manager

A nurses administrator is always an executive position usually with a degree, master with or without Ph.D usually reports to the Chief Executive Officer. Always does more meetings than being seen with patients. Nursing administrator also referred to as Director of nursing in which all other nursing units or departments are under his or her control. In Nigeria, the nurses administrator is referred to as the Assistant Director of Nursing services (ADNS), for federal institutions or teaching hospitals. For the state owned hospitals, they are referred to as Deputy Director of nursing services (DDNS). These are the main nurse administrators, presently only one officer exist for positions like this in Nigeria.

The nurse manager on the other hand, chief nursing officer etc. The nurse manager is more with the patient, where he/she coordinates and supervises other nursing cadres in the
way nursing care is rendered to clients. Several of nursing managers exists in various units and gives report directly to the nurses administrators. 

The Assistant Chief nursing officer (Level 12) directly manages the unit under the CNO and give report to the CNO. Principal and the Senior Nursing Officers are both (level 10 and level 09) respectively who are directly involve in patient care and at times takes over unit administration as suitable to the unit the nursing officer I and II are newly registered nurses with few years of experience.

**Research methodology**

This chapter discusses to the design and methodology adopted for the study.

**3.1. Research design**

This is a survey type of research, trying to find out how knowledgeable nurses are about the crave for upgrading nursing and its administration in Sokoto.

**3.2. Research setting**

This study was carried out in Usmanu Danfodiyo University Teaching Hospital UDUTH, Sokoto. The nursing department/unit. About 10% have attained graduate level certification. Majority are diploma holders.

**3.3. Target population**

The target population of this study consists of 150 staff nurses and midwives, who work with the Usmanu Danfodiyo University Teaching Hospital Sokoto at different of the hospital.

**3.4. Sampling techniques**

The researcher choose four hundred registered nurses nursing working with the teaching hospital (UDUTH) This figure was chosen from the target population of 500 (five hundred) simple random sampling technique were employed.

**3.5. Instrument for data collection**

The used instruments for date collection were both opened and closed ended questionnaire. It is divided into three (5) sections about 190 were retrieved from the respondents.

**3.6. Validity reliability of the instrument**

The knowledge of previous studies undergone by the researcher were used in drawing and making the questionnaires.

**3.7. Method of date analysis**

The collected information were analysed using frequency table, bar chart and pie chart.

**3.8. Ethical consideration**

The permission to conduct this research was gotten from the participants after a thorough explanation, prior to distributing the questionnaires to them. Their privacy were ensured throughout hence, no name or identification were requested from them. Religious and cultural background were also maintained in full confidentiality.

Sample size calculation
Data presentation and analysis

4.1. Introduction

This chapter is concerned with the analysis of data obtained from the administered questionnaires. The analysis is based on the response of 190 respondents that successfully completed and returned their questionnaires to the researcher.

The result are as follows:

4.2. Data analysis

Section A: Distribution of respondents based on age

Table 4.1.

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>26-30</td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>31-35</td>
<td>40</td>
<td>20%</td>
</tr>
<tr>
<td>36 and above</td>
<td>90</td>
<td>45%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to table 1 above has shown that (20) respondents i.e. about 10% falls between the age bracket of (20-25). 25% falls between (26-30) age bracket about 20% (40) respondents falls between (31-35) and the highest respondents falls above 36 years of age 90 respondents (45%).

Table 4.2: Distribution of respondents based on tribe

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hausa</td>
<td>90</td>
<td>45%</td>
</tr>
<tr>
<td>Igbo</td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>Yoruba</td>
<td>40</td>
<td>20%</td>
</tr>
<tr>
<td>Fulani</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

The above table shows that (90) respondents about 45% are Hausa, (50) respondents i.e. 25% are Igbo, while (40) respondents about 20% are Yoruba and finally, only 10% of the respondents are Fulani tribe (in Nigeria).

Table 4.3: Distribution of respondents based on marital status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>140</td>
<td>70%</td>
</tr>
<tr>
<td>Single</td>
<td>30</td>
<td>15%</td>
</tr>
<tr>
<td>Divorced</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>Window</td>
<td>20</td>
<td>10%</td>
</tr>
</tbody>
</table>
According to table 4.3, (140) respondents i.e. 70% are married, while (30) respondents 15% are single, about 5% are divorced and about 70 respondents i.e. 10% are widowed.

Table 4.4: Distribution of respondents based on religion

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christianity</td>
<td>90</td>
<td>45%</td>
</tr>
<tr>
<td>Islamic</td>
<td>80</td>
<td>40%</td>
</tr>
<tr>
<td>Traditional</td>
<td>30</td>
<td>1%</td>
</tr>
<tr>
<td>Others</td>
<td>NIL</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to table 4.4, 45% (90) respondents are Christians, while about (80) respondents i.e. 40% are Muslims, about 30 respondents are of traditional faith (15%).

Table 4.5: Distribution of respondents based on rank

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>90</td>
<td>45%</td>
</tr>
<tr>
<td>SNO</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>PNO</td>
<td>20</td>
<td>1%</td>
</tr>
<tr>
<td>ACNO</td>
<td>20</td>
<td>0%</td>
</tr>
<tr>
<td>CNO</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the table 4.5., 45% of the respondents are nursing officers i.e. Nursing Officers, while SNOs, PNO and ACNO had 10% respondents each, i.e. about 20 respondents each. About 50 respondents i.e. 25% are Chief Nursing Officers (CNO).

Table 4.6: Distribution of respondents based on level of education

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>170</td>
<td>85%</td>
</tr>
<tr>
<td>BNS</td>
<td>30</td>
<td>15%</td>
</tr>
<tr>
<td>MSc</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ph.D</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the table 4.6, 85% obtained diploma certificate, while only 30% of the respondents BNSC. No respondents has MSc and PhD.

SECTION B: Benefits of University Based Nursing Education

Figure 4.1: Distribution of respondents based on awareness of university education.

According to the pie chart above, 95% of the respondents admitted that they are aware of university education, while only 5% said they are not aware.
Figure 4.2: Distribution of respondents based on the importance of obtaining university education.

The chart above shows that 95% of respondents admitted that obtaining a university degree is of high importance, while only about 5%.

Table 4.7: Distribution of respondents that answered yes to question

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is a universal form of education</td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>It modifies ones morally and replenish knowledge</td>
<td>130</td>
<td>65%</td>
</tr>
<tr>
<td>It brings about self fulfillment</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to table 4.9, 25% of the respondents admitted that it is a universal form of education, about 65% admitted that it improves ones morals and replenishes existing knowledge while only 10% agrees that it brings about self fulfillment.

Table 4.8: Distribution of respondents based on the fact that university education is provided with enough practical experience.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>130</td>
<td>65%</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the table 4.10, 65% of respondents believe that university education is accompanied with sound practical knowledge, only 10% disagree and about 25% are not sure it has.

SECTION C: Nurses Opinion about shifting from hospital based nursing training to university level

Figure 4.3: Distribution of respondents based on the importance of obtaining university education.

The pie chart above shows that 75% which is the majority, believe that the hospital based shift from hospital based to university base is a welcoming development, while only 10% disagree with the shift. About 15% are not sure of the shift.

Table 4.9: Distribution of respondents based on upon question (Figure 4.3) being Yes as a choice.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because all other field of studies have upgraded to</td>
<td>60</td>
<td>30%</td>
</tr>
</tbody>
</table>
university level

| It enhances ones behaviour morally and enriches ones knowledge. | 60 | 30% |
| It develops individual’s critical thinking and problem solving faculty. | 80 | 40% |
| It makes no difference in clinical nursing practice | 00 | 00% |
| **Total** | **200** | **100%** |

According to the above table, 30% believed that they should upgrade since other fields are upgrading. 30% also believe that it enriches one knowledge. 80% believes that it will enhance individual critical thinking faculty. No one believes that it makes no difference in clinical practice.

**Table 4.10**: Distribution of respondents who answer positively to question (12) and reasons why the suggestion was made.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve one’s skills of learning and pave way for career advancement</td>
<td>170</td>
<td>85%</td>
</tr>
<tr>
<td>Just to change the RN nomenclature</td>
<td>30</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4.10 shows that 85% suggested skills improvement will pave way for career advancement while 15% (30) respondents believe that to change the RN no menclature is only what they desired as reason for upgrading oneself.

**SECTION D Pattern of Nursing Administration in UDUTH**

**Table 4.11**: Distribution of respondents based on the desired director in an ideal teaching hospital.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80</td>
<td>40%</td>
</tr>
<tr>
<td>2</td>
<td>60</td>
<td>30%</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>6+</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4.11 shows that majority of the respondents 40% opted for one director of nursing in a teaching hospital, 30 chose two directors. Only about 5% went for four director and about 25% went for 6 and above directors.

**Table 4.12**: Respondents view on the ideal qualifications for an Assistant Director of Nursing.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>80</td>
<td>40%</td>
</tr>
<tr>
<td>BSC</td>
<td>60</td>
<td>30%</td>
</tr>
<tr>
<td>MSC</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>PhD</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

According to table 4.12, no respondent chose Diploma as the ideal qualification for nurses leaders, about 40% choose B.sc as the best qualification, same percentage 40% choose Msc and only 20% preferred PhD as the ideal qualification for nurses who wants to lead.

**Table 4.13**: Respondents view on the ideal qualifications for an Assistant Director of Nursing.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years</td>
<td>20</td>
<td>10%</td>
</tr>
</tbody>
</table>
According to the above table, 10% said 5 years working experience is desirable for a nurse leader, 25% said 10 years is better. 30% admitted that 15 years is desirable and then 35% (70) respondents took the lead, that more years of 20% should be considered for nurses leaders.

**Table 4.14:** Distribution of respondents based on the suitability of nurses consultants as holders of administrative positions in hospital settings

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly likely</td>
<td>90</td>
<td>45%</td>
</tr>
<tr>
<td>Good enough</td>
<td>110</td>
<td>65%</td>
</tr>
<tr>
<td>Not good enough</td>
<td>NIL</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the above table, 45% of the respondents admitted that nurse consultants are most likely to be good administrators, while 65% confessed that they are good enough to be administrators no respondent confirm that they are not good enough.

SECTION E:
Effectiveness of nursing administration in UDUTH

**Table 4.15:** Respondents view on effectiveness of nursing administration in their domain

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Good</td>
<td>130</td>
<td>65%</td>
</tr>
<tr>
<td>Fair</td>
<td>50</td>
<td>25%</td>
</tr>
<tr>
<td>Poor</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.15 indicates that 10% confirmed that nursing administration is excellent in UDUTH, about 65% the highest respondents say administration in UDUTH is good, only 25% admitted it is fair and no single respondent says it is poor.

**Table 4.16:** Respondents who choose poor, giving possible ways on how to improve nursing administration.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision regular seminars and workshop</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Encouraging conventional university programme</td>
<td>180</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100%</td>
</tr>
</tbody>
</table>

The above table shows that 90% prefers conventional university programme as a good platform for improving administrative knowledge while only 10% suggested seminars and workshops as way.

**Discussion of findings**

5.0. Introduction

This chapter consists of discussion of findings. This study identified nursing education and administration in Usman Danfodiyo University Teaching Hospital. A total number of two hundred (200) nurses were randomly selected and questionnaires filled as indicated below:

5.1. Discussion of findings

Based on age, 45% of the respondents were 36 years and above, resulting to 90 responding
being 36 years and over; followed by age bracket of (26-30) which had about 25% of the total population studied. 70% of total respondents who engaged in the study were married. Based on ranking, 45% of the total respondents are Nursing Officers at Junior Cadre level, followed by 25% which were CNO. Pertaining to the educational level of the respondents 85% of the selected nurses were diploma/general nursing certificates, while only 30% are graduate nurses BNSc. According to the findings, nearly all the selected nurses i.e. about 95% confirmed of being aware of Baccalareate form of education i.e. university education.

Also 95% of the studied population emphasized that obtaining university education as nurses is a good development; this is in line with the studies carried out by Gideon et al (1960), in which 210 nurses out of 250 that were studied had some view that nursing education should be geared towards the level of degree programme.

In another vein 65% of the respondents also admitted that this form of education (university education for nurses will replenish ones’ knowledge and improves ones thinks critical thinking faculty). This is also in accordance with the studied that was carried out in (1990) by Frances Kam et a, that states nurses need to be further educated in specialist practice and clinical management so as to maximize the contribution of nursing in health care delivery.

The above also cancelled with the 85% of the respondents that states that skills improvement will pave way for career advancement. According to the results obtained on the required qualification for an assistant director of nursing, 40% of respondents choose BSN, Some percentage also took after MSc in nursing, these were the highest respondents, while non desired a diploma holder to take the lead in nursing career.

In this research studies, about 65% of the respondent, which is the highest confirmed that nurses consultants are good enough to manage the administration in hospital.

5.2. Recommendation

This capstone study demonstrated that majority of the staff nurses working in the Usmanu Danfodiyo Teaching Hospital (UDUTH) Sokoto, Nigeria welcome this new development of shifting from hospital based nursing educational training to University based training. Many feel that apart from developing one’s critical thinking level, the healthcare industry will be better equipped with graduate nurses than Diploma holders. This goes in line with the research work that was said to has been conducted in some hospitals in the United Kingdom where the total numbers of death recorded when graduate nurses treated and handed patients were for less, when non graduate nurses solely handles the management of clients.

The shift is a welcoming one that will add value to our health industries in our different communities and the world at large. And therefore should be embraced, but time should be given by the different parastatals and stakeholders involving in this process. It’s a delicate move and a lot should really be put in place before this kind of move can really be a meaningful one.

5.3. Recommendation

The federal and state government and also non governmental agencies should all participate in this move. Already qualified staff nurses who had worked for reasonable period of years should be carried along, as they are the potential administrators, in the various departments of the health industry especially in the nursing department.

Collaborative efforts should be made with foreign Universities both with those engaging in both distant learning programmes and conventional programmes pertaining to nursing fields and programme such certificates should be evaluated by the Nigeria university commission and the nursing councils and should be accepted if such measures up to the required standard accepted universally.
References


Acute rheumatic fever and rheumatic heart disease in Fiji: prospective surveillance, 2005–2008

Article Review by Ranjana Prabhu
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Source

Introduction

The following review is an attempt to critically analyses the article ‘Acute rheumatic fever and rheumatic heart disease in Fiji: prospective surveillance, 2005–2007’ first published in the Medical Journal of Australia in 2009. The article is by local Fijian authors and highly relevant as acute rheumatic fever (ARF) and rheumatic heart disease (RHD) contribute highly to the burden of disease in Fiji. The mentioned diseases also contribute greatly to admission numbers and mortality in third world countries like Fiji and are always regarded as areas of special interest as these diseases are virtually extinct in developed countries with NZ and Australia being exceptions. A thorough summary of the article will be provided and this will be followed by analysis of the article’s structure with critique of how the information is set out and whether the findings are efficiently imparted to the interested reader. The review also sets to critique the content mainly with regards to accuracy, objectivity, general coverage and evaluation of its authority. It also explores the author credibility and their insights into the need for such a research. Overall, the topic was a well-chosen one and the article itself is well written, concise and extremely relevant.

Review of literature

Acute rheumatic fever (ARF) is an autoimmune, multi-system response secondary to molecular mimicry following Lancefield group streptococcus (GAS) pharyngitis; it is now most commonly found in the paediatric populations of developing nations. Within developed nations, the incidence of ARF and RHD has declined dramatically mainly due to improved living conditions, better access to health care and generally greater availability of penicillin based antibiotics. However, it should be noted that ARF and RHD are still highly prevalent in indigenous and migrant Pacific populations in developed countries like Australia and New Zealand. Despite the belief that it’s been eradicated in developed countries, epidemiological data reveals 300,000 new cases globally and close to 15 million people with RHD globally. This has sparked renewed interest worldwide as to relook at epidemiology of ARF and RHD globally and in specific populations and making comparisons with regards to incidence, prevalence and general signs and symptoms. Fiji has similar incidence of the disease when compared to Aboriginal populations in Australia and Maori and Pacific Islander population in New Zealand. A number of epidemiological studies have been conducted in Fiji with majority trying to establish baseline figures and monitoring these indices over the years. The object of this review is to look at one of these studies and offer an insight to the methods and reasons behind it. Newer studies are using screening data from echocardiogram surveys and these are showing increased prevalence and incidence of ARF and RHD.
Article summary

The purpose of the study is to characterise the clinical epidemiology of patients admitted with ARF and RHD in Fiji. A number of similar studies have been conducted in developed countries especially during outbreaks or during discovery of endemic communities but not much data was available for low income countries like Fiji in the Pacific. There are also not many studies documenting the clinical presentation of these diseases in communities similar to Fiji and this study was also an attempt to document the main clinical features in all those admitted with ARF and RHD. This study will also be used to establish the burden of clinical disease and furthermore be used to develop potential clinical trials of Group A Streptococcal vaccines.

The study design used was a prospective surveillance study at CWM Hospital over a 23 month period. Case definitions in line with World Health Organisation standards were used and statistical analysis was done using national census figures. Major conclusions were that ARF remains a significant health problem in Fiji leading to premature morbidity and mortality and thus the urgent need for more effective control of ARF and prevention of RHD.

Article structure

The article is presented in a columnar format and visually appealing. The abstract is well highlighted and sets the tone for the remainder of the article. The abstract well defines the objectives, study design and setting with summary of results and well explained concluding statement. The introductory paragraphs of the article state the rationales for the research and how this research can be used further with regard to possible vaccine trials. The headings of the other paragraphs are vibrant and make it easy to navigate around the article. Paragraphs are also short and compact and generally avoid clustering of detailed information hence making the article easy to peruse. There are separate sections for abstract, introduction, method, results and discussion. Important data (the main findings of the study) has been tabulated and well placed within the article highlighting their significance. The findings and conclusions are stated under a singular heading of ‘discussion’ and the content is pretty comprehensive with regards to satisfying the aims of the study. References were also cited in-text and set out clearly in the literature cited section. The structure of the article is logically developed with the use of short paragraphs helping the reader access the main points easily. References are also clearly stated and it also has correspondence address of the principal author.

Article critique

Authority

The study has been conducted in Fiji and the article has been published in Medical Journal of Australia which is a peer reviewed journal and is the official journal of Australian Medical Association which is an objective unbiased public organisation. The journal is found on many academic databases and many articles are also open access and freely available online including the subject of this review.

The authors’ credibility is established in a number of ways. All the lead authors are clearly stated with their qualifications and current place of work and positions held. The lead author is a research fellow and an academic working at Centre for International Child Health at University of Melbourne which itself is a highly credible organization. The study was also funded by US National Institutes of Health which again is a foremost medical research centre globally.

Accuracy

The source of all data is the prospective surveillance study that was conducted over 23 months from Dec 2005 to November 2007. The high number of authors aims to provide a well-designed study and the results generally state the same. The comprehensive lists of
reference text further corroborate with the data provided and are well cited in-text. The publishing entity has strict referring and peer review processes and all of these contribute to the articles exceptional accuracy.

Currency

The article was published in February 2009 while the study was received by MJA in May 2008 and accepted for publication in October 2008. The research was concluded nearly a yearly ago and the article cites up-to-date references in the body of the text. The article may be considered old as the review on it has been delayed by 6 years. The content matter (epidemiology of ARF and RHD in Fiji) however is highly current.

Relevance

This is an open access article published in a prestigious medical journal and has high credibility with regards to academic context. It was scripted after a comprehensive study over 23 months in a 3rd world country where the content matter (ARF and RHD) is highly relevant. The article serves multiple purposes in the sense it tries to establish baseline epidemiology and clinical presentation while also try to of relevance to future vaccine trial designs. It is not meant to advertise and nor there are any conflicting interests. Its authors are mainly academics and research specialists and the article is extremely relevant as it tries to do a study where not many studies on the same topic have been done previously.

Objectivity

The data has been presented objectively showing the full research that was conducted. It is very supported with numerous references and data fits in similar research done elsewhere. There is no evidence of bias which again highlights the rigorous and lengthy research process conducted by a number of qualified people. Ethical considerations were met and necessary approvals received were also stated in the research. The research attempted to ascertain epidemiology of ARF and RHD in a low income country and all the objectives were well met. Conclusions were in line with similar research done in other communities and all are well referenced.

Stability

Research conducted has been published as a journal article by Medical Journal of Australia. It can be recovered from numerous online academic databases and is therefore stable as a resource.

Analysis of graph

There has been graphical representation of data via tables. All the tables are well presented and data is easy to assimilate from them. Table 1 makes comparisons against demographic features of patients presenting with definite acute rheumatic fever to CWM Hospital from December 2005 to November 2007. Table 2 shows the clinical features of patients with ARF who were enrolled in the study in the above mentioned timeline. Table 3 presents similar data as Table 2 but the case definition of RHD is used. The data that the team set out to assimilate is well displayed in the tabular form and makes it easy to interpret and shows the objectives of the research were met easily.

Recent advances related to the topic

The research conducted by the esteemed writers aim to establish baseline epidemiology of ARF and RHD in Fiji. It also stated the main clinical features of patients who were admitted with either ARF or RHD over a 23 month from 2005 to 2007. Similar research has been conducted in other Pacific Island countries like Samoa and similar conclusions have been presented. Another study from Samoa has demonstrated the effectiveness of Rheumatic Fever Programme in Samoa in decreasing the incidences of ARF and RHD over the years. The same
study also makes recommendations that RHD screening with echocardiogram in schools may be the best way to reduce the burden and suffering from RHD.

Newer studies have also tried to relook at the etiology and pathogenesis of ARF again using more detailed biochemical analysis. Cunningham, 2012 reinforced the role of Streptococcus and molecular mimicry and eventual antibody binding to cell surface antigens leading to valve damage in RHD or neuropsychiatric behaviours in Sydneham chorea.

Marijon et al, 2013 mentioned in her Lancet article that early detection and targeted treatment of RHD might be possible if populations at risk for RHD in endemic areas are screened. In this setting, active surveillance with echocardiography-based screening might become very important. Newer studies are using echocardiogram in their case definitions to give a better account of the incidence of ARF and RHD.

A comprehensive review article by Krishna published in 2013 gave an account of the developing epidemiological trends of ARF and RHD over the last 50 years. The key conclusions continue to be that ARF and RHD are an undesirable burden as it results in mortality and mortality for young adults. There is also mention of primary prevention but it’s only possible with development of a suitable vaccine designed to prevent GAS infection related supportive and non-supportive clinical manifestations.

Heningham, 2013 states there is no commercial GAS vaccine available and that development of such a vaccine remains an elusive process as researchers are confronted with many obstacles mainly in the form of more than 150 serotypes. The research is also complicated by lack of animal model trials as GAS is an exclusive human pathogen.

**Conclusion**

Steer et al, 2009, attempts to define epidemiology of ARF and RHD in Fiji by doing a prospective surveillance of cases admitted to CWM Hospital over a 23 month period from 2005 to 2007. The authors also investigate the main clinical features of ARF and RHD amongst those meeting case definition. The research was submitted to Medical Journal of Australia and duly published in October 2008. The content, structure, strengths and limitations of the article were analysed and critiqued. The study objectives were met and well presented on the article in tabular form. The abstract is well written as it describes the research and states the conclusions which is highly in line with similar research done all over the world. The article is exemplary as it adds to the growing literature on ARF and RHD and gives a standard for newer research and future collaborative possibilities such as vaccine trials.

**References**


A Case Study on Violence against Nurses in Nigeria and Recommendations in Reducing the Violence

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Abstract

Violence against nurses is a complex and persistent occupational hazard facing the nursing profession. The job sector with the mission to care for people appears to be at the highest risk of workplace violence. Nurses are among the most assaulted workers in the Nigeria workforce. Too frequently, nurses are exposed to violence – primarily from patients, patients’ families, visitors and other health care workers. This violence can take the form of intimidation, harassment, stalking, beatings, stabbings, shootings, and other forms of assault. Violence, aggression, and harassment exist in virtually all workplace and this not only affect the individual’s health and morale, it negatively affects productivity due to reduced morale and motivation (Azodo et al., 2011, Vittorio, 2003). It has been shown that workplace violence affects every professional group in every country and sometimes to an ‘epidemic’ extent (Gates 2004; Mohamad and Motasem 2012). In the health care sector, all categories of healthcare workers are at risk of violence though at different degrees with the nurses having up to three times higher than others (Abbas et al., 2010; Azodo). The purpose of this project work is to point out some of the violence melted against nurses and to conduct a review and assessment of the problem of violence against nurses. Analysis presented within this research work is based on complaints and write up in various State in Nigeria Hospitals and clinic. Finally, recommendations integrating the analysis and literature review. The recommendations contained herein address regulatory issues, educational programs, nursing practice interventions, and data collection and dissemination issues as they relate to the problem of violence against nurses.

Introduction

Background of study

Violence against nurses is a complex and persistent occupational hazard facing the nursing profession.

This violence can take the form of intimidation, harassment, stalking, beatings, stabbings, shootings, and other forms of assault. Nurses are among the most assaulted workers in the Nigeria workforce.

Psychological consequences resulting from violence may include fear, anxiety, sadness, depression, frustration, mistrust, and nervousness. These consequences can have a negative impact on nurse retention.

Workplace violence — be it physical or psychological — has become a global problem crossing borders, work settings and occupational groups. For long a “forgotten” issue, violence at work has dramatically gained momentum in recent years and is now a priority concern in both industrialised and developing countries.

Workplace violence perpetrated against nurses is at least continuing and at worst increasing. Occupational violence has detrimental effects on job satisfaction, retention and recruitment, and the quality and cost of patient care.

Workplace violence affects the dignity of millions of people worldwide. It is a major source of inequality, discrimination, stigmatisation and conflict at the workplace. Increasingly it is becoming a central human rights issue. At the same time, workplace violence is
increasingly appearing as a serious, sometimes lethal threat to the efficiency and success of organisations.

General definition of workplace violence Incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health. (Adapted from European Commission)

Physical violence and psychological violence. While the existence of personal physical violence at the workplace has always been recognized, the existence of psychological violence has been long under-estimated and only now receives due attention. Psychological violence is currently emerging as a priority concern at the workplace. It is also increasingly recognized that personal psychological violence is often perpetrated through repeated behaviour, of a type which by itself may be relatively minor but which cumulatively can become a very serious form of violence. Although a single incident can suffice, psychological violence often consists of repeated, unwelcome, unreciprocated and imposed upon action which may have a devastating effect on the victim.

Physical violence. The use of physical force against another person or group that results in physical, sexual or psychological harm. It includes among others, beating, kicking, slapping, stabbing, shooting, pushing, biting and pinching. (Adapted from WHO definition of violence).

Literature review

Nursing

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles. The International Council of Nurses (ICN)

Violence

The World Health Organization defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, mal development, or deprivation

Workplace

Any health care facility, whatever the size, location (urban or rural) and the type of service(s) provided, including major referral hospitals of large cities, regional and district hospitals, health care centres, clinics, community health posts, rehabilitation centres, long-term care facilities, general practitioners’ offices, other independent health care professionals. In the case of services performed outside the health care facility, such as ambulance services or home care, anyplace where such services are performed will be considered a workplace.

Terms frequently used

Physical and psychological violence often overlap in practice making any attempt to categorize different forms of violence very difficult. Some of the most frequently used terms relating to violence are presented in the following list.

Assault/attack: Intentional behaviour that harms another person physically, including sexual assault.

Abuse: Behaviour that humiliates degrades or otherwise indicates a lack of respect for the dignity and worth of an individual. (Alberta Association of Registered Nurses)
**Bullying/mobbing:** Repeated and over time offensive behaviour through vindictive, cruel or malicious attempts to humiliate or undermine an individual or groups of employees.
(Adapted from ILO – Violence at Work)

**Harassment:** Any conduct based on age, disability, HIV status, domestic circumstances, sex, sexual orientation, gender reassignment, race, colour, language, religion, political, trade union or other opinion or belief, national or social origin, association with a minority, property, birth or other status that is unreciprocated or unwanted and which affects the dignity of men and women at work. (Human Rights Act, UK)

**Sexual harassment:** Any unwanted, unreciprocated and unwelcome behaviour of a sexual nature that is offensive to the person involved, and causes that person to feel threatened, humiliated or embarrassed. (Irish Nurses Organisation)

**Racial harassment:** Any threatening conduct that is based on race, colour, language, national origin, religion, association with a minority, birth or other status that is unreciprocated or unwanted and which affects the dignity of women and men at work. (Adapted from Human Rights Act, UK)

**Threat:** Promised use of physical force or power (i.e. psychological force) resulting in fear of physical, sexual, psychological harm or other negative consequences to the targeted individuals or groups.

**Victim:** Any person who is the object of act(s) of violence or violent behaviour(s) as described above.

**Perpetrator:** Any person who commits act(s) of violence or engages in violent behaviour(s) as described above.

**Contributing factors**

**Organization**

The dangers arise from the exposure to violent individuals combined with the absence of strong violence prevention programs and protective regulations within the organization. These factors together with organizational realities such as staff shortages and increased patient acuity create substantial barriers to eliminating violence in today’s health care workplace.”
(McPhaul & Lipscomb, 2004)

Those events, while certainly serious, are relatively rare. Far more common are assaults, threats, stalkings, and other forms of non-fatal violence in the workplace. Violence targeted at Nurses is of particular concern, as these Nurses are among the most likely in the workplace to be assaulted. Incidences of violence early in nurses’ careers are particularly problematic as they may lead nurses to become disillusioned with their profession.

Nurses often feel powerless to deal with a situation in which they have been victimized and, as a result, accept violence as part of the job. Homeyer (2005) found nurses are often reprimanded or fired if they defend themselves against violence. As job satisfaction decreases as a result of violence, the likelihood of nurses leaving their employment increases with nurses finding different roles within the health care setting or leaving the profession entirely (Shader, Broome, Broome, West, & Nash, 2001).

**Administration**

The lack of support from administrators in addressing problems of violence in the workplace is a contributor to burnout and resignations of even the most seasoned veteran nurses. This is an issue that the profession and health care industry cannot continue to ignore especially in light of the current nursing violence

**Methodology**

Method: The method use was collation of case by case individual victims experience from various part of Nigeria State and a survey which was conducted to investigate variose types of violence against Nigeria Nurse in their place of work retrospectively using Complains filed by victim on Nigeria National News papers,Nursing World Nigeria Forum. Also questionnaire
Physical assaults were defined as actual physical attacks (e.g. hit, struck with an object, shaken, pushed, attempted strangling, attempted rape, kicking, biting) and not threats or verbal aggression. Demographic data such as gender and duration of employment were obtained, all replies were anonymous.

CASE 1 (Assaults)

Of the 101 Nurses that completed the questionnaires, 30 had been physically assaulted by psychiatric patients in the hospital within the period of their employment (40%) and 20 of them had been assaulted within the past year (10%). No significant differences were found between male and female respondents, when those who were assaulted were compared with those who were not assaulted.

Table 1 The commonest type of assault was being pushed or shaken. The majority of assaults (26, 30%) occurred during routine in-patient assessment and during routine admission of an out-patient (24, 20%).

<table>
<thead>
<tr>
<th>S.N</th>
<th>Assault - Pushed or shaken</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Occurred during routine admission of an out-patient</td>
<td>24</td>
<td>20%</td>
</tr>
<tr>
<td>2.</td>
<td>Occurred during routine in-patient assessment</td>
<td>26</td>
<td>30%</td>
</tr>
<tr>
<td>3.</td>
<td>Occurred within period of engagement</td>
<td>30</td>
<td>40%</td>
</tr>
<tr>
<td>4.</td>
<td>Occurred within the past years</td>
<td>20</td>
<td>10%</td>
</tr>
</tbody>
</table>

KEYS.
- Occurred during routine admission of an out-patient = ODRAOP
- Occurred during routine in-patient assessment = ODRIPA
- Occurred within period of engagement = OWPE
- Occurred within the past years = OWPY

Table 2

<table>
<thead>
<tr>
<th>S/N</th>
<th>Sex/Years of Exp.</th>
<th>No of Participant</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male Nurse (0-5 yrs)</td>
<td>30</td>
<td>(29.7%)</td>
</tr>
<tr>
<td>2</td>
<td>Female Nurse (0-5 yrs)</td>
<td>70</td>
<td>(70.3%)</td>
</tr>
</tbody>
</table>
Most of the assaults occurred in the presence of another mental health professional and for the assailants had a previous history of violence. Although some Nurses had attended at least one course aimed at the prevention and management of patient violence, there was no difference in reported violence between those who had attended courses and those who had not.

**Case 2. From the South – South Riverine Coastal Area of Delta State, Nigeria on the 4th, November, 2014**


BARELY 16 days after the World Health Organisation declared Nigeria Ebola free, a nurse and another non-medical staff of the state government owned hospital in Bomadi, got the beating of their lives for insisting on the use of protective hand gloves before administering treatment on a patient.

The incident occurred around 8:15pm on Wednesday at the female/children ward of the hospital when a nurse on duty asked a 46-years-old man identified as Mr. Ebitonmo (also known as Ghadafi), whose son was in admission to provide hand gloves to enable her change the infusion.

According to a dependable source, the request by the nurse generated a heated argument and in the ensuing circumstance, Ghadafi pounced on the nurse and started throwing punches at her she scampered for safety.

The source said the incident resulted into a pandemonium at the hospital and two other non-medical staff, who attempted to restrain Ghadafi from further attacking the nurse were also beaten up. He said rampaging Ghadafi later took to his heels when he heard that the joint Task Force JTF Nigeria Army attached in that area had been informed and were on their way to the hospital.

**Case 3. From The North-Western Nigeria, Information is gotten from Metro News of August 8th, 2014**

Nurse allegedly gang-raped by two youths in Kano:- Home / Metro News / Nurse allegedly gang-raped by two youths in Kano

A 30-year-old nurse was allegedly gang-raped by two youths in a reputed hotel in Kano.

Police said that the incident took place in the staff quarter of the hotel last night when victim was looking after the 80-year-old mother of the hotel’s owner.

The mother of hotel’s owner needed to be put under 24-hour medical observation as she is ill, and last night, victim working with a well-know private hospital was assigned the job to look after patient. Officer also said that they have arrested Musa and Kabiru and further investigation is on.

She said many of such incidents had taken place in the hospital leaving many nurses seriously wounded while some had been beaten into a stupor.
She said when the incidents continued unabated without the management addressing the unpleasant situation, some nurses, who could not bear the situation had to resign while some decided to go abroad to continue their vocation there.

**Way forward in preventing and reducing violence against Nigeria nurses**

Governments and their competent authorities should provide the necessary framework for the reduction and elimination of such violence. This includes:

**Organisational interventions**

High priority should be given to organizational intervention. Sorting out the organizational problem at the source usually proves much more effective and less costly than increasing the coping capacity through intervention at the individual level or intervening on the effects of violence on the individual worker. Organisational interventions should be developed and adapted in the consultation with the local stakeholders.

**Information and communication**

Among the staff and working units Circulation of information and open communication can greatly reduce the risk of workplace violence by defusing tension and frustration among workers. They are of particular importance in removing the taboo of silence which often surrounds cases of sexual harassment, mobbing and bullying.

**Individual-focussed interventions**

Interventions should be developed to reinforce the capacity of individuals to contribute to the prevention of workplace violence. Individual-focused interventions should be developed and adapted having regard to the specific situations, and priorities among the various types of interventions available should be established in consultation with the local stakeholders.

For workers at special risk, Information on the risks involved in specific situations and effective communication channels should be provided to workers at special risk, such as community and home care workers or ambulance staff.

1. Encouraging the inclusion in national, sectarian and workplace/enterprise agreements of Provisions to reduce and eliminate workplace violence
2. Encouraging the development of policies and plans at the workplace to combat workplace violence
3. Launching awareness campaigns on the risks of workplace violence
4. Requesting the collection of information and statistical data on the spread, causes and consequences of workplace violence

**Organisation. (Employers)**

Employers and their organisations should provide and promote a violence-free workplace.

**This would include:**

1. Recognizing overall responsibility for ensuring the health, safety and wellbeing of workers including the elimination of the predictable risk of workplace violence, according to national legislation and practice
2. Creating a climate of rejection of violence in their organisations
3. The routine assessment of the incidence of workplace violence and the factors that support or generate workplace violence

**Workers:** This would include:

1. Following workplace policies and procedures
2. Cooperating with the employer to reduce and eliminate the risks of workplace violence
3. Attending relevant educational and training programmes
Professional Bodies
Trade unions, professional councils and associations should launch, participate in and contribute to initiatives and mechanisms to reduce and eliminate the risks associated with workplace violence.

This would include:
1. Promoting training of health care personnel concerning the risks of workplace violence and the mechanisms to prevent, identify and cope with such violence
2. Elaborating on data collecting procedures for incidents of violence in the health sector and Promoting the collection of such data

Enlarged Community
The media, research and educational institutions, specialists in workplace violence, consumer/patient advocacy groups, the police and other criminal justice professionals, NGOs active in the area of workplace violence, health and safety.

Conclusion and recommendation
Organizational intervention
Developing a human-centred workplace culture Priority should be given to the development of a human-centred workplace culture based on safety and dignity, non-discrimination, tolerance, equal opportunity and cooperation. This requires actively promoting the development of socialisation processes, new, participative management styles and the establishment of a new type of organisation where: The introduction of all necessary preventive and protective measures and procedures to reduce and eliminate the risks of workplace violence.Conclusively the following are recommended ways in reducing Violence against Nurses in Nigeria.

- The Manager should be committed to combating workplace violence
- The organisation should encourage problem-sharing and group problem solving
- A readiness to engage in support of any action targeted at creating a violence-free environment;
- The provision of an independent and free- from -retaliation complaint system.

References
[7.] Nursing World Nigeria Limited (Nigeria) Address 100, Aba Owerri Road, Umungasi, Aba North, Abia Phone 08131183065 Website www.nursingworldnigeria.com
Spontaneous Abortion: An Assessment of the Knowledge of Health Professionals on their Role in its Prevention

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Abstract

Abortion has a long history and can be traced back to civilizations; and according to Wikipedia, it is defined as the termination of pregnancy by the expulsion from the uterus of a fetus or embryo prior to viability. An abortion can be spontaneous, or induced. Spontaneous abortion, also known as miscarriage, is the unintentional expulsion of an embryo or fetus before the 20th to 22nd week of gestation. The most common cause of spontaneous abortion during the first trimester is chromosomal abnormalities of the embryo/fetus, accounting for at least 50% of sampled early pregnancy losses. Statistics collected from the Regional Hospital Bamenda (Cameroon) shows that in 2010, out of 360 cases of spontaneous abortion recorded, 257 (71%) were threatened abortion out of which 103 (40%) ended in miscarriages, i.e. in the expulsion of the embryo or fetus. Similarly in 2011, out of 753 cases of spontaneous abortion registered, 545 (72%) were threatened abortion and out of which 208 (38%) ended in miscarriages.

“Do health care providers know their role in the prevention of spontaneous abortion?” The answer to this question will find its source in the attainment of the main objective which is to assess the knowledge of Health Care Providers on their role in the prevention of SA.

It is based on the Virginia Henderson conceptual model that we frame a directive pattern to this important project.

Man as an individual, is defined by Virginia Henderson as “a bio-psychosocial being, a unified whole, and presenting with 14 fundamental needs. 2 of the needs will direct and make the cue of this study as follows:

- Need to communicate with others
- Need to learn and understand

The use of structured questionnaires helped to collect information from the respondents in order to reflect the specific objectives of the study. In assessing the knowledge of HCPs, only 16 responses were gotten, instead of 39 responses expected from them. This may show a lack of knowledge, even for those who said knew about. For the prevention of SA, it is observed that psychological care at the prenatal period may be out of practice. Only 2(8%) respondents talked of alleviating anxiety, forgetting that this should be coupled with education and adequate medication administration. To conclude, it is worth noting that HCPs are poorly knowledgeable on their role in the prevention of SA, thus contribute to less significantly in the decrease of its prevalence.

List of abbreviations and acronyms

IUD: Intra uterine death
OTC: over the counter
AHA: Azire health area
RHB: Regional hospital Bamenda
D&E: dilatation and evacuation
D&C: dilatation and curettage
MNH: Mother and neonatal health
ITN: Insecticide treated nets
LAP: Lower abdominal pain
EBF: Exclusive breastfeeding
Introduction

1.1. Background of the study

Abortion has a long history and can be traced back to civilizations; and according to Wikipedia, the free encyclopedia, it is defined as the termination of pregnancy by the removal or expulsion from the uterus of a fetus or embryo prior to viability. An abortion can occur spontaneously, in which case it is usually called a miscarriage, or it can be purposely induced. The term abortion most commonly refers to the induced abortion of a human pregnancy. Abortion when induced in the developed world in accordance with local law is among the safest procedures in medicine. However, unsafe abortions (those performed by persons without proper training or outside of a medical environment) result in approximately 70 thousand maternal deaths and 5 million disabilities per year globally. An estimated 42 million abortions are performed globally each year, with 20 million of those performed unsafely. The incidence of abortion has declined world wide as access to family planning education and contraceptive services has increased (http://en.m.wikipedia.org/wiki/abortion).

Spontaneous abortion, also known as miscarriage, is the unintentional expulsion of an embryo or fetus before the 20th to 22nd week of gestation. Between 15% and 30% of known pregnancies end in clinically apparent miscarriage, depending upon the age and health of the pregnant women. The most common cause of spontaneous abortion during the first trimester is chromosomal abnormalities of the embryo/fetus, accounting for at least 50% of sampled early pregnancy losses. Other causes include vascular disease (such as lupus), diabetes, other hormonal problems, infections, and abnormalities of the uterus.

Advancing maternal age and a patient’s history of previous spontaneous abortion is the two leading factors associate with a greater risk of spontaneous abortion. It can also be caused by accidental trauma (http://en.m.wikipedia.org/wiki/abortion).

The prevalence and incidence of abortion, either induced or spontaneous, in Africa or in developing countries are very difficult to assess and evaluate. This is due to the non-legalization of induced abortion, the confusion between the 2 terms (induced and spontaneous) and mixing up and wrong or poor statistics provided. That is the reason why studies carried out, may help in estimating and evaluating the impact of those practices or occurrences in our society and in terms of demographic data collection and analysis as related to maternal or fetal infant death rates, adding to the fact that induced abortion either legalized or not is a pertinent precipitating factor of spontaneous abortion.

In Cameroon in particular, strategies are put into place to salvage those problems which put the Cameroonian women in danger and affect the State demographic data. It is the case of the national conference of the responsible of central and decentralized services of the ministry of public health, held from the 7th to the 8th January 2011, the theme being “Amelioration of the mother and child health, the priority of the ministry of health activity in 2011”.

It is therefore important for the nurse or health care provider to contribute or assist the patient/client, in managing and preventing spontaneous abortion, through adequate and
efficient health care deliveries.

1.2. Statement of the problem

Determining the prevalence of miscarriage is not an easy task. Treatment of women with miscarriage at home means medical statistics on miscarriage miss many cases. Prospective studies using very sensitive early pregnancy tests have found that 25% of pregnancies miscarry by the 6th week LMP. However, other sources report suggest high rates. One fact sheet from the University of Ottawa states that: “the incidence of spontaneous abortion is estimated to be 50% to 75% of all pregnancies, based on the assumption that many pregnancies abort spontaneously with no clinical recognition” and that: “it is also estimated that up to half of all fertilized eggs die and are lost (aborted) spontaneously, usually before the woman knows she is pregnant. Among those women who know they are pregnant, the miscarriage rate is about 15% to 20%.” (http://en.m.wikipedia.org/wiki/miscarriage).

Clinical miscarriages, i.e. those occurring after the 6th week LMP, occur in 8% of pregnancies. The risk of miscarriages decreases sharply after the 10th week LMP, i.e. when the fetal stage begins. The loss rate between 8.5 weeks LMP and birth is about 2%; loss is virtually completed by the embryonic period. (http://en.m.wikipedia.org/wiki/miscarriage).

The prevalence of miscarriage increases considerably with age of the patients. Pregnancies from men younger than 25 years are 40% less likely to end in miscarriage than pregnancies from men 25 – 29 years. Those from men older than 40 years old are 60% more likely to end in miscarriage than the 25-29 years age group. This increased risk of miscarriage in pregnancies from older men is mainly seen in the first trimester. (http://en.m.wikipedia.org/wiki/miscarriage).

To estimate the impact of abortion (any type of abortion), it is by finding out the maternal death rate. As such a prospective study carried out from May to October 1999, in West Africa, i.e. in Benin, Ivory Coast, and Senegal, has shown that, during the study period, 10,744 women were admitted for delivery, of whom 2708 (25%) had major complications (haemorrhage, sepsis, obstructed labour, uterine rupture, or high Bp). Of these 2708 women, 79 died. This fatality rate (3%) was similar to the fatality rate of 2.4 % (37 of 1525) observed among women admitted for complications of induced abortion. There were 4116 women admitted for obstetrical complications during the first trimester of pregnancy. Of these, 1525 (37%) were admitted for complications of induced abortion, 1834 (45%) for complications of spontaneous abortion, 651 (16 %) for ectopic pregnancies, and 106 (3%) for molar pregnancies. A total of 42 of these 4116 woman died. 37 (88%) of these deaths, resulted from complications of induced abortion, conforming that complications of induced abortion the leading cause of maternal death during the first 3 months of the pregnancy. (The New England journal of medicine) (http://www.nejm.org/doi/full).

Information and statistics gotten from the American Pregnancy Association (APA) help too, to answer questions about the incidence of SA. According to it, women under 35 years in general good care have about 15% chance of having miscarriage. Also, 670,000 American women miscarry a pregnancy each year, since most miscarriages occur during the first 12 weeks of gestation. In general, a single miscarriage doesn’t mean a woman is doomed to multiple miscarriages. A woman who miscarries only once has a slightly higher risk (25%) of having a miscarriage than a woman who has never miscarried (20%). While vaginal bleeding during pregnancy is always present during miscarriage, it doesn’t always mean that miscarriage is imminent. An estimated 20% to 30% of women report some type of bleeding in early pregnancy, but only ½ (half) of those who bleed end up miscarrying their pregnancies. Adding to the age factor, women who are 35 – 45 years old have a 20% – 35% chance of miscarriage, while those over the age of 45 can have up to a 50% chance of miscarriage. Around 1 woman in 100 has recurrent miscarriages at some point; this is 3 times the incidence expected by chance.

In Cameroon, statistics is not readily available on miscarriage; the main reason being that the majority of miscarriages occur before the mother realizes; and also, they remain
unreported and/or due to poor recording and misplacement of records.

Statistics collected from the Regional Hospital Bamenda shows that maternal death has been reduced from 2008, 2009 to 2010, from 6, 4, to 3 maternal deaths respectively. That reduction was linked to the decrease of pregnancy complications. In 2008, out of 1623 people hospitalized for malaria, 167 (10%) pregnant women were hospitalized for malaria. In 2009, out of 1491 people hospitalized for malaria, 92 (6.2%) were pregnant women. At the mid 2010 (May-June), out of 1110 people hospitalized for malaria, 98 (8.8%) were for malaria in pregnancy, and by the end of the year 2010, 310 cases of malaria in pregnancy were registered. In 2011, the number of malaria in pregnancy was 316.

Furthermore, in 2010, out of 360 cases of spontaneous abortion recorded 257 (71%) were threatened abortion out of which 103 (40%) ended in miscarriages, i.e. in the expulsion of the embryo or fetus. Similarly in 2011, out of 753 cases of spontaneous abortion registered, 545 (72%) were threatened abortion and out of which 208 (38%) ended in miscarriages.

Also during the investigator’s specialty internship at the R.H.B in the theatre from the 23rd to the 30th/04/2012, he realized that for his 6 days present there, 5 cases of spontaneous abortion (post expulsion, blight ovum) were registered for D&C and 1 case for the Shirodkar’s stitch.

During a 2 weeks clinical internship period in the Gynaecological ward at the RHB, from the 15th – 26th August 2011, the investigator realized the impact of threatened abortion in the woman’s life and society. Four cases witnessed, particularly triggered him to carry out further research in order to enhance on the knowledge of HCPs on the prevention of spontaneous abortion.

In the first case, the investigator witnessed malaria in early pregnancy with no initial LAP, which after 30 minutes following the first malaria Protocol administration, the patient started having uterine contractions (premature contractions), and the flow rate when changed from 42 drops per minute to 20 – 21 drops/minute, the contractions stopped and recovery in 2 days time was very effective. The 2nd case was admitted for malaria in early pregnancy (first trimester) with LAP. Infusion against malaria was set up by the Nurse on duty at a flow rate of 42 drops/minute to run for 4 hours. The client after treatment was still complaining of LAP and she ended losing her baby.

With the above statistics, the investigator went in the field to look for the reasons behind the increase in the prevalence and incidence of spontaneous abortion. This will push the investigator to ask this question: “Do health care providers know their role in the prevention of spontaneous abortion?” with the intention that the answer to it may help curb the prevalence and incidence of spontaneous abortion.

1.3. Research question

What is the knowledge of HCPs on their role in the prevention of SA?

1.4. Objectives

1.4.1. General objective

To assess the knowledge of HCPs on their role in the prevention of SA.

1.4.2. Specific objectives

- To assess the knowledge of HCPs on S.A - To assess their knowledge in their role in preventing SA. - To assess their activities in the management of threatened abortion and malaria in pregnancy, towards preventing SA - To find out the difficulties they encounter in the prevention of S.A.

1.5. Hypothesis

Health care providers who are knowledgeable on the causes of spontaneous abortion and who understand and carry out their role in preventing it, will contribute more significantly to the decrease in the prevalence of SA, than those who are not.
1.6. Significance of the study

The outcome of this study will go a long way to impact positively the health care providers, by creating awareness on the causes and preventive measures of spontaneous abortion, and their role in its prevention. It will also improve ANC service deliveries by reinforcing IEC process and case finding. It will bring out new knowledge towards a positive approach and positive outcome to health care delivery practices.

1.7. Scope of the study/delimitations

The research has to do with HCPs practicing in the Gynaecological ward, gynaecological department and those in ANC unit, including the labour room, of the RHB; those working in the general wards and at the ANC units of the private clinics of the Azire Health Area (AHA).

Also, it particularly includes the role of HCPs in the prevention of S.A.

1.8. Limitations

Financial and time constraints, have limited the research to the AHA of the NWR.

This study could have been extended to other hospitals in other towns and why not in the whole nation, to come out with a concrete accurate and greater study sample, should the above constraints be met.

1.9. Conceptual model and conceptual frame work

The HCP is an individual, defined by Virginia Henderson as “a bio-psychosocial being, a unified whole, presenting with 14 fundamental needs”, she identifies, among the 14, with those needs which make the cue of this study as follows:

- Need to communicate with others
- Need to learn and understand

The causes and predisposing factors responsible for the initiation or occurrence of SA are of many origins (see chapter 2) and the preventive measures put into place are used based on the knowledge of those causes and predisposing factors.

A deficit of knowledge or ignorance about a causative factor and or potential risk would worsen the condition of the client and even lead to induction of premature contractions. That’s the reason why, as stated by Virginia Henderson in her conceptual model, the HCP would “need to learn and understand”.

Additionally, a HCP with knowledge deficit would not adequately communicate with the patient and/or other health professionals for the proper management towards preventing SA. This might indirectly lead to stimulation/induction of SA process and worsen the condition of the client which may end up aborting, leading to increased prevalence of S.A. Thus the “need to communicate with others”.

A HCP knowledgeable of his/her role in preventing SA will adequately implement the required preventive measures. This will lead to an appropriate management of the condition of the client exposed to a potential SA, and finally, he/she would play his/her role in the reduction of the prevalence of S.A as Virginia Henderson stipulates the role of the Nurse being “to assist the individual sick or well in accomplishing those tasks that he/she would perform unaied if he/she had the will, the knowledge and the power; and in doing so, to lead the person to recovery or to a peaceful dead”.

Furthermore, except stated otherwise, a well knowledgeable HCP will help strengthen the client’s moral in such a way that she should feel secured and her baby safe. As such, the client will adapt in the present condition, despite the endurance, effort and patience to put in, in the management of her condition. The supportive healing environment established by the Nurse/HCP who is the change agent, will help to client adapt effectively to the change (physiological, psychological, environmental, etc), that she has gone or is going through.
2.1. Definition of “abortion”

According to Petrozza John C. (August 29, 2001) in his book: “Early pregnancy loss”, **ABORTION** is defined as the termination of pregnancy by the removal or expulsive from the uterus of a fetus or embryo prior to viability. 

An **abortion** can occur spontaneously, in which case it is usually called a miscarriage or it can be purposely and deliberately induced. The term abortion is commonly used to refer to the induced abortion of a human pregnancy, thus the need to differentiate them. Induced abortion in the developed world is among the safest procedures in medicine, and follows the local law that legalizes the practice. (Wikipedia the free encyclopedia). However, unsafe abortions, i.e. those performed by persons without proper training or outside of a medical environment, result in approximately 70,000 maternal deaths and 5 million disabilities per year globally (from Wikipedia, the free encyclopedia), whereas, spontaneous abortions are unintentional. 

Elizabeth J. Dickason (1975) says “an **Abortion** is a termination of pregnancy before the fetus is liable to survive”. In her review titled, “maternal and infant care”, she affirms that: “an early abortion takes place before the 16th week of gestation; a late abortion occurs during and after the 16th week. To be classed as a product of an abortion, or as pre-viable, the fetus must weigh less than 500g. The age of viability has now been set at the beginning of the 20th week of gestation, even though very few of the 20-27 weeks old infants are able to survive, by the use of modern techniques of neonatal intensive care, thus counted as potentially viable infants”.

2.1.1. Classification of abortion

According to Douglas G. Wilson Clyne (1959), abortion is classed as follows:
2.2. Spontaneous abortion

2.2.1. Definition

According to Wikipedia the free encyclopedia, miscarriage or spontaneous abortion (SA) is the spontaneous end of a pregnancy at a stage where the embryo or fetus is incapable of surviving independently, generally defined in humans at prior to 20 weeks of gestation.

Miscarriage is the most common complication of early pregnancy. Primary early miscarriages are those that occur before the 6th week LMP (since the woman’s LMP) and are medically termed “early pregnancy loss or chemical pregnancy”. Those occurring after the 6th week are medically termed “clinical spontaneous abortion”. The limit of viability at which 50% of fetus/infants survive long term is around 24 weeks, with moderate or major neurological disability dropping to 50% only by 26 weeks. Although long-term survival has never been reported for infants born from pregnancy shorter than 21 weeks and 5 days, fetuses born as early as the 16th week of pregnancy may sometimes live some minutes after birth (Wikipedia the free encyclopedia).

2.3. Time frame of pregnancy outcomes

<table>
<thead>
<tr>
<th>Aspect of fetus and pregnancy</th>
<th>GESTATIONAL AGE FROM LMP (IN WEEKS AND 2 MORE THAN DEVELOPMENTAL AGE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenatal development stage</td>
<td>2 6 11 2 2 2 24 2 2 28 29 3 40 42</td>
</tr>
<tr>
<td>Embryo</td>
<td>Fetus</td>
</tr>
<tr>
<td>Whether fetus viable</td>
<td>Not viable</td>
</tr>
<tr>
<td>Completes</td>
<td>Incompletes</td>
</tr>
</tbody>
</table>
If vaginal bleedings observed

<table>
<thead>
<tr>
<th>Onset of spontaneous delivery</th>
<th>Early Pregnancy Loss</th>
<th>Clinical spontaneous Abortion (miscarriage)</th>
<th>Premature labour</th>
<th>Terms</th>
<th>Overdue</th>
</tr>
</thead>
<tbody>
<tr>
<td>… and delivered alive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… but then dies after wards</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If died before deliver</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Still birth

NB: Age of viability was 28 weeks before availability of modern medical intervention, current 50% chance of survival to discharge occurs for 24 – 25 weeks. Definition varies by country: Australia: 20 weeks, UK: 24 weeks, US: no standard definite

2.4. Causes of spontaneous abortion

Seventy-five percent (75%) of all spontaneous abortions take place between 8 and 12 weeks of gestation. Many women have experienced early abortions without realizing that they were actually pregnant. Spotting at first period, then extra bleeding and cramping at the next may be the only indications of the pregnancy loss. Since an estimated 15% of all gestations end in spontaneous abortion, almost every gravid will have experienced an involuntary loss of a pregnancy at some time in her reproductive period. (Elizabeth J. Dickason).

Furthermore, Elizabeth J. Dickason in her review expresses the causes of miscarriage which have been classified as embryonic and fetal causes (50 – 60%), maternal causes (15%) and a combination or unknown (20 – 30%).

2.4.1. Embryonic or fetal causes

a. Chromosomal and germ plasma defects

According to, most clinically apparent miscarriages (2/3 – 3/4) occur during the first trimester, with chromosomal abnormalities being found in more than ½ (half) of embryos miscarried in the first 13 weeks. A pregnancy with a genetic problem has a 95% probability of ending in miscarriage. Most chromosomal problems happen then by chance, having nothing to do with the parents and are unlikely to recur; however, chromosomal problems due to a parent’s genes can be a possibility. This is more likely to have been the cause in the case of repeated miscarriages, or if one of the parents has a child or other relatives with birth defects. Genetic problems are more likely to occur with older parents; this may account for the higher miscarriage rates observed in older women.

Elizabeth J. Dickason defines a “blighted ovum” as abnormal development or implantation that is inconsistent with growth. It is also called an empty sac or an embryonic pregnancy and according to Kaufman et al (2007), it is a condition where the gestational sac develops normally, while the embryonic part of the pregnancy is either absent or stops growing very early.

According to Douglas George Wilson Clyne (1959), another abnormality of the zygote is the hydatidiform mole. Its degeneration has been found in as many as 40% of abortions and in many more fetal monstrosities which were present.

b. Placental abnormalities/umbilical cord problems

According to petrozza et al (2006), 19% of second trimester losses are caused by problems with the umbilical cord. It then, accounts for a significant number of late-term miscarriages.
Douglas G. Wilson. Clyne in his review: “A concise text book for midwives” (1959), affirms that in faulty embedding, if the ovum embeds low down near the isthmus, abortion is then common. If no abortion occurs the placenta praevia may reach full term. That faulty embedding, however rarely occurs and if it does, it is usually in situation where the mother presents with infantile or double uterus.

Elizabeth J. Dickason in “maternal and infant care” (1975), gives a clear and simple pathophysiology of spontaneous abortion as a result of placenta praevia. On occasion the blastocyst implants in the lower uterine segment. Because the decidua is less nourishing and the blood supply is less adequate, the placenta spreads out over a larger surface and may cover the internal so completely, partially or marginally. A fourth type, the low-lying placenta, does not impinge on the internal so until the cervix is well dilated during labour. Placenta praevia occurs in about 1% of all pregnancy and is more common in older gravid as and in those with a multiple pregnancy. Because low implantation does not favour fetal growth, many of these pregnancies are lost by spontaneous abortion in the first trimester.

2.4.2. Maternal causes
They tend to be involved in late abortions and are displayed as follows:

- Progesterone deficiency
  It is one of the causes which occur in early miscarriage. Women diagnosed with low progesterone levels in the second half of their menstrual cycle (lacteal phase) may be prescribed progesterone supplements, to be taken for the first trimester of pregnancy, although there are contradicting views about the use of progesterone supplements to prevent (petroza, John C. (August 29, 2006)).
- Uterine malformation
- Tumors (fibroids)
- Cervical problems etc.

2.5. Predisposing or risk factors

2.5.1. General factors

- Infections. E.g. Malaria, pneumonia, diphtheria, STDs, small pox, influenza, measles, typhoid fever etc.
- Toxaemia, including nephritis and hypertension.
- Poor nutrition; e.g. lack of vitamin E, essential for the continuation for normal pregnancies to full term (Douglas G. Wilson C. (1959) ).
- Trauma
- Sickle cell anemia (because of placenta-bed micro infarcts) (petrozsa et al, 2006)
- Tobacco consumption
- Diabetes (uncontrolled diabetes)
- IUCD use
- Advanced maternal age
- The use of certain drugs which may contradict to the evolution of the pregnancy. e.g. antidepressants (paroxetine, venlafaxine)
- Polycystic ovary syndrome (Stein-Leventhal syndrome) (30 – 50% of pregnancies in the 1st trimester)
- Hypothyroidism

Conception and hypothyroidism are usually incompatible. However, should a hypothyroid woman become pregnant, early diagnosis is mandatory, because abortion, premature delivery, pre-eclampsia, and congenital abnormalities (notably cretinism and/or mental retardation) are common. Since the baby’s thyroid develops independently of the mother’s, however there is a possibility of a normal infant born to be hypothyroid (Elizabeth J. Dickason (1975)).
2.5.2. Specific risk factors

a. Autoimmune diseases
It is associated with a greatly increased risk of miscarriage. In the case of auto-immune induced miscarriage, the woman’s body attacks the growing fetus or prevents normal pregnancy progression. And according to Wikipedia the free encyclopedia, further research has also suggested that auto-immune disease can cause genetic abnormalities in embryos which in turn, can lead to miscarriage.

b. Morning sickness
Because nausea and vomiting of pregnancy (morning sickness) may alter a woman’s food intake and other activities during pregnancy, it may be a confounding factor when investigating possible causes of miscarriage.

c. Exercise
According to Wikipedia the free encyclopedia, most types of exercise (with the exception of swimming) correlate with a higher risk of miscarriage prior to 18 weeks. Increasing time spent on exercise is associated with a greater risk of miscarriage. Also, an approximately 10% increased risk may be seen with up to 1.5 hours per week of exercise, and a 200% increased risk seen over 7 hours per week of exercise. After the 18th week, no relationship may be found between exercise and miscarriage rates.

d. Caffeine
Also, according to Wikipedia the free encyclopedia, caffeine consumption has been correlated to miscarriage rates, at least at higher levels of intake. Normally, 200 mg of caffeine is found in 10 oz (300 ml) of coffee or 25 oz (740 ml) of tea. Thus, pregnant women who consume 200 mg or more of caffeine per day may experience a 25% miscarriage rate, compared to 13% of pregnant women who don’t consume any caffeine.

e. The use OTC drugs
Elizabeth J. Dickason (1975) clearly displays this fact. In fact, every ingested or inhaled drug, by the pregnant women crosses the placental barrier in varying concentrations and has the potential for disturbing or altering the growth pattern of the fetus. Those are called the teratogenic effects of drugs.

According to Martha Olsen Schult and Sister Theresa Thomas (1975), Americans consume exorbitant amounts of sleeping medications, barbiturates, amphetamines, antacids, laxatives antibiotics, and vitamins. When taken according to prescribed amount most drugs are considered “safe” for the adult human body. However, they can have devastating effects on the unborn baby. And so, a few effects of drugs on the fetus are known. For example, aspirin has the potential for causing GI bleeding in the fetus. Large doses of Phenobarbital can cause neonatal bleeding, and some vitamins taken in excess can harm the fetus. For this reason, all pregnant women should be warned against taking any medication unless it is prescribed by the physician.

Some women indulge into these practices without knowing their pregnancy status, and by so doing, they ignorantly cause harms to the embryos, which may involve miscarriage. That is why Douglas G. Wilson C. (1959) displays the signs and symptoms of pregnancy among which the possible signs and symptoms i.e. the ones of very early pregnancy, which must call the attention of any woman so as to help her not to get involve into non-control use of drugs. The other signs and symptoms i.e. the probable and positive ones, will be easily identified later.

Possible signs and symptoms of pregnancy
1. Amenorrhoea
2. Morning sickness
3. Breast changes
4. Frequency of micturition
5. Appetite changes
6. Vaginal discharge (in excess amount)
7. Quickening- mostly noticed by multiparae at the 16th weeks.

The joy of pregnancy and the expectation of motherhood may be marred by the fear of the unknown, and affected by temperament, intelligence, environment, general health and so on. This may result in spontaneous abortion.

This mis-information about the labour period may stress-up a woman.
A young adult who becomes pregnant unwilling (like in case of incest, rape or other unwanted pregnancies) and which doesn’t found good in inducing abortion voluntarily, is also at risk of having spontaneous abortion.

Emotional disturbances may also affect the progesterone levels for the maintenance of the implanted ovum, which if very less, can lead to pregnancy loss.

Emotional disturbances may also be associated with religious factors, economical status etc….


g. Professional mistakes

The misuses of medications including their poor follow-up for the treatment of conditions in pregnancy are likely to lead to its loss. The tangible example which will make the cue of this research is the wrong use of quinine in the treatment of malaria in pregnancy.

2.6. Classification of spontaneous abortion

1. Threatened abortion

It is premature uterine contractions before viability and which may be characterized by lower abdominal pain and per vaginal bleeding. It happens in the first 3 months of pregnancy (Douglas G. Wilson C, 1959).

2. Inevitable abortion (Elizabeth J. Dickason, 1975)

The term “inevitable” is used to describe the inability of therapy to reverse the process of cervical dilation or save the fetus.

It can be divided into 3 types:

i) Complete abortion

The cervix dilates to 4-5 cm, and all parts of the placenta and embryo are passed out of the uterus. The recovery period is one of normal involution. Many women do not receive medical care but may go through the complete abortion at home.

ii) Incomplete abortion

After cervical dilation, bleeding and cramping, fragments of the embryo and placenta are passed. The retained portions of the placenta cause excessive bleeding. This is common after the 10th week.

Incomplete abortion may also be due to a poorly performed criminal abortion.

iii) Habitual Abortion

A woman who has lost 3 or more consecutive pregnancies is called a habitual aborter. The cause may be maternal infertility, chronic disease, or blood group incompatibility. The chief cause is cervical insufficiency due to poor birth trauma to the cervix, or to intrinsic anatomic problems. The process follows a specific pattern; the cervix begins dilating after 16 weeks, the membranes budge out of the external cervical ox and the uterus begins the contractions which will lead to delivery of a tiny fetus. (Elizabeth J. Dickason, 1975)

3. Missed abortion

This is the retaining of fetus 4 or more weeks after IUD

2.7. Manifestations of spontaneous abortion

- Bleeding, which may increase accordingly
- Cramping
Abdominal aching
This is like labour pain, coming round from back to the front, and griping in character.

2.8. Diagnosis of spontaneous abortion

- Through signs and symptoms
- Ultra sound
- Examination of the passed tissue
- Microscopic pathologic symptoms of miscarriage
  E.g. Chorionic villi, trophoblast, fetal parts, background changes of the endometrium.
- Genetic tests may be performed to look for abnormal chromosome arrangements.

2.9. Management of spontaneous abortion

2.9.1. General management

i) Blood loss being the most common symptom during early pregnancy loss, transvaginal ultra sound is performed.

ii) Medical management It consists of using misoprostol (cytotec) (orally or vaginally) a prostaglandin or oxytocin (syntocinon) to encourage completion of the miscarriage, then Hyoscine to stop the contractions after completion if necessary, in case of incomplete abortion.

iii) Surgical management
  - D & C
  - D & E

2.9.2. Specific management

a. Threatened abortion

Since the cause is rarely known early enough to use preventive therapy, treatment is symptomatic;

- Bed rest
- While waiting for medical aid, the nurse shaves the pubic hair, and the vulva swabbed down with an antiseptic solution, all soiled clothing and pads are preserved for the doctor’s inspection
- Temperature and pulse are recorded thereafter twice daily
- Avoid vaginal or rectal examinations that may make the abortion inevitable.
- Bowels are let severely alone for 48 hours.

After that the doctor may order any liquid paraffin needed

- Doctor’s treatment:
  - Sedatives will be ordered, such as pethidine 100 mg or phenobarbitone 1g TID
  - If tests for progesterone and human chorionic gonadotrophin (HCG) reveal low levels, replacement with progesterone may be started. After 10 days, another pregnancy test may be requested to discover whether the pregnancy is continuing.
  - If the cervix is patulous or incompetent, a nylon suture round it is placed through the Shirodkar’s operation.
  - Thyroid supplements, sometimes, help to maintain a pregnancy.
  - If an abortion is threatening because of psychogenic causes, calm listening and counseling may be helpful.
  - In every case, intercourse will be contra-indicated until the pregnancy seems to be well established.
  - Diet and other advices.

a• A light diet with wheat-germ oil as suggestion may be prescribed.

b• After 5 days without bleeding, the patient is allowed up, and if there is no further loss, may be discharged 3 days later.

c• She is told to take things easily and to report if there is any recurrence of pain or
bleeding.

b. Inevitable abortion

i) General care

- Put the patient to bed, and send for medical aid
- Avoid any rectal and any vaginal examinations
- Clean and shave the vulva, and keep all soiled clothing or pads.

ii) In case of emergency

- If the bleeding is very severe, and the patient appears to be in danger, give 0.5 mg of Ergometrine or Oxytocin injectable, while waiting for the doctor.
- Plug the vagina tightly with broad, sterile gauze.

iii) Doctor’s treatment/order

- Complete abortion
  
  Since up to the 8th or 10th week the whole of the fatal sac generally is expelled intact, bed rest for a few days and a daily injection of Ergometrine/oxytocin IM (if necessary) are sufficient.
  
  - Incomplete abortion
  - Expulsion of the retained placenta with injections of ergometrine/oxytocin.
  - If it fails, D & E is done under anaesthesia
  - If it is as a result of criminal abortion, sepsis is liable to occur, and so, antibiotics will be prescribed in such cases
  - Blood transfusion may be required if exaggerated blood lost

- Habitual abortion

  - Shirodkar’s operation It consists of the use of cerclage procedure, by placing a non-absorbable suture around the cervix to hold it closed. It can be done before conception. If done after, special precautions must be taken to maintain the pregnancy after the cervical manipulation.
  - Post operatively, the patient is placed in a Trendelenburg’s position for 48 hours to relieve the pressure of the fetus on the cervix.
  - Sedation and complete bed rest for 48 hours are usually ordered.
  - Special check-up will be done for virginal bleeding, contractions, and the fetal heart beat. Before delivery is possible, the suture must be removed.

c. Missed abortion

  a• Emptying of the uterus with suction, or with dilation and curettage, using oxytocin infusion to control bleeding.
  b• Late abortion will be treated with oxytocin infusion to soften the cervix. Should this be ineffective, the doctor may use an intra-amniotic injection of saline solution (hypertonic saline) to start labour.

2.10. Prevention of spontaneous abortion

According to Wikipedia, currently, there is no known way to prevent an impending miscarriage. However, fertility experts believe that identifying the cause of the miscarriage may help prevent it from happening again in a future pregnancy.

a) Medical preventive measures

They consist of the use of supplement progesterone before and during pregnancy (http://en.m.wikipedia.org/wiki/miscarriage).

Progesterone plays a key part in preparing the uterus for implantation of the newly fertilized egg. It has been suggested that some women who experience spontaneous abortions may not be producing enough progesterone; and so, by administering exogenous progesterone it may be possible to prevent miscarriage. Doctors in Vietnam widely prescribe progesterone for the treatment of threatened miscarriage. In France also, progesterone is among the most frequently prescribed drugs during pregnancy, and almost 1/3 of women with threatened
abortion are prescribed progesterone in Italy. Unlike in developed countries, most health care providers and policy-makers in developing countries do not have easy access to the latest reliable information on effective care.

To then, institute the use of progesterone therapy for recurrent miscarriage, treatment protocols for reproductive health care will to be standardized and periodically updated by appropriate authorities, using an evidence based approach.


b) The first ANC visit.

The first visit is encouraged to be done as early as possible after realizing a pregnancy. It is usually during the 1st trimester. Considering that SA mostly occurs during the 1st trimester, the emphasis will be done on the ANC during the first trimester, and particularly on the prevention of abortion added to other activities. As viewed by Elizabeth J. Dickason (1975), the 1st trimester needs vary according to whether the pregnancy is a first one. A first pregnancy is like any other first experience. Curiosity and concern are felt about the unknown that lies ahead. The woman may appear to be very self-concerned and will reflect the ambivalence of the phase through which she is going. Because she probably will not be able to focus on instructions concerning future events such as labour, delivery, child care, or contraception, such topics are best discussed in later visits. A nurse usually has the first contact with a patient following the registration procedures; besides, the patient is assured of the confidentiality of her record and of the importance of having a complete history for background information that will be useful in assessing this particular pregnancy. According to Douglas G. Wilson. C. (1959), a first ANC visit is made up of history and examination, and general advice to the patient.

1. History
   - General history e.g. demographic data, minor ailments etc.
   - Obstetric history. e.g. previous labour, delivery, puerperia, etc.

2. Examination
   - General examination: e.g. vital signs, physical inspection etc.
   - Special examination: e.g. laboratory investigation (HIV status) etc
   - Abdominal examination: e.g. palpation.
   - Measurements
   - Vaginal examination: e.g. consistency, exclusion of cysts and fibroids etc.

3. Advice to the patient (IEC) on:
   - Use of ITNs
   - Diet
   - Exercise and rest
   - Clothing
   - Smoking and alcohol etc.

c) Subsequent ANC visits

- Besides routine ANC activities as stated above, there can be:

  1. health education
     - EBF
     - FP
     - EPI program etc.

  2. Drugs
     - SP as from 16 weeks or when viability period
     - Folic acid
     - Ferrous etc.
2.11. Malaria in pregnancy

Since glimpses of antiquity, the woman’s womb is exposed as axis of the universe, the nucleus of the world in which all human beings, whatever their age, ability, background, physical or spiritual power take form. In other words, within the bosom of the woman resides the fructifying life-giving power without which sustaining source for the continual existence of the human species is impossible. This is why generations throughout ages have celebrated the fertility of the woman. This is why pregnancy, the transition into motherhood in most African societies is climaxed with special mother-centered gatherings of friends and family to honor, support, nurture, and encourage the mother-to-be in her new role or continuing role. For the most part, pregnancy is a special time in life to honor this momentous rite of passage and infuse the epoch with love, spirit, caring, and support the mother-to-be. For example, in certain traditional society, not only was it uncommon to take all the best part of certain slaughter animals to be specially prepared to feed the mother-to-be but she was forbidden to eat certain meat, mushroom, and vegetables for the sake of the fetus. Equally important, the mother-to-be was the first to take her bathe, eat, and went to bed early as the goddess or a “protectress” of the “seed.” In essence, the mother has not only been the glue of the household and the flower in a garden but one who gives birth to the human race.

It is no wonder why an early death of a child or the loss of the unborn to a miscarriage, “spontaneous abortion” is one of the most traumatic experiences no couple would ever want to go through. They are haunted for life with the frustrated feelings of motherhood. Sadly, an estimated 30 million plus childbearing African women who become pregnant in malaria-endemic environment annually have to suffer, thereby dying from a malaria-induced miscarriage/stillbirth. The figure is vividly captured in the U.N. findings that 95 percent of the deaths worldwide, related to pregnancy and childbirth, occurs in Africa where a woman dies from complications in pregnancy every minute. The statistics is even frightening when compare to women living in the western world. For example, “African women are 175 times more likely to die in childbirth and pregnancy than Westerners; a UN report says. (www.news.bbc.co.uk/2/hi/health/).

Additionally, tens of thousands of African women who survive the ordeal would live with severe disabilities, maternal anemia, etc.

2.11.1. Preventing and treating malaria in pregnancy

These can be a key intervention to improve maternal, fetal and even child health globally and is linked to 3 of the Millennium development goal (MDG)
- MDG – 3 improve maternal health
- MDG – 4 reduce under 5 mortality
- MDG – 5 combating infections disease (combat HIV, malaria, TB and others diseases)

Pregnant women are generally more susceptible to malaria infection than other adults. In area where malaria is prevalent, the disease contributes to 2 – 15% of diseases of maternal anaemia, 8 – 14% of low birth, and as many as 3 – 5% of infant deaths. More than 45 million women – 30 million of them in Africa, become pregnant in malaria-endemic areas each year.

When a pregnant woman has malaria, even if she has no clinical symptoms, she may develop placental parasitaemia which can contribute to maternal anaemia, and impaired fetal growth, or spontaneous abortion. Also, the prevalence and intensity of Malaria infection during pregnancy is higher among HIV-positive women. (http://www.planetwire.org/files.fcgi/3438_BPmalMa02e.pdf).

a. Prevention

Following the recommendation of the WHO, the MNH program promotes IPT and the use of ITNs in the prevention of malaria.

Family members can also help protect the woman from malaria by filling areas in the ground near their homes when water collects, clearing bushes away from the house, disposing of trash and keeping food containers covered.
b. Treatment

For severe malaria during pregnancy, the WHO recommends artesunate or guanine during the 1st trimester and artesunate as the first line therapy during the second and third trimesters. Appropriate management should be available to all women with clinical cases of malaria. In endemic areas, screening for signs and symptoms of malaria should be a routine part of ANC. If no possible, the diagnosis can be done through blood test and managed somehow otherwise.

According to Wikipedia the free encyclopedia, if malaria is suspected in a pregnant patient, refer immediately to secondary/tertiary care where infectious disease, obstetric and neonatal care is on hand and intensive care felicities if needed.

- Drugs should be used at adequate doses and according to clinical condition and local resistance patterns.
  - Chloroquine and quinine can be used safely in any part of the pregnancy, but resistance is common.
  - Artemisinins appears to be safe in the second and third trimesters.
  - Mefloquine and SP are safe in second and third trimesters.
- Fluid replacement needs to be very carefully monitored to prevent pulmonary oedema.
- If anaemia requires transfusion (Hb 7 -8 g/dl) then packed cells are preferred to avoid fluid overload.
- The complications of malaria should be carefully and aggressively managed
- Involve the obstetric team early in case of premature labour
- Iron/Folate may be added to the prescription

NB: Primaquine, tetracycline, doxycycline and halofantrine are contra-indicated. So, it is suggested to use quinine and clindamycin in place of doxycycline for example.

Parental treatment/Quinine infusion.

- For a quinine dose of 25mg/kg/day, the flow rate should be reduced from 42 drops/minute to about 20-21 drops/minute for 4 hours. (particularly when the first line contains 1200mg of quinine)
- For a quinine dose of 20mg/kg/day, a flow rate of 42drops/min x 4 hours can be maintained. NB: vitamin B complex ampoules (1-2) should be added to the infusion in order to reduce the effects of quinine.
- A salbutamol infusion may be added to a quinine infusion of 25mg/kg/day; but it should be noticed that this shouldn’t be given in early pregnancy where it is contra-indicated. It is typical to malaria in late pregnancy.

c. Quinine treatment/effects in pregnancy

Quinine capsules should not be used during pregnancy and even after as it is found in the breast milk, except specifically and purposefully prescribed by a competent doctor. Congenital abnormalities (including damage to the auditory and optic nerve) have been reported following the use of large doses of quinine for its abortive effect. Quinine is only recommended for use during pregnancy when there are no alternatives and benefits outweigh risk.

Quinine crosses the placenta and gives measurable blood concentrations in the fetus. During a study of women with Plasmodium falciparum malaria, difference in the rate of stillbirths at greater than 28 weeks of gestation was not significant in pregnant women treated with quinine compared to the control group without malaria or exposure to anti-malarial agents during pregnancy. The overall rate of congenital malformations was not different for women treated with quinine (1.4%) compared to a control group (1.7%). The rate of SA was...
lower in women treated with quinine (3.5%) than the control group (10.9%). Despite its contracting effect on the uterus, it is safe for the pregnant women when administered rightly, and as recommended to treat malaria, as prescribed accordingly by the doctor. (http://www.netdoctor.co.uk/medecines/100002213.html).

2.12. Role of hcps in the prevention of SA.

The role of health care providers depends greatly on the unit of activity.

i) At the ANC unit.

- Identification of women at risk by proper history, physical examination, laboratory investigation…
- Proper referrals
- IEC on preventing SA on topics relating to:
  - Proper use of mosquito nets
  - Avoid physical and psychological stress
  - Proper nutrition
  - Avoidance of OTC drugs
  - Recognizing early signs of pregnancy
  - Recognizing early signs of Threatened Abortion and the immediate action to take.
  - The types and limits of physical exercises.
  - Use of intermittent preventive treatment against malaria added to folic acid and iron.

ii) In the wards

- Use appropriate approach towards patients
- Monitor vital signs
- Proper administration of medications
- Ensure strict bed rest
- Alleviate anxiety through proper psychological care.
- Counsel the woman on the various preventive measures.
- Ensure good collaboration in the health team in order to ease corrections, proposals, critics and renovations in the activities.
- Drawing of nursing care plans for proper management of patients.

Research methodology

3.1. Description of the study area

The area of study adequately chosen or this research work is the Azire Health Area. AHA is one of the 17 functional has that make up the Bamenda Health District (see appendix). It is situated in the Bamenda II subdivision, in the Mezam division of NWR.

Azire Health Area is divided into 10 quarters/zones as follows: Azire A, Azire B, lower Atuazire, Nitop 1, Nitop 2, Nitop 3, Nitop 4, Ntarikon 1, Ntarikon 2, and Ntaturu. (See appendix)

With a population of about 65,031 inhabitants in 2010 HA census, AHA is bounded to the North by Ntamulung HA, to the South by Ntuakom HA, to the West by Alakuma HA and to the East by Ntambag HA.

It is made up of 7 Health facilities as follows:

1) Alpha Royal Clinic
2) Azire IHC
3) Mezam Polyclinic
4) Broadgreen Maternity
5) Mount Zion Clinic
6) Regional Hospital
7) God’s Glory Clinic (actually not existing).

The study was carried out in 3 of the health facilities, i.e. Alpha royal clinic, Azire IHC, and Regional Hospital. AHA is the 2nd most populated HA with about 65,031 inhabitants; after Nkwen urban (69,104 inhabitants). It is made up people of various origins, tribes,
languages… Also, it is mostly made up of people of high educational level, with many primary, secondary schools i.e. the population is a mature one.

3.2. Research design

A descriptive cross sectional design has been used for this work. It is a design in which people’s perception, knowledge, belief patterns and practices are assessed and the findings described as such. The investigator collected data from a sample of respondents in the 3 health facilities out of 6, representative of the entire population of HCPs in the AHA, on the knowledge of their role in the prevention of SA. This design helped the investigator to acquire information so as to meet with the study objectives.

3.3. Target population

It is the population which comprises people of various sex, age groups, health occupations… that have the potential to be part of the study sample. The target population chosen for this study was HCPs both male and female, regardless of their duration in service and grade, of the gynaecological ward (general ward), ANC department, labour room and gynaecological/obstetric consultation of these health institutions.

3.4. Sample size and sampling procedure

During this study a sample size of 24 HCPs were recruited in 3 Health Facilities of the Azire Health Area, with 12 respondents from the Regional Hospital Bamenda, 7 from the Azire Integrated Health Center, and 5 from the Alpha Royal Clinic.

The sampling procedure used was the convenient sampling method where all available HCPs in the specific units were sampled. This was due to existing small size of the target population. This helped the investigator to get tangible information from the HCPs about the study in the health units concerned.

3.5. Data collection tool

This is an instrument used in the collection of raw data from the target population. The tool used here was a structured questionnaire designed to obtain responses from the respondents. The questions were made of open-ended questions, and short answered questions. They were structured to reflect the specific objectives of the study.

3.6. Pre-testing and instrument validation

The questionnaires were pre-tested in the Nkwen Urban HA and particularly in the Medicalised Health Centre Nkwen (CMA Nkwen). This HF was chosen because of close characteristic features as that HFs chosen in the AHA; and also has a population (69,104) close to the one the AHA.

The pre-testing was necessary because it helped the investigator to be sure that the questions were clearly structured such as to enable easy understanding by the respondents. Flaws in the question structures and lapses in the responses were corrected to fit the research objectives, so as to make the questionnaire be valid and reliable as a research instrument.

3.7. Data collection procedure

The questionnaires were administered by the investigator and they were answered and handed over to him after a short while, due to the busy schedule of the respondents.

Also, secondary data was collected from the doctor(s) in charge of the gynaecological/obstetric consultation, through short informal interview.

3.8. Data analysis tools

Raw data collected from the field was presented and analysed in the next chapter using frequency tables, bar charts, pie charts etc. analysis was done under each table and chart accordingly
3.9. Ethical considerations

Authorization to carry out this study was obtained from the RDPH-NWR (see appendix). This granted the investigator to go ahead to carry out this study in the chosen area.

Also, in collecting raw data from the target population (HCPs), the concern of respondents was solicited first; then explanation given to them on the purpose of the study, and also guaranteeing them on the confidentiality of the information they provide. This was necessary because it made the respondents to build up trust on the investigator and so doing, answered the questions freely and accurately. This made them to understand that their rights are being respected and will still be respected during and after the study.

Finally, to reassure confidentiality the names of the respondents were not taken, so as to make them not to be identified.

3.10. Communication of results

This work serves as an academic work and shall be presented to different areas and individuals in corrected copies. It shall be presented to:

- The school library (TSSRN Bamenda Library).
- The Regional delegation for public Health.
- One of the HF where the research was carried out (RHB).

Data presentation and analysis.

The purpose of this study was to assess the knowledge of HCPs on their role in the prevention of SA. Raw data was collected from the field through the administration of questionnaires to the HCPs of the required departments/units, so as to achieve the above mentioned purpose. Due to time constraint, out of 27 questionnaires administered, 24 were answered. As such, the presentation and analysis shall be done based on the answered questionnaires.

SECTION I: SOCIO DEMOGRAPHIC DATA

Table I: Distribution of HCPs/respondents according to unit department of service

<table>
<thead>
<tr>
<th>Unit/department of service</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>ANC</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Labour room/delivery room</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Gynaecological ward/general ward</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table above, out of 24 HCPs recruited for this study, 6(25%) were working in the consultation department, 6(25%) in the ANC, 5(21%) in the labour room, and 7(29%) in the gynaecological/general ward.

Table II: Distribution of respondents according to their duration in their units/departments.

<table>
<thead>
<tr>
<th>Duration in the unit/department</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 years</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>1-5 years</td>
<td>13</td>
<td>54</td>
</tr>
<tr>
<td>5-10 years</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As seen on the table II above, out of the 24 recruited respondents, the majority, i.e. 13(54%) are 1-5 years in their units, 7(29%) less than 1 years and 4(17%) between 5-10 years.
Table III: Distribution of respondents according to professional grade.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gynaecologist</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>General practitioner</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Nurse midwife</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Midwife</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>SRN/reproductive health</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>SRN</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Nurse assistant</td>
<td>10</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As seen on the table III above, out of the 24 respondents recruited, the majority i.e. 10(42%) are nurse assistants.

SECTION II: ASSESSMENT OF THE KNOWLEDGE OF HCPS ON SA

Table IV: Distribution of respondents according to their definition of SA.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is unintentional expulsion of the embryo or fetus before viability</td>
<td>14</td>
<td>58.3</td>
</tr>
<tr>
<td>It is unintentional expulsion of the embryo only, before viability</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>It is unintentional expulsion of the embryo or fetus after viability</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>It is unintentional expulsion of the embryo or fetus before viability</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As seen on table IV above, 114 (58.3%) answered correctly by saying that SA is unintentional expulsion of the embryo or fetus before viability.

Figure 1: distribution of respondents according to whether they know the various types of SA or not.

Out of the 24 respondents recruited, 133(54%) said yes they know the definition off SA, and 11(46%) said no.

Table V: Distribution of respondents’ responses who said that they knew the types of SA, according to the various types of SA.

<table>
<thead>
<tr>
<th>Types of spontaneous abortion</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threatened</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Inevitable</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Complete</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Incomplete</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Habitual</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Missed</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Early spontaneous abortion</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
Late spontaneous abortion | 1 | 6  
Total | 16 | 100

From the 13 respondents who said yes they know the types of SA, 16 answers were gotten out of which 4(25%) were “inevitable SA”. Nobody thought of habitual abortion. This is seen on the table V above.

**Table VI:** Distribution of respondents according to when SA occurs.

<table>
<thead>
<tr>
<th>Period of occurrence of SA</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First trimester only</td>
<td>16</td>
<td>66.7</td>
</tr>
<tr>
<td>Second trimester only</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>First and second trimester</td>
<td>4</td>
<td>16.7</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

From the table VI above, it is seen that only 4 respondents (16.7%) said that SA occur both in the first and (early) second trimester. The majority of respondents (66.7%) said it occurs in the first trimester only.

**Table VII:** Distribution of respondents according to how SA can be prevented.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education of selected potential mothers at risk during ANC visits and appropriate treatment when signs and symptoms appear</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Education of selected potential mothers at risk during ANC visits added to other ANC activities</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>Appropriate treatment when signs and symptoms are appearing</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>By alleviating anxiety</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100</td>
</tr>
</tbody>
</table>

As seen on the table VII above, the majority of respondents, i.e. 9(38%) said to prevent SA, education of selected potential mothers at risk during ANC visits, 7(29%) of them associated to the previous answer the appropriate treatment when the signs and symptoms appear, only 2(8%) thought of alleviating anxiety.

**SECTION III: ASSESSMENT OF THE ACTIVITIES OF HCPS IN THE MANAGEMENT OF SA.**

As seen on the figure 2 above, 9(388%) respondents said that they encounter TA above a month, 77(29%) said per month, and up to 4(117%) said they do meet TA every day.
Table VIII: Distribution of the respondents’ responses following their management of TA.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Referral to the doctor/gynaecologist</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>Physical examination</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Administration of prescribed drugs</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The responses on the table VIII above were a swerved by 23 respondents. The majority of the answers i.e. 222(71%) are: referral to the doctor gynaecologist and administration of prescribed drugs; only 9(29%) are: counseling and physical examination.

Figure 3: Distribution of respondents according too whether virginal or rectal examination is carried out during TA conditions.

From the figure 3 above, 7(29%) of the respondents said yes to virginal or rectal examination, 116(67%) said no.

Table IX: Distribute on of respondents according to their reasons of doing virginal or rectal examinations in TA cases.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To examine the cervix</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>To exclude ectopic pregnancy</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>To determine if the abortion is inevitable or not (to assess the degree)</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>To confirm diagnoses in order to act</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td><strong>No answer</strong></td>
<td><strong>1</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table IX above, only 1(14%) respondents said vaginal or rectal examination could be done to exclude ectopic pregnancy, 2(29%) said to confirm diagnosis in order to act.

Table X: Distribution of the respondents’ reasons who said “no” to vaginal or rectal examination in case of TA

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It may cause contraction and lead to expulsion of the fetus</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>It may cause further bleeding</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>To prevent infection</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>It can cause the rupture of membrane</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>To reduce manipulation</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Out of the 19 reasons given, 1(5%) said, it can cause the rupture of membrane, 18(95%) were correct reasons.
Table XI. Distribution of respondents according to whether the threatened abortion cases they did manage ended in abortion or not.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>13</td>
<td>59</td>
</tr>
<tr>
<td>No</td>
<td>06</td>
<td>27</td>
</tr>
<tr>
<td>No response</td>
<td>03</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As seen on the table XI above, out of the 22 respondents who had encountered TA, 13 (59%) said the cases they did manage ended in abortion, and 6 (27%) said their cases did not end in abortion.

Table XII: Distribution of respondents’ reasons who said the cases of TA they did manage ended in SA.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late consultation/late intervention</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>Infection</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Natural causes</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Incompetent cervix</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>Rupture of membrane</td>
<td>1</td>
<td>7.0</td>
</tr>
<tr>
<td>Poor or no cooperation of the patient</td>
<td>1</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Figure 4: Distribution of respondents according to the frequency of occurrence of malaria in pregnancy

As seen on figure 4 above, up to 4 (16.7%) HPCs meet malaria in pregnancy daily and only 10 (42%) see it monthly.

Table XIII: Distribution of respondents according to how they did manage malaria in pregnancy.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment with malaria only and strict bed rest</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Treatment using malaria protocol, salbutamol protocol and strict bed rest</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Treatment using malaria protocol and salbutamol protocol as well</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Treatment using malaria protocol only</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Strict bed rest only</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Referral to doctor</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
From the table XIII above, 6 respondents (25%) said to manage malaria in pregnancy, there is need to use only malaria protocol. Only 6 (25%) thought that besides medications there is need from the patient to get strict bed rest.

**Table XIV:** Distribution of respondents according to how malaria in pregnancy can lead to SA.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The parasites of malaria cross the placenta and cause premature contractions</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>By causing uterine contractions</td>
<td>3</td>
<td>12.5</td>
</tr>
<tr>
<td>By causing uterine contractions and by the change of temperature</td>
<td>4</td>
<td>16.6</td>
</tr>
<tr>
<td>By causing uterine contraction and due to poor treatment and by the change in term premature</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table above, the majority of respondents i.e. 15(62.5%) answered in the best way that the parasites of malaria cross the placenta and cause premature contractions.

**Table XV:** Distribution of respondents according to the effect of quinine on the pregnant uterus

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quinine can cause uterine contractions.</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>Has no effect</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>No response</td>
<td>11</td>
<td>45.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As seen on the table XV above half of the respondents i.e. 12 (550%) said that quinine can cause uterine contractions,, while thee 12 others (50%) seemed not to know its effect on the uterus.

**Table XVI:** Distribution of precautions to consider in the management of malaria in pregnancy with malaria in fusion protocol, by respondents

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay attention to the flow rate and amount of quinine administered per day</td>
<td>23</td>
<td>67.7</td>
</tr>
<tr>
<td>Use of aseptic technique</td>
<td>3</td>
<td>8.8</td>
</tr>
<tr>
<td>Frequent observation</td>
<td>6</td>
<td>17.6</td>
</tr>
<tr>
<td>Maintain good hygienic conditions</td>
<td>2</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table XVI above, the majority of responses i.e. 23((67.7%) is pay attention to the flow rate and amount off quinine administer per day.

**Figure 5:** Distribution of respondents according to whether a HCP can ignorantly initiate premature
contractions in early pregnancy.

As seen on figure 5 above, 15(62.5%) respondents said yes to the possibility of HCPs too ignorantly cause premature contractions.

**Table XVII:** Distribution of the reasons of respondents who said yes to the possibility by HCPs to cause premature contractions.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor or no control of the amount of quinine and flow rate of infusion</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Administration of contra-indicated medications</td>
<td>9</td>
<td>56.25</td>
</tr>
<tr>
<td>Poor or no aseptic technique and traumatic palpation</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Over dosage</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table XVII shows the reasons for HCPs to ignorantly cause premature contractions: 15 responses (i.e. 93.75%) are mostly linked to the administration of medications.

**SECTION IV: ROLE OF HCPs IN THE PREVENTION OF SA**

**Table XVIII:** Distribution of the respondents’ responses on the role of HCPs in the prevention of SA.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC at ANC, ward and/or consultation department</td>
<td>23</td>
<td>43.4</td>
</tr>
<tr>
<td>Administration of appropriate prescribed drugs</td>
<td>11</td>
<td>20.8</td>
</tr>
<tr>
<td>Maintain aseptic method</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>Screening and follow-up of high risk mothers</td>
<td>9</td>
<td>16.9</td>
</tr>
<tr>
<td>Use of Shirodkar’s operation</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>Avoid frequent vaginal examination</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Referral on time</td>
<td>3</td>
<td>5.7</td>
</tr>
<tr>
<td>Reassure the patient</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table XVIII above, the majority of responses on the role of HCPs in the prevention of SA is 23 (43.4%) IEC at ANC, ward and/or consultation units, next is 11(20.8%) for the administration of appropriate prescribed drugs.

**SECTION V: DIFFICULTIES ENCOUNTERED IN THE MANAGEMENT AND PREVENTION OF SA**

**Table XIX:** Distribution of respondents’ responses according to the difficulties they do encounter in the prevention of SA.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate knowledge on the part of health personnel</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>Lack of material for the care of patients</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Inadequate or no cooperation of patients</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>Patients having financial problems</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Patients coming late for consultation</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table XIX above, the majority of difficulties encountered by HCPs is: inadequate or no cooperation of patients which counts for 12 responses (32%); next is lack of adequate knowledge on the part of HCPs: 10 responses (27%).
Discussions of results, conclusions and recommendations

5.1. Discussion of results

SECTION I: SOCIO DEMOGRAPHIC DATA

The 24 respondents recruited for this study were from varied departments. The majority i.e. 7(29%) were from the gynaecological/general ward, the smallest, i.e. 5(21%) were from the labour room. This diversity of units HCPS was stated by Elizabeth J. Dickerson in her book, “maternal and infant care” is to assure that “competent care should be available to all in order to improve the infant and maternal to all in order to improve the infant and maternal morbidity and mortality rates”.

The distribution of respondents according to the duration in the units/departments show that 7 respondents (29%) has less than 1 year in their service and 13(54%) has 1-5 years; and as such they should have had enough time to get acquainted in their service in order to get experience. However, this does not tie with the statistics collected in the BRH, which shows that in the year 2009, the number of malaria in pregnancy cases was 92, compared to the year 2010 with 310 cases. Also, in 2010, 103(40%) miscarriages from 257 threaten abortion (TA) cases were recorded. This number doubled in 2011, with 545 TA cases out of which 208 (38%) ended in miscarriages. As such, the HCPs and nurses in particular may not be versed with specific nursing procedures of the concerned unit.

The distribution of respondents per professional grade indicates that the majority of HCPs were Nurse Assistants (10 of them i.e. 42%). As such there should be an increase chance for them to carry out activities which are out of their functions or job description. This will result in low quality of work as reflected on the statistics collected in the BRH, and consequently to an increase in the prevalence of SA.

SECTION II: ASSESSMENT OF THE KNOWLEDGE OF HCPs ON SA

The distribution of respondents according to their definition of SA, indicates that only a majority of 14 respondents (58.3%) knows what SA is. 10 (41.7%) were out of track i.e. they did not know what SA is, though well concerned with the issue. This distribution is similar to the one according to the various types of SA where 13 (54%) only said they know the types.

Looking at the distribution according to those respondents’ responses (i.e. the 13 who claimed to know the various type of SA), only 16 responses were gotten, compared to an expected minimum of 3 responses per respondents, i.e. 39 responses expected from them. This shows a lack of knowledge, even for those who said knew about.

The responses on the period of occurrence of SA: up to 16 respondents (66.7%) were for the first trimester only and only 4(16.7%) actually knew that it could happened as well in the 2nd trimester of pregnancy and particularly in the early second trimester, as said by Elizabeth J. Dickerson in book titled, “maternal and infant care”, that: “an early abortion takes place before the 16th week of gestation; a late abortion occurs during and after the 16th week “. So the knowledge on the issue is poor.

For the prevention of SA, it is observed that psychological care at the prenatal period may be out of practice. Only 2(8%) respondents talked of alleviating anxiety, forgetting that this should be coupled with education and adequate medication administration. It is thus obvious that adequate knowledge on the prevention of SA is lacking.

SECTION III: ASSESSMENT OF THE ACTIVITIES OF HCPs IN THE MANAGEMENT OF SA

The frequency of occurrence of threatened abortion shows that up to 4 respondents (17%) meet TA every day. This means that in a month of 30 days, there is a high probability to meet 120 patients per month if at all they meet 1 patient per day, even though there is a higher chance to get more than 1 patient per day.

Looking at the respondents’ responses on the management of TA, it is clear that HCPs are much more turned to the management with medications, even in their intention of referring to
the doctor. Counseling, psychological care and physical assessment which also include vital signs, frequent observation and follow-up, are less considered; this ties with the fact that most of the respondents are Nurse Assistants, whose role is much more directed towards implementation of the nursing care plans (which are not even taken into consideration).

On the responses on vaginal or rectal examination in TA condition: Out of the 7 (29%) respondents who said yes to it, only 1 (14%) gave a logical and acceptable reason of doing vaginal or rectal examination during TA cases, which is “to exclude ectopic pregnancy”. The lack of knowledge may reflect poor practice.

For those who were against that practice, only 1 (5%) reason was not acceptable i.e. “it can cause the rupture of membrane”. It is then retained that vaginal or rectal examination can only be carried by a professional specialized in the practice, even though it is usually not advisable as a practice.

On the outcome of the management of TA, out of 22 respondents who had encountered TA, 13 (59%) said the cases they managed ended in abortion, it means that there is a failure in its management. To justify themselves, as seen on table XV, it can be observed that all the responsibilities are directed towards the pregnant women and not the HCPs.

For the frequency of occurrence of malaria in pregnancy: the responses gotten from this question as seen on figure 4 are similar to the responses on the frequency of occurrence of TA seen on figure 2. From the 2 figures, (4 respondents from each table with percentages of 16.7% and 17%) it is observed that the percentage in an average of 16.85% is high and there should be a great link between them. It is therefore probable that the occurrence of TA may be mostly due to malaria in (early) pregnancy.

For the management of malaria in pregnancy, only 1 respondent (4%) responded correctly i.e. treatment using malaria protocol, salbutamol protocol and strict bed rest. This is applicable in malaria in late pregnancy. For malaria in early pregnancy, salbutamol being contra indicated, treatment with malaria protocol only and strict bed rest is adequate as 5 respondents answered (21%). The 18 (75%) remaining respondents were incomplete in their answers. This indicates poor knowledge in the management of malaria in pregnancy, and hence a probable indicator to the increased prevalence of SA.

On the distribution of respondents according to how malaria in pregnancy can lead to SA as seen on table XVIII 15 (62.5%) respondents were correct in their answers. The parasites cross the placenta and cause premature contractions. In average answers, 4 (16.7%) were correct “by causing uterine contractions and by the change of temperature”. A total number of 18 (79.2%) respondents are knowledgeable on how malaria in pregnancy can lead to SA.

On the responses on the effect of quinine on the pregnancy uterus, up to 11 (45.8%) respondents did not answer. 1 (4.2%) “Said it has no effect” 50% of respondents had lack of knowledge in the effect of quinine on the pregnant uterus.

On the precautions to consider in the management of malaria in pregnancy with malaria protocol, up to 23 respondents (67.7%) answered correctly. Pay attention to the flow rate and amount of quinine administered per day. However, this number of respondents is contradictory to those gotten on the effect of quinine on the pregnant uterus as seen on table XIX. Otherwise, for this question the responses could have been 12, rather it is almost the double. However there is knowledge on the precautions to take in the management of malaria in pregnancy.

For the distribution of respondents according to whether a HCP can ignorantly initiate premature contractions in early pregnancy, the majority i.e. 15 (62.5%) said yes. This response is quite contrary to those gotten from table XV, where the HCPs declined their responsibilities in the failure realized in the management of some TA cases.

On Yes that HCPs can ignorantly cause premature uterine contractions in the early pregnancy, 15 respondents (93.75%) were directly linked to medications. The reasons given to justify themselves are correct, but the expected nursing role/care is not observed here, since it is supposed to justify table III, where 42% of respondents were Nurse Assistants, 17% were Nurses (SRNs) 8% were Nurse Midwives.
SECTION IV: ROLE OF HCPs IN THE PREVENTION OF SA.

The distribution of the respondents’ responses according to the role of HPCs in the prevention of SA the majority i.e. 23(43.4%) of responses is on IEC at ANC, ward and/or consultation unit. Next is the administration of appropriate prescribed drugs, with 11 responses (20.8%). Only 9 responses (16.9%) refer to “screening and follow-up of high risk mother” and only 2 (3.8%) are on the patients reassurance. As such, HCPs and particularly those having a nursing course by profession may not be knowledgeable of their role in the prevention of SA.

SECTION V: DIFFICULTIES ENCOUNTERED BY HCPs IN THE PREVENTION OF SA.

The responses of respondents on the difficulties they encounter in the prevention of SA responses (32%), the majority, is about the inadequate or no cooperation of patients. This group of responses is to be revised because the inadequate or no cooperation may be mostly due to the approach of the HCPs and the nurses in particular, while receiving and caring for the patient. In the next group, 10(27%) were for lack of adequate knowledge on the part of health personnel. This is correctly answered and match with some tables (e.g. table XIX, table XX), confirmation of the lack knowledge on the part of HCPs, as 10 respondents have answered.

5.2. Conclusions

Looking at the distribution of respondents according to the definition of SA, the various types and their reasons of choices, the frequency of occurrence of SA and its prevention, it is worth noticed and retained that HCPs have inadequate or poor knowledge on SA.

The majority of respondents as seen on table III that is 21 HCPs (88%) have a nursing course by profession. And so, their practices towards preventing SA are supposed to be nursing care plan based with holistic approach used. But unfortunately it is realized that from table X which brings out the practices of HCPs in managing TA towards preventing SA, the HCPs (22.71%) use but the drug-based method of prevention. It is also seen on table XXII. This obviously makes their practices worsen the patient’s condition through inadequate knowledge as seen on table XIV with 13(59%) respondents confirming the loss of pregnancies they did manage, there is a failure in practice, due to dislocation of roles or functions.

On the role of HCPs in the prevention SA, 2 responses (3.8%) were for patient’s reassurance. The psychological aspect of the patients is being neglected in the management/prevention of SA. As such, the follow-up of cases at risk will be reduced (9 responses i.e. 16.9%) as observed on table XXIII.

The difficulties in the prevention of SA have been expressed, but the most prevalent one which is inadequate or no cooperation of patients has to be reviewed because of the approach used by HCPs, as proven in the latter paragraph above, from table XXIII, where psychological care is neglected, which may be the main cause. The most important difficulty is the lack of adequate knowledge by health personnel’s.

To conclude, it is worth noting that HCPs are poorly knowledgeable on their role in the prevention of SA, thus contribute less in the reduction of its prevalence.

5.3. Recommendation

5.3.1. To the health personnel

Short term: All nurses concerned should create time to read and learn individually from various available sources about the management/prevention of SA, in order to practice holistically through the use of a nursing care plan and reduce the prevalence of SA in Cameroon.
5.3.2. To the health institutions

Forums on various health issues should be organized accordingly to refocus each health personnel towards his/her domain of activity.

5.3.3. To the government

Medium term
a• The government should recruited more HCPs, and nurses in particular so as to minimize the load of patients per nurse
b• The government should facilitate in-service training for Nurses in order to improve in their practices.
c• Health insurance should be issued to pregnant women so as to substantially improve on their accessibility to health care.
d• The ministry of public health should supply the TSSRN with updated library and high technologies school learning materials, in order to facilitate the tasks of students.

Long term
The creation of visiting nurse association (VNA), working closely with public health agencies and clinics in order to move its focus beyond the hospital doors and out into the community.

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Ethical, Patients Bills of Right and Professionals Consequences of HIV/Aids Care/Neglect

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Abstract

AIDS is a syndrome that continues to generate fears, misconceptions, misunderstanding, and discrimination because of stigma, rejection and isolation. Respect for the dignity, privacy and confidentiality of anyone who seeks health care is a fundamental right. The client/patient therefore, has the right to considerate and respectful care and the right for his/her privacy and confidentiality maintained. However the clients/patient with HIV/Aids is often denied these rights. They are usually discriminate against, made to go mandatory HIV testing and their serostatus testing revealed without their consent. These are violations of their rights and the healthcare provider who do such are not only violating the ethics of their profession, but could also be found liable by a court of law.

Introduction

The standards of professional healthcare to clients or patients and or individuals or community is based on human needs and is therefore unlimited by considerations of nationality, social status, religion, race and medical diagnosis. The nurses and other healthcare provider have legal, ethical and professional duty to care for every person that requires such needs. A registered/licensed nurse or healthcare provider could be found liable if she/he fails to provide needed care or treatment and resulting in harm or injury to clients or patients.

In Nigeria, the control professional control bodies like nursing and midwifery council of Nigeria and the medical and dental council of Nigeria, handle with seriousness cases of professional negligence and unethical practices. Also in the past up till now healthcare has become increasingly become complexes and dynamics in nature, which has now lead to inherent professionals and ethical problems/dilemmas and concerns that healthcare providers has to contend with it.

1.1 Aims and objectives

1.1.1 Aims

The aim is to examine the patient’s bills of right and professional consequences of HIV/AIDS care and neglect.

1.1.2 Objectives

The objective of the study is to gather information about HIV/AIDS clients’ bill of rights and implications of Negligence by Nurse and other healthcare practitioners

Literature review HIV/AIDS

One of the areas of healthcare today that poses ethical dilemmas is the HIV/AIDS care. This is because despite the recognition human rights on HIV/AIDS clients. The disease is still associated with stigmatization, intolerance, rejection, fear of contamination and discrimination among healthcare provider, friends, family and society at large. These has resulted on human rights issue like the rights to be informed consent, confidentiality of diagnosis and reporting voluntary, anonymous testing, voluntary disclosure of serostatus and partner notification and the right to be treated without discrimination for effective management HIV/AIDS care, the ethical issue and human rights has to seen as a hindrances to reduction an management of the disease factor, with
increase awareness on the rights of the client it leads to formulation along governmental organization such as person living with HIV/AIDS (PLW HAS) in Nigeria to fight for their right.

According to John and Udomo 2003, state that the ongoing respect for rights remains an essential component of HIV/AIDS care all over the world. In an attempt to deal with these challenges and dilemmas there is a need to look at professional code of ethics for an insight into these challenges. The ethics of professional healthcare means accepting the covenants relationship of trust between the profession and the community. It brings about professional standards, anticipated expectation and norms of the profession and gives direction from reliable moral and clinical judgments in practice.

Just as the hippocratic oath guides the practice medical personnel; the code of nursing ethics guides the practice of nursing. Through the ethical code are rules and regulations regulating the practice of nursing and if found wanting might be liable for misconduct or breach of rights. Whatever the situation, place or country involved the code of ethics stipulates among other things that the nurse should do.

- Care for and relate with patients/clients in non-prejudicial, non-judgmental and non-discriminating manner.
- Give care that shows respects for client’s beliefs, choices and values.
- Safeguard clients privacy and confidentiality
- Provide professional care to clients who are in need

Another guiding principle apart from professional ethics are act or law and legislation which every country has its own laws or bill rights that guarantee patients to right to life, right to health, right to be free from discrimination and deranging treatment.

2.1 Ethic o-legal issues in HIV/AIDS care overview of ethical principles

There are three orderly recognized principles in bioethics that apply to both clinical and research ethics respect for persons, beneficence and justice, respect for person entails respecting the decision of autonomous person and protecting person who lack decision making capacity and there are not autonomous. It also imposes an obligation to treat persons with respect by maintaining confidences and keeping promises. Beneficence imposes a positive obligation to act in the best interest of patients or research participants. Lastly, justice requires that people be treated fairly. It is often understood to require that benefits and burdens be distributed for within society.

Though ethical principles are useful guideline that help to focus on this discussion cannot mechanically or rigidly applied, some exemption to the principles may be appropriate in particular cases, also they often conflict the principles must be interpreted in the context of specific cases.

- The principles are utilitarian perspective embodies the idea that acts should be evaluated according to consequences.
- The deontological approaches stress that research ethics should be guide by generalized rules or obligation.
- The virtues ethics focuses on the motivation or character of the actor, rather that the act itself etc.

Generally, the widely accepted international ethical guidelines do accepted the fundamental principles of autonomy, beneficence and justice. Another thing is patients ‘right which emanate from human right, constitutional rights, civil rights, consumer right and codes ethics of medical and nursing profession formed on the basis of rights is life.

The legal rights of an HIV/AIDS infected persons or clients and the ethical obligation of medical profession and general public has not received careful attention till date and so has not been precisely defines. There are questions like confidentiality, consent of the person before taking blood for HIV test, discrimination of the person infected with HIV infection for employment and various other issues.
Laws and medical ethics are disciplines with frequent areas of overlap. The parameters of each are, however, distinct. Law is the established rule of conduct, the violation of which may create criminal or civil liabilities while ethics is the identification of values. Ethics maintains what ought to be? Laws maintain has to be. They both share common goals of creating and maintaining social good.

The ethic legal issue examines how the law regulates medical practice. This is because today patients are becoming more aware of their rights and are prepared of challenging theirs. The patient/client with HIV /AIDS has the same as anyone else and so access to medical care is his fundamental right. The American nurses Association commented on the patients bills of right which also cover the HIV infected person. These are as follows:

- The right to considerate and respectful care and there is no dehumanization or degradation (standard 1 of the bill of rights).
- The right to expect that his request for health services is granted and therefore, to receive adequate treatment and care without discrimination (standard 7 bill of rights).
- The right to expect that all communications and records pertaining his care are treated confidential (standard 6 bill of rights and standard 2 of American Nurses Association ANA codes of ethics).
- The right to voluntary testing, however, negatives attitudes and beliefs and misconception about HIV usually limit the care gives ability to provide compassionate respectful and competent care for the clients with infected HIV /AIDS the care given to them is usually compromised with the care given either by judging and condemning clients or avoiding him, being unwilling to treat or care for him and there generally towards behaviours towards the client or patients.

2.2 The right to non-discriminating care

The patients’ bill of right, the International Council of Nurses (ICN) code of ethics and it documents on HIV /AIDS care stated that all nurses and midwives have a moral ethical, legal and professional responsibility to care for all patients including HIV infected person. The ICN codes of ethics stated that the primary responsibility of the nurse is to all people who require nursing care.

Despite these non-prejudicial and non-discriminating codes, care givers still tend to be unwilling to care for people suspected of or confirmed with HIV /AIDS due to fear of contagious. The diagnosis of HIV /AIDS as stressful because of the stigma often leads to rejection and isolation but when rejection is from healthcare providers. The patient stress becomes unbearable. And this is stated in the report of ICN conference on HIV /AIDS, we continue to hear stories of people with AIDS being shunned, isolated, refused medical treatment and stripped of their human and civil right that people already suffering, should be subjected to such indignity is intolerable and even more so when it occurs on healthcare institution by healthcare professionals who should know better.

According to Jackson and H inter (1992) stated that non-discrimination ought to be the rule in HIV /AIDS care, it is therefore a breach of code of ethics for nurse to refuse care for a person infected with HIV /AIDS. Whether such a practitioner is guilty of man slaughter depends on the degree of negligence. The right to voluntary testing of HIV serostatus HIV testing should be voluntary not mandatory and results should be personal and confidential. The world health organization and UNAIDS do not support mandatory testing whether for patients or for health workers as this is coercive, as such there is no moral justification for such healthcare providers to insist on patients undergoing HIV testing before treating them. Consent is a “condicio sine qua num” to the examination or testing the patients. The hospital cannot therefore take patients’ blood sample for HIV without patient informed consent.

Another aspect of HIV testing is the right to adequate pretest and posttest counseling of clients to prepare and support them mentally, emotionally and socially for the result. No individual should receive a positive result without proper counseling. Counseling helps to overcome negative reaction, encourages voluntary disclosure to sexual partners, assist the
clients to make informed decisions and cope better with the health condition and thereby prevent further transmission of HIV.

The right of confidentiality and disclosure of serostatus in medical and nursing practice, confident information cannot be disclosed without the consent of the client/patient, unless where the disclosure is require by law or by order for a court or is consider necessary in the public interest. Confidentiality in HIV testing and report is important because of social stigma and subsequently discrimination and ostracization associated with HIV/AIDS.

2.3 Ethical responsibilities of the nurse to care for HIV/AIDS clients

The ethical and moral issues in HIV/AIDS care include the duty of nursing and midwifery personnel to provide care, and responsibility of HIV personnel to protect their parents and the community from harm related to transmission of disease. The responsibility to care for the sick is moral ideal and a distinguishing feature of nursing and other health professions that is part of the choice to join the profession.

In caring for people with HIV/AIDS nurses and midwives personnel may have misconception of the HIV/AIDS risk that interferes with ability to provide care. However they have moral and ethical responsibility to care for all people with or without HIV/AIDS or other disease. As the ICN code of ethics for nurses, “The nurses’ primary responsibility is to those people who require nursing care.

Healthcare workers do not pose a serious risk of HIV/AIDS and other blood borne disease to patient provided they adhere to basic principles of standard precaution. Despite the rarity of this form of transmission the ethical responsibility of HIV transmission to others must be defined. This means that personnel must adhere strictly to guidelines in their workplaces which may include voluntarily withdrawal from performing exposure prone and invasive procedures to avoid putting patients at risk. The ethical principles of doing good and doing no harm must constantly uphold.

To combat fear which is commonly associated to the misunderstanding of the mode of infection method of prevention, and/or other social stigma attached to HIV/AIDS, which the extent is disproportionate to the actual risk, and can result in denial or care or neglect of HIV/AIDS clients, with proper education strategies for nursing and midwifery personnel impact knowledge and skills, counseling caring for and where appropriate, a change attitudes and beliefs reduce the likelihood to stigmatize and disseminate clients.

Methodology

For this study the researcher decide to use non experimental or descriptive study. Data were collected using questionnaire with focus was on client right to care and negligence

3.1 Technique for data collections

The data was collected using questionnaire and checklist which focuses on gathering information on HIV/AIDS clients and professional negligence.

3.2 procedure for data collection

3.2.1 Source of data collection

The dependability for this project were derived from primary and secondary source

3.2.2 The primary source

For the purpose of this study the data were obtain as briefly explain below
A Questionnaire Administration
B Oral Interview

3.2.3 Secondary data source

The data from secondary source came from existing works and including data obtain from writing thesis, internet site and official report.
3.3 Sampling technique and sample size.

The sample sizes were basically obtained from general Hospital Bida with reference to Hiv/AIDS clinic. The sampling technique is systematic Random sampling technique which involved Administration of fifty (50) questionnaires to fifty (50) clients.

3.4 Method of data analysis

The data obtain were analyzed using Descriptive statistic

Data interpretation

From the result of data obtained, fifty questionnaires were distributed and all were retrieved without lost or Damage. Out of the fifty respondent 40% of the respondent fall within the age of 18-24 years, 60% of them were male and 60% were married, 90% understand what are Hiv/AIDS

On the issue of patient Bill of right 75% of the clients understand and know what is patients of right, most of the clients about ninety percent(90% )were counsel before confirmation (pretest counseling),also 80% knows they have right to accept test or not. However 25% respondents had experience onto wards behavior by healthcare workers while discrimination was 20%. Some of the respondent about 50% of those whom experienced of discrimination and onto wards behavior seek disciplinary in the institution and legal redress and others do not due lack of awareness of their rights.

4.1 Findings

Based on the findings in the research it was discover that most clients has knowledge of what is Hiv/AIDS and the patient Bill of rights, so mostly had pretest before being confirmed.

However for those who experience violation of the rights through on towards behavior and discrimination seek legal action or Redress. These goes in line with the statement of Jackson and H inter (1992) who stated that non-discrimination ought to be the rule in HIV/AIDS care; it is therefore a breach of code of ethics for nurse to refuse care for a person infected with HIV/AIDS. Whether such a practitioner is guilty of man slaughter depends on the degree of negligence. The right to voluntary testing of HIV serostatus HIV testing should be voluntary not mandatory

Conclusion

In conclusion, the social problem associated with HIV/AIDS makes it difficult for HIV positive to willingly disclose their serostatus or avail themselves of the advocacy efforts of NGOs and human rights in both subtle and averts ways.

The nurse is the patients’ advocate and should ensure that the rights of the patient are not violated. She needs to look at the code of ethics of the profession for guidance in order to provide care void of litigation. There is therefore the need for the nurse to be adequately educated on both the professional code of ethics and legal aspects of practice.

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Utilization of Safe Motherhood Services, Effects of Male Involvement
Study of Ilesa East Local Government, Osun State

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Abstract

The study focused on the male involvement in utilization of safe motherhood services of their spouses in Ilesa East Local Government, Osun state. It assessed the level of married men's involvement in ante, intra and post-partum health care, the relationship between selected demographic factors and a review of identified barriers to safe motherhood services utilization. It also examined the barriers to male involvement in maternal health care in Ilesa East Local Government.

A cross-sectional descriptive design was employed using a semi structured questionnaire to gather information from 500 married men with at least one child. A multi stage sampling procedure was employed. Data was collected using interviewer administered questionnaire. Analysis of data was done using appropriate descriptive and inferential statistical techniques.

The results of the study revealed that about 85% of respondents were less than 55 years of age, majority of them (92.6%) were of Yoruba ethnicity and were predominantly Christian (74%). About 40% of them had tertiary education with over 60% in monogamous relationship. Majority (60.2%) have between 1 and 4 children with 65% of respondents having a last child less than 4 years of age. Also, 362 (72.4%) of respondents were well involved in Maternity care services, while 138 (27.6%) were partially involved; none of the respondents was not involved in maternity care services. Also, majority of respondents agree with the named role of men in safe motherhood services at the prenatal level. The highest proportion of agreement was with regards to “Ensuring that the pregnant mother gets proper antenatal care” (97.8%), while the lowest proportion was obtained with regards to “learning the symptoms of imminent delivery and of delivery complications” (66.2%). Most (93.2%) of the respondents support ensuring that their children receive all the needed immunization and 6.8% did not support it as the role of men. Furthermore, majority supported the role of men in family planning. In addition, 86.2% supported “Helping mothers to use modern methods correctly” while, 68.8% supported the role of men in “Preventing unintended or unwanted pregnancies”. The respondents supported factors identified as barriers to male involvement in maternity care services and were able to name: Financial constraint, Poor health of husband and Ignorance as factors hindering them from participation in maternal care. No statistically significant relationship was obtained between each of age, religion and ethnicity and level of involvement of men in maternal care. However the relationship between educational status and level of involvement in maternity care was statistically significant. Also, there was a significant relationship between number of wives and the level of involvement in maternal care among men. (P=0.001).

Introduction

1.1 Background of study

The most populous country in Africa is Nigeria (Engender health 2009) with more than 140 million people (Fatima 2001). Additionally, the country accounts for a high percentage of infant and maternal mortality rate globally (75 infant deaths per 1,000 live births, 545 maternal death per 100,000 live births) (NDHS 2008) 145 women of child bearing age die daily from causes that are preventable (allAfrica.com, 2009).
Generally women remain at home more than men (Feyisetan et al. 2000). According to MDG report of 2009, the population of women in paid employment, globally, outside the agricultural sector has increased marginally over the years while in Southern Asia, Northern Africa and Western Asia, employment opportunities for women remain overtly low. Also, there is poor representation of women in non-agricultural employment in sub-Saharan Africa. Men are therefore quite a difficult group to target for program intervention because they are generally not easy to meet at home.

Studies continue to show that existing strategies to save mothers’ lives had been less successful than the child survival program in Nigeria despite the interventions. (Hollerbach et al.) Annually, as a result of pregnancy related complications, during pregnancy, childbirth or the post natal period about 536,000 women and girls die. Developing countries account for almost all of these deaths (99 percent) (Orji et al., 2007). According to the World Health Organization (who) report of 2008, about 358,000 maternal mortality occur in the world annually majority of which occur in sub-Saharan Africa and Southern Asia. Together, sub-Saharan Africa and southern Asia account for 85 per cent of all maternal deaths. This may be due to less emphasis placed on the adverse maternal outcomes due to social factors surrounding decision making at home in obstetric care (Bang et al. 2007).

In Nigeria many pregnant women are dying not because of pregnancy as a biological function, but because of the neglect they suffer in the management of the event particularly from home. These women have to take permission from their husbands before seeking care in some part of the country, their husband may not be available even in emergencies; having to do strenuous work during pregnancy; having to obey some family or cultural norms/taboo like restriction of pregnant women from eating certain foods even when these are dangerous to their health in pregnancy (Moses et al, 2007). Women in Sub-Saharan Africa are in a disadvantaged position in terms of decision making at home and they are not in control of their sexuality (Ojofehintimi et al, 2007). From research evidences, women have little or no control whatsoever over their health (Murphy et al, 2005). According to Orji, (2007) and Adegbenro (2007) Safe Motherhood Initiative has not been successful in reducing maternal mortality in Nigeria probably because interventions are centered around the women who are rather silenced or passive in taking decisions in relations to reproductive health issues in the average African family setting.

In family setting men play key role, socially and economically- he is a husband, then a father- in the formation of the family, in child education and also required to be supportive of the decisions and needs concerning the reproductive health of his wife. According to Arrows for change publication of 1996, it is evidence that not only couples, but also men and women of extended families participate in fertility issues and in decision-making regarding the use of family planning.

Following the International Conference on Population and Development (ICPD) held in Cairo in 1994, and the Fourth World Conference on Women (FWCW) in Beijing in 1995, globally, there has been an increased recognition of the need for men to take more responsibility in reproductive health matters by taking a more active role in planning pregnancy, seeking healthcare in case of adverse pregnancy outcomes and in preventing sexually transmitted Infections (STI.s), Reproductive tract infection (RTI), HIV/AIDS.

But recently males have been receiving attention as important candidates for reproductive health sciences because of their own health need and also as their sexual behaviors affect the reproductive health of their female partners. In the different subculture and social strata, the role men play as partners has different connotations and can vary widely. This is partly because men and women can be involved sexually without actually being married and can also have multiple sexual partners before marriage, within marriage, or outside marriage. While the main burden of reproductive ill-health falls on women, men may also suffer from reproductive ill health, particularly from STDs and HIV/AIDS, strategies to improve reproductive health must also take into account the concerns, needs, roles and responsibilities of males.
In the past, men were not interested in “taking responsibility” for their fertility was a popular belief. Although this was certainly never true of all men, but a significant percentage of men in previous decades were taking responsibility (Griffin & Ringheim, 1999; Heinemann et al., 2005). In a 17-country analysis of data collected during the 1990s, men’s views on family size were closer to those of women than many in the reproductive health field believed (United Nations Population Division, 2005; United Nations Population Fund, 2004).

1.2 Statement of problem

Women bear many health burdens, such as child-bearing, fertility planning and as contraceptive side-effects associated with it, and recourse to abortion as a consequence of non-use of contraceptives or failure of family planning method. Therefore, married women of reproductive age (MWRA) have been the primary focus of reproductive health research and programme interventions. Formerly, programmes had focused on demographic and target-oriented objectives with very little emphasis on quality issues. Programmes in the past have also failed to address the relations among men and women and their responsibilities (Kuala 1996). Therefore, the importance of man in reproductive health and their responsibilities as decision makers in the process of reproduction have neither received an adequate attention nor have been investigated extensively. A man’s reproductive life-span is not as clearly defined as that of a woman, may be a contributory factor.

The past programmes laid heavy emphasis on Family planning methods, the use of male, such as condom, Vasectomy, and withdrawal, has been considered as an indicator to describe “male involvement”, and “male participation” in Family planning. ICPD and FWCW mandated that men’s constructive roles be made part of the broader reproductive health agenda (Wegner et al 2002).

Despite academic debate on these terms, male responsibility in reproductive health has been identified as a prominent area of research and program intervention.

Men’s ‘reproductive responsibilities’ are a stronger term which implies that men are obliged to carry out certain activities and can therefore be held accountable for their actions. To clarify, the ICPD program of Action notes, “Special efforts should be made to emphasize men’s shared responsibility and enhance their involvement in responsible parenthood actively, sexual and reproductive behavior, including family planning; prenatal, maternal post-natal and child health; prevention of STIs, including HIV; and prevention of unwanted and high risk pregnancies (Green et al 2005). Such a conceptualization has broadened the role of men in reproductive health care well beyond their participation in fertility control.

With all these efforts there is still poor men’s participation in maternal care service. Therefore, this study is specifically targeted at investigating why the low level of participation and enumerate measures to increase men’s involvement in maternal care services.

1.3 Justification of the study

A key factor in the adoption and sustained safe motherhood in Nigeria is Male involvement in reproductive health where men often dominate decision (Feyisetan, 2000; Orji, 2003). In rural Nigerian communities very few studies have targeted men roles and barriers to fulfilling these roles in safe motherhood (Ogunyigbe, 2002; Feyisetan, 2000). This study is therefore designed to critically examine the role of men in safe motherhood health services in Ilesa east local government, Osun state, south west, Nigeria. This will cover pre-natal, intra-natal and post-natal care.

Reproductive health including family planning has long been viewed as solely a woman’s issue, and reproductive programmes have largely focused exclusively on women. In most places around the world, whether in developing or developed countries, men are fairly involved in their partners’ health care during pregnancy (Drennan, 1998).

Findings of this study will be useful for health practitioners in the areas of building knowledge as to what will constitute barriers to male involvement in maternal care services.
and see that actions are taken to remove these barriers. It will also be useful for policy makers in government to consider changes in law and policy to ensure men’s involvement in maternal care services. The findings of this study is hoped to be useful for curriculum planners in education sectors to strengthen male responsibilities in family life in the education of children from the earliest ages. It will enlighten the program planners on typical roles men play in maternal care services.

1.4 Objectives of the study

1. To investigate the view of community members about men involvement in maternity care services.
2. To assess the level of men’s involvement in maternity care services in Ilesa east local government.
3. To determine the predictors of male involvement in maternal health services
4. To identify barriers to male involvement in reproductive health services.

Literature review

2.1 Overview of maternity care

Several works have been carried out on maternity care. Maternity care involves care given to women from the time of pregnancy, through delivery and after delivery. (Lucas and Gilles 2003).

It is the yearning of the reproductive health workers that a woman must pass through the motherhood period safely

In the last 20 years, the issue of safe motherhood has evolved from a neglected issue to an essential and integrated element of the women’s health agenda. The event that set this change in motion was a landmark worldwide movement launched in 1987 at the global Safe Motherhood Conference in Nairobi, Kenya, the Initiative sought to address the near-silent tragedy of women dying during pregnancy and childbirth ((IAG) for Safe Motherhood, 2007). It issued an international call to action to cut maternal mortality in half by the year 2000((IAG) for Safe Motherhood, 2007). Largely as a result of the initiative and the political momentum it generated, reproductive health became a central component of program and policies focusing on women’s health and rights ((IAG) for Safe Motherhood, 2007). At the International Conference on Population and Development (ICPD) in 1994, maternal mortality was found to be a core component of women’s sexual and reproductive health. Health problems among pregnant women are preventable, detectable and treatable through monitoring and visits with trained health workers before birth. To achieve this, the UN Children’s Fund (UNICEF) and the World Health Organization (WHO) recommend a minimum of four antenatal visits. These visits will enable them to receive important services, such as tetanus toxoid, screening and treatment for infections, and have access to potentially life-saving information to recognize warning signs during pregnancy.

There is significant increase since the 1990s, the number of pregnant women in the developing world who had at least one antenatal care visit from around 64 per cent to 79 per cent. Substantially lower proportion of pregnant women followed the recommended four visits by WHO and UNICEF. The number of women who receive four or more antenatal visits is still less than 50 per cent in sub-Saharan Africa and Southern Asia, where the majority of maternal mortality occur. Over the last decade these figures have changed a little, indicating that maternal health and the provision of reproductive health services in those regions have scarcely advanced. (MDG report 2009)

Male involvement in sexual and reproductive health has been recognized as an integral aspect of reproductive health especially in areas where men dominate most of decisions (Feyisetan, 2000; Orji, 2003). At the Millennium Development Goal (MDG) Summit in 2000, reproductive health of women was situated within the broader context of poverty reduction efforts and overall development efforts, and with MDG 5, maternal health was recognized as a key development goal((IAG) for Safe Motherhood, 2007).
In 1994 the International Conference on Population and Development (ICPD) increases awareness that more actions is required to achieve improvements in reproductive health outcomes generally and maternal health in particular, and the communities should be involved in the process and encourage men's active participation (Jacobstein, 2005).

According to Lucas and Gilles, 2003, the seven point agenda for Safe Motherhood are:

Information; Expand and strengthen the information base about reproductive health. This can be achieved through accurate publicity and enlightenment of both male and female, young and old on reproductive health.

- Advocacy: Disseminate relevant information about reproductive health to those who need to take action and ensure prompt action are taken in matters that can affect the reproductive health of individuals in the society.
- Education: Expand educational opportunities for girls and promote family life education for the general population. This will afford every female the opportunity to know when, where and what to seek health care for.
- Women’s status: Improve the social, economic and legal status of women to liberate them from being view as second class citizen as it is found in some society.
- Family Planning: Encourage women to regulate their fertility and provide access to family planning services. This will also promote the wellbeing of the women as this will give enough time to recover from stress undergone during pregnancy, delivery and child nursing.
- Health care: Ensure that pregnant woman receive adequate care during pregnancy and childbirth by making the services available, affordable and accessible.
- Research: Promote research aimed at obtaining a clearer definition of maternal health, the determinants of morbidity and mortality including operational factors, as well as the development of new technologies.

The essential services for Safe Motherhood according to Lucas and Gilles, 2003 include:

Community education on reproductive health; prenatal care and counseling, including promotion of maternal nutrition; skilled assistance during childbirth; care for obstetric complications, including emergencies; postpartum care; management of abortion complications, post abortion care and, where abortion is not against the law, safe services for the termination of pregnancy; family planning counseling, information and services; reproductive health education and services for adolescents.

Male involvement in maternity care is essential to achieve the purpose of the services.

Involvement of male in sexual and reproductive health has become a topical issue since the concept of reproductive health and rights was adopted at the ICPD in 1994 ((IAG) for Safe Motherhood, 2007). The implications of this initiative are deeply rooted in the way each society defines gender roles and responsibilities, the progress in the involvement of men in maternity care specifically, i.e. in matters directly related to ensuring well-being and survival of mothers during pregnancy, childbirth, and after childbirth might take more time (Bongaarts et al, 2004). According to Adamchak and Chad, 2004, majority of men in most societies traditionally consider this area as the responsibility of women and still shrouded in mystery. Now that the aim is to promote mutual supportive male-female relationships during this critical period in women’s life, this subject could be internalized more rapidly through relevant educational opportunities offered to young people in schools and other social settings. (Raimi et al, 2007).

2.2 Influence of gender roles on reproductive behavior

Gender has a powerful influence on reproductive decision-making and behavior (Blanc et al 2006; Mccauley et al, 2004). In many developing countries men are the primary decision makers about sexual activity, fertility, and contraceptive use. Men are often called "gatekeepers" because of the many powerful roles they play in society- as husbands, fathers, uncles, religious leaders, policy-makers, and local and national leaders (Jezowski et al, 2004; Green et al, 2005). In their different roles men can control access to health information and
services and finances and related resources such as, transportation (Roberts et al, 2007; Cohen et al 2006; Robey et al, 2008).

Little is known about the dynamics of couples' sexual and reproductive decision-making or about how gender roles affect these decisions. Such decisions can include practicing family planning, choosing when and how to have sexual relations, engaging in extramarital sex, using condoms to prevent STDs, breastfeeding, and seeking prenatal care (Bertrand et al, 2007; Blanc et al 2006; Mcdonald et al, 2005).

Of the many factors that influence couples and affect their reproductive decisions, gender is just one. Education level, family pressures, social expectations, socioeconomic status, exposure to mass media, personal experience, expectations for the future, and religion also influence such decisions (Beckman, 2003; Hull et al, 2003). Consequently, no two couples' "decision-making environments" are identical (Hull et al, 2003).Suggestion has been made by some researcher that personal reproductive decisions result from many smaller, incremental decisions (Binyange et al, 2003; Mumford et al, 2003; Wilkinson et al, 2002). Others suggest that social and cultural norms and expectations often prevail over individual preferences on fertility decisions (Hull et al, 2003). In some traditional societies many couples say that the number of children they expect to have is not up to them at all, but rather up to God or to fate.

Husbands dominate reproductive decision-making, choice of contraceptive use, family size, birth spacing, or extramarital sexual partners in some developing countries (Ezeh et al, 2003; Fatima et al, 2001; Kulu et al, 2000,).

Over 3,000 urban Nigerian couples study it was found that, while men do not dominate decision-making, they still exercise more power than women do. Men and women were asked who decides such matters as family size, when to have sex, and how long periods of sexual abstinence should last. Close to 60% of men said that they decide, and 40% to 50% of women agreed that men decide (Isiugo et al, 2004). In South India a study of the fertility decisions made by five generations family also found that the men tended to control contraceptive use and made fertility decisions. The men in the older generations chose to limit their own fertility by getting vasectomies, usually without telling their wives. The men said that they were motivated to limit the number of children as a result of economic pressures.

A survey of all five generations in this family revealed that more than half of the men thought the decision-making was mutual, but only 38% of their wives saw it that way (Karra et al, 2007).

Reproductive decision-making under men's control may be weakening, particularly among younger generations and in certain cultures. As social, economic, and educational opportunities for women increase in many societies, traditional gender roles are starting to change. As a result of this, power is being redistributed between men and women (Grady et al, 2006). Result from several countries demonstrates that, increasingly, reproductive decisions are being made jointly by couples, not by men alone (Grady et al, 2006; Ogawa et al, 2003; Renne et al, 2003 ). However, the roles of men in reproductive health especially the husbands cannot be overemphasized.

2.3 Expected mens’ roles in reproductive health

Men should help protect the lives and health of women and also attend to the health of their children. According to WHO about 342,900 women die each year from complications of pregnancy, childbirth, and unsafe abortion, about one death every minute (WHO, 2008). Majority of these deaths could be prevented (Koblinsky, 2003; Campbell, 2004).

Pregnancy-related complications is responsible for one-quarter to half of deaths among women of reproductive age in developing countries (Fortney et al, 2005; Royston et al, 2008). In some countries pregnancy-related complications are the leading cause of death of reproductive-age women (Fortney et al, 2005; Royston et al, 2008). Thousands of women in developing countries suffer serious illnesses and disabilities, including chronic pelvic pain, pelvic inflammatory disease, incontinence, and infertility, caused by pregnancy or its complications (Smith et al, 2006).
WHO defines maternal mortality as a death occurring within 42 days after pregnancy, irrespective of the duration or the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management (WHO, 2001). The following are five direct causes—hemorrhage, sepsis, pregnancy-induced hypertension, obstructed labor, and complications of unsafe abortion and these account for more than 80% of maternal mortality (WHO, 2001).

Maternity care involves ensuring good health for women and their babies during pregnancy, delivery, and in the postpartum period. Men should play many key roles during women's pregnancy, child's delivery and after post delivery. Their decisions and actions often make the difference between illness and health, life and death (Sherpa et al, 2004; Thaddeus et al, 2003).

2.3.1 Planning their families

Men can take the first step to ensure good health for their spouses by planning their families (Armstrong, 2004). Limiting births and spacing them at least two years apart are good for maternal and child health. Every pregnancy carries potential health risks for women, even for women who appear healthy and at low risk (Armstrong, 2004; Johnston, 2008; Sherpa et al 2004). Unwanted pregnancies are particularly likely to carry more risky because they are more likely to result in abortion. These unsafe abortion complications cause 50,000 to 100,000 deaths each year (Hengen, 2008, WHO, 2001). There can be reduction if men can encourage their spouse and cooperate with them in planning their family.

2.3.2 Supporting contraceptive use

It is good for men to accompany their partners to meet with a family planning provider or health worker. Together, they can learn about the available contraceptive methods and choose the one that best meets their needs. The husband can help his partner use modern methods correctly (for example, he can help her remember her next check-up in IUCD), he can take up a male method himself, or both can agree to practice periodic abstinence. They can encourage their partners to seek help from a family planning provider if side effects occur. They can also agree to change to another method if one method proves unsatisfactory.

2.3.3 Helping pregnant women stay healthy

The man can make sure that his partner gets proper antenatal care when she becomes pregnant, this may entail providing transportation or/ and funds to pay for her visits. He can also accompany her on the antenatal visits, where he can learn about the symptoms of pregnancy complications.

Good nutrition and plenty of rest also are important during pregnancy. Men can encourage women have safe pregnancies and healthy babies by ensuring that they receive nutritious food, especially food rich in iron and fortified with vitamin A (Sharma et al, 2002; Sherpa et al, 2004; UNICEF, 2007). Anemia, is not a direct cause of maternal deaths, but a factor in almost all such deaths. An anemic woman is five times more likely to die of pregnancy-related causes than a woman who is not anemic (Viteri, 2002).

Vitamin A is important to the health of both the mother and the fetus (Sharma et al, 2004). Pregnant women need to have enough vitamin A both to support the healthy development of their baby and to protect their own health, particularly their eyesight and immune system. Night blindness among pregnant women is a symptom of vitamin A deficiency. Antenatal vitamin A supplements, often provided in pill form, can greatly reduce maternal and child deaths (UNICEF, 2007).

During pregnancy there are a number of activities having implications on the health of women. Examples are difficult tasks that include carrying heavy load, bending down lot, pounding yam or doing any other hard tasks. To enhance the health of pregnant women they must take proper nutrition including taking a lot of fruits.
2.3.4 Arranging for skilled care during delivery

Majority of women deliver their babies without skilled assistance, helped only by untrained traditional birth attendants or family members in developing countries (Maswoodur, 2010). A trained midwife present during childbirth can mean the difference between life and death. Husbands can help by arranging for a trained attendant/midwife to be available for the delivery and by funding the services. They also can arrange ahead of time for transportation and can buy necessary supplies.

2.3.5 Avoiding delays in seeking care

When complications of pregnancy occur delay often contributes to maternal deaths (Thaddeus, et al, 2004). Three types of delay put mothers' health at risk: delay in deciding to seek care; delay in getting to a health care facility; and delay in receiving adequate care at the facility. Husbands and other family members play crucial roles in ensuring prompt action (Buckley, 2007; Maine, 2004). In most cases men are often the ones who decide when a woman's condition is serious enough to seek medical care. They also decide how a woman will be transported to the health facility. They can avoid delays by learning the symptoms of imminent delivery and of delivery complications.

2.3.6 Helping after the baby is born

Most maternal deaths occur within three days after delivery, due to infection or hemorrhage (Roudi, et al, 2006). New research suggests that men can learn about potential postpartum complications and be ready to seek help if they occur. They also can make sure that postpartum women get good nutrition while they are breastfeeding. There is need for extra vitamin A to ensure that they pass enough of the vitamin on to their babies.

Men can help with heavy housework during the postpartum period such as gathering wood and water and taking care of other children. They can encourage breastfeeding, which helps the uterus contract. Finally, they can begin using contraception, either a temporary method to space the next birth or possibly a vasectomy if no more children are desired (AAWH, 2008; Ondimu, 2008; Sherpa, 2007).

2.3.7 Being responsible fathers

The roles of men as fathers and the ways in which they affect their children's health have been gaining attention (Byrne, 2008; Danforth, 2008; Edwards, 2008; Grady, 2006). They can still become more involved in helping their children's healthy development for example, ensuring that their children receive all of the needed immunizations. A study in Ghana found that the more education fathers have, the greater their role in deciding to immunize their children (Brugha et al, 2006).

Baltimore's Urban Fatherhood Program in the US, helps young men become responsible fathers by promoting positive male role models. Program staff members, many of whom were teenage fathers themselves, encourage other young men to be good fathers through support groups, counseling sessions, and life skills classes. They were also taught about fertility, reproduction, the menstrual cycle, pregnancy, and infant nutrition and care (Jones, 2006).

2.4 Factors limiting men's involvement

A number of programmatic and cultural factors have limited men's abilities to take an active role in maternity care services decision making: The "minimalist support" attitude should be examined in the light of the limited information that men have about the variety of pregnant women's needs and their lack of clarity about their roles and responsibilities in meeting these needs. Evidently, the degree of involvement will also vary according to the social and cultural context. Too often in the past, men were presented as an obstacle and not as part of the solution. Men play powerful – even dominant – roles in reproductive decisions. Men's participation in reproductive health is a crucial step in decreasing maternal and child mortality (Obermeryer et al, 2003; Lasee et al, 2007).
The majority of interventions and services to promote sexual and reproductive health, including care during pregnancy and childbirth, have been exclusively focused on women (Green et al, 2003). Yet, men and women living in the same society are influenced by the same beliefs about the roles and responsibilities that are appropriate for each gender. Men are not the only ones to blame for the slow changes in gender-based imbalances. In societies where maternal mortality and severe morbidity are high, men and women face similar challenges related to the social, cultural and political complexities underlying these events, including the pressure for high fertility and lack of safety measures when obstetric complications arise. Therefore, it should be assumed that, for all that is leading to maternal survival as defined in the Mother-Baby Package, there is always a man standing by the side of every woman knocking at the "gate" before, during and after each pregnancy (WHO, 2005).

2.4.1 Gaps in male focused health services

Most reproductive health services are designed to meet women’s or children’s needs and, as a result, men often do not consider them as a source of information and services. Currently, political support for male involvement is manifested by a lack of opposition to it rather than by any specific support. Many may be inconvenient or unwelcoming to men, and providers may not have the training or skills necessary to meet men’s reproductive health needs. Men also may be embarrassed about visiting a facility that primarily serves women. Men’s lack of access to services has been a barrier to their involvement in safe motherhood. Men cannot share responsibility for reproductive health if services and information do not reach them. Most FP clinics cater to women, so men are uncomfortable about going to these clinics. Men must be reached in other ways. This testimony from a Kenyan man is a good illustration of that need:

"After having three children, my wife went on the pill for her contraception because we could no longer afford an accident with the natural methods we were using. Her blood pressure immediately shot up, and she was advised to discontinue. She tried other methods, but they had complications too. I felt I was unfair and it was my duty, too, to take part in family planning. One morning we went together to our local family-planning clinic. I will never forget how embarrassed I felt. There was not even a single man there, just queues of women and their babies. This was a woman’s world and I felt totally lost." (Wambui, 2005).

This confirms the assumption that no matter how many men want to know and participate in reproductive health, most reproductive health programs have not yet given adequate attention to serving them.

2.5 Potential benefits of male involvement in maternity care

Provision of reproductive health information and services to men benefits both men and women in several ways. Reproductive health programs can help men cooperate with their sexual partners to avoid unwanted pregnancies and to prevent sexually transmitted diseases (STDs).

2.5.1 Promotion of contraceptive use and prevention of STDs

Men involvement in reproductive health services increases access to contraceptive methods that men can use, thereby expanding a couple’s range of contraceptive options. It also improves men’s support for women’s use of contraception and shared reproductive decision making, and prevents STD transmission thereby preventing maternal morbidity and mortality. It is widely acknowledged that men in developing countries make most of the decisions regarding family formation (Freedman et al, 2003). Despite women's increasing influence on household decision making, their preferences regarding contraceptive choices and family size may not translate into practice unless they conform to their husbands' wishes (Morgan et al, 2005). In this context, the decision to have or not to have children is the male's(Ojofeitiimi et al, 2009). Isiugo-Abanihe, et al(2004) noted that male dominance is particularly profound in
matters of reproduction. They generally view reproduction as their prerogative, an issue in which the compliance of their wives is taken for granted.

Well-informed men can participate fully in reproductive health as they use a method of family planning themselves or support their partners in using a method. They can also talk with their wives and cooperate in assessing their needs and choosing a family planning method (Ogunjuyigbe et al, 2009). Except for female prostitutes, men are likely to have more sexual partners than women. They have more control over condom use and are more likely to control the frequency of sexual relations and the possibility of abstinence within a relationship (Ojofeitimi et al, 2009). One factor driving emphasis on the couple over the individual, as observed by Biddlecom and Fapohunda, has been an increasing number of studies that demonstrate the influence of a man's preferences and power on reproductive outcomes such as contraceptive use, childbirth and views about family planning (Liasu et al, 2009). Based on these studies, one could argue that reproductive health programs that attempt to reach women will have a higher probability of success if they also involve the husband or at least encourage such involvement. Therefore, an understanding of the males' influence and the role they play in decision-making on contraceptive use can throw better light on mechanisms through which fertility reduction can be achieved.

2.5.2 Reduction of maternal mortality and morbidity

Maternal mortality is a major public health problem in the world, and ensuring access to necessary health care including emergency obstetric services is a prerequisite for reducing maternal mortality. Men are important stakeholders in and can be possible barriers to women's health care seeking in pregnancy, delivery and post-partum period, and their involvement is essential for their health (Paullina et al, 2009).

When a mother dies, children and fathers lose their primary caregiver, communities are denied her paid and unpaid labour, and countries forego her contributions to economic and social development. A woman’s death is more than a personal tragedy – it represents an enormous cost to her nation, her community and her family (Abhay, et al, 2007). Any social and economic development that has been made in her life is lost. Her family loses her love, her nurturing and her productivity inside and outside the home.

Most maternal deaths are rooted in inadequate participation of men in reproductive health (Anjana et al, 2007). Support needed by women especially during pregnancy, childbirth and after childbirth from their husband is often not given, may then result in late or no prenatal care, lack of skilled attendants at every birth, delays at home in deciding to seek emergency treatment; delay in reaching an institution that can provide emergency obstetric care; practice of unsafe sex and may finally lead to increased maternal morbidity and mortality (Friedan et al, 2005). Making motherhood safer requires men’s adequate participation and support in reproductive roles.

In this scenario, good health for the mother is the watchword and preventing maternal deaths and illness is an issue for both men and women.

Methodology

3.1 Research design

This study utilized a descriptive, cross-sectional research design to obtain information using a self administered structured questionnaire to obtain quantitative data on men’s attitude towards utilization of maternity care services by their spouses in Ilesa East Local Government.

The questionnaire was both in English and Yoruba language to ensure both literates and illiterates participate.

3.2 Study setting

The study was conducted in 11 wards of the Ilesa East Local Government area which is located in Osun state Nigeria, on coordinates 7°37"N(Latitude) and Longitude 4°43"E. The
Local Government Area occupies 71km² (27.4sqm) land space. According to National Population Commission, 2006, the 11 wards have a combined population of 106,586. It has its head-quarters and secretariat at Iyemogun in Ilesa town.

The inhabitants of this area are of multi-ethnic background with the Yorubas the dominant group while a sizeable proportion of the population consists of Igbos and Hausas. The major occupation are farming and trading. Other residents are civil servants and artisans.

3.3 Target population

The target population are married men who are of child bearing age in Ilesa East Local Government Area.

3.4 Sample size

Sample size of respondents was estimated using the Computer Programme for Epidemiologists (PEPI), version 3.01, employing the sample size formula for estimation of proportions as described by Armitage and Berry.

\[ n = \frac{P(1-P)Z^2}{d^2} \]

Where \( n \) = minimum sample size

\( P \) = crude estimate of true proportion in the population. (From the Nigeria Demographic and Health Survey 2008) figures, the estimate of true proportion of mothers that receive some ante natal care 58%

\( Z \) = standard normal variant corresponding to level of confidence at 95% and for a 2-tailed test \( Z = 1.96 \)

\( d \) = maximal allowable difference from true proportion; this was accepted at 5% (0.05).

Sample size (n) of 375 was obtained as the minimum sample size. However, to take care of those that may be lost due to non-submission of questionnaire and to permit robust analysis, the sample size was increased to 500.

3.5 Sampling method

A convenience sampling technique was used based on the major occupational groups in the community. Twelve occupational groupings were identified and a total of 42 respondents per occupational grouping were selected for interview spread over 11 wards. See appendix for list of occupational groups. The respondents were selected from their places of work based on the inclusion criteria of being married with children while those that were not married, without children and declined consent were excluded from participation.

3.6 Instrument development

A semi structured questionnaire was utilized for the study. It consisted of closed and open ended questions, organized into sections A to D and was translated from English to Yoruba and back translated from Yoruba to English.

3.7 Validity

Face Validity: The instrument was presented to the researcher’s supervisor for approval regarding the suitability and appropriateness of the items.

Content validity: The supervisor assessed the content and any unclear or ambiguous questions were modified before it was administered on the target population.

3.8 Pretest

A pretest was conducted in Atakumosa Local Government to be able to modify and correct ambiguous questions in the questionnaire.

3.9 Procedure for data collection

The research instrument was an interviewer-administered questionnaire targeted to married men in the selected wards of Ilesa east Local Government, Ilesa. The researcher explained about the study men and consent obtained before the administration of the
questionnaire. Questionnaires were administered based on language preference of the respondents.

3.10 Ethical consideration

Permission for study was obtained from respective community leaders. Participants were required to give a verbal consent to participate in the study. The reluctance of the respondents to discuss potentially sensitive matters was eliminated by assuring the participants of the confidentiality of the information provided which is purely for research purpose. Also the anonymity and of the respondents were assured.

3.11 Data analysis

The number of questionnaires that were properly filled was analyzed using the PC, SPSS software version 16. Appropriate descriptive and inferential statistics were applied. Discrete variables were presented using tables and charts; test of association was conducted using chi-square. P value was set at <0.05.

3.12 Scoring variables

Fourteen questions were asked on involvement of respondents in maternity care services, two marks were given for each question to those who perform the role all the time, those that choose ‘sometimes’ were given one mark, while that never perform the role scored zero for each question. The highest possible score was 28 and lowest was 0. Based on the performance, those that scored 21-28 were assumed to be well involved, those that scored 14-20 were said to be partially involved while those that scored below 13 were grouped into not involved.

Twenty-three questions were asked on community perception of men involvement in maternity care services. Four marks were given to those who strongly agree with stated expected role of men, three was given to those that just agree and two, one and zero for those that disagree, undecided and strongly disagree respectively. Therefore the highest possible mark was 92. Those that scored between 0 and 46 were said to be poorly involved, those that scored between 47 and 69 were said to have fair perception, and scores from 70 to 92 were assumed to have good perception of men involvement in maternity care services.

Results

Five hundred questionnaires were administered; five hundred were received and used for analysis. The number of responses from the data was expressed in percentages against the whole number.

Table 1: Socio-demographic profile of respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of respondents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 to 42</td>
<td>205</td>
<td>41.0</td>
</tr>
<tr>
<td>43 to 55</td>
<td>218</td>
<td>43.6</td>
</tr>
<tr>
<td>56 to 67</td>
<td>77</td>
<td>15.4</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yoruba</td>
<td>463</td>
<td>92.6</td>
</tr>
<tr>
<td>Igbo</td>
<td>27</td>
<td>5.4</td>
</tr>
<tr>
<td>Hausa</td>
<td>10</td>
<td>2.0</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christianity</td>
<td>369</td>
<td>73.8</td>
</tr>
<tr>
<td>Islam</td>
<td>131</td>
<td>26.2</td>
</tr>
<tr>
<td>Educational status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>119</td>
<td>23.8</td>
</tr>
<tr>
<td>Secondary</td>
<td>174</td>
<td>34.8</td>
</tr>
</tbody>
</table>
In table 1 above, about 85% of respondents were less than 55 years of age, majority of them (92.6) were of Yoruba ethnicity and they were predominantly Christian (74%). About 40% of them had tertiary education with over 60% in monogamous relationship. Majority (60.2%) have between 1 and 4 children with 65% of respondents having a last child less than 4 years of age.

**Table 2: Level of involvement of respondents in maternity care services**

<table>
<thead>
<tr>
<th>Level of involvement</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well involved</td>
<td>362</td>
<td>72.4</td>
</tr>
<tr>
<td>Partially involved</td>
<td>138</td>
<td>27.6</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

The table shows that 362 (72.4%) of respondents were well involved in Maternity care services, while 138 (27.6%) were partially involved; none of the respondents was not involved in maternity care services.

**Table 3: Role of men in maternity care prenatal care**

<table>
<thead>
<tr>
<th>Role of man in maternal care</th>
<th>Level of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree (%)</td>
</tr>
<tr>
<td>Ensure that the pregnant mother gets proper antenatal care</td>
<td>457 (91.4)</td>
</tr>
<tr>
<td>Provide transportation or funds for pregnant mothers antenatal visits</td>
<td>378 (75.6)</td>
</tr>
<tr>
<td>Accompany the pregnant mother on the antenatal visits</td>
<td>378 (75.6)</td>
</tr>
<tr>
<td>Ensure that spouse receives good nutrition and adequate rest.</td>
<td>382 (76.4)</td>
</tr>
<tr>
<td>Taking active role in working out a plan for delivery of the baby</td>
<td>353 (70.6)</td>
</tr>
<tr>
<td>Ensure that spouse receives appropriate immunization</td>
<td>435 (87.0)</td>
</tr>
<tr>
<td>Ensure that spouse receives</td>
<td>327 (65.4)</td>
</tr>
</tbody>
</table>
malaria prophylaxis or treatment

Learning the symptoms of imminent delivery and of delivery complications

| Level of agreement | 296 (59.2) | 35 (7.0) | 45 (9.0) | 71 (14.2) | 53 (10.6) |

From table 3 above, majority of respondents agree with the named role of men in maternity care services at the prenatal level, the highest was seen in the role “Ensure that the pregnant mother gets proper antenatal care” where 457 (91.4%) strongly agreed and 32 (6.4%) agreed only 1 (0.2%) respondent disagree and none strongly disagree.

The lowest was seen in the question “learning the symptoms of imminent delivery and of delivery complications;” here less than 60% of respondents strongly agreed, while only 7% agreed, 9% disagreed and 14.2% strongly disagreed while 10.6 were undecided.

**Table 4:** Role of men in maternity care delivery

<table>
<thead>
<tr>
<th>Role of man in maternal care</th>
<th>Strongly Agree (%)</th>
<th>Agree (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
<th>Undecided (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring that delivery is taken by trained attendant</td>
<td>289 (57.8)</td>
<td>37 (7.4)</td>
<td>23 (4.6)</td>
<td>106 (21.2)</td>
<td>45 (9.0)</td>
</tr>
<tr>
<td>Paying for the delivery services</td>
<td>424 (84.8)</td>
<td>47 (9.4)</td>
<td>29 (5.8)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Paying for services rendered during childbirth</td>
<td>435 (87)</td>
<td>63 (12.6)</td>
<td>2 (0.4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Arranging ahead of time for transport</td>
<td>372 (74.4)</td>
<td>70 (14.0)</td>
<td>2 (0.4)</td>
<td>36 (7.2)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Avoiding delays in deciding and seeking health care</td>
<td>372 (74.4)</td>
<td>116 (23.3)</td>
<td>10 (2.0)</td>
<td>0 (0)</td>
<td>2 (0.4)</td>
</tr>
<tr>
<td>Supporting spouse psychologically during labour</td>
<td>424 (84.8)</td>
<td>59 (11.8)</td>
<td>17 (3.4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

In table 4 over 75% strongly agreed with all the identified role of men during delivery except attendance of birth by skilled personnel where only about 60% strongly agreed.

**Table 5:** Role of men in maternity care (postnatal period)

<table>
<thead>
<tr>
<th>Role of man in maternal care</th>
<th>Level of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping spouse with heavy household work</td>
<td>Strongly Agree (%)</td>
</tr>
<tr>
<td>398 (79.6)</td>
<td>26 (5.2)</td>
</tr>
<tr>
<td>Ensuring that child receives all needed immunizations</td>
<td>409 (81.8)</td>
</tr>
</tbody>
</table>

From table 5 about 85% of respondents agreed with helping spouse with heavy household works especially during postnatal period while, 12% did not support the role and 3.2% of the respondents were undecided.

Majority (93.2%) of the respondents support ensuring that their children receive all the needed immunization and 6.8% did not support it as the role of men.

**Table 6:** Role of men in maternity care (family planning)
Planning your family by limiting births and spacing them
Preventing unwanted pregnancy by using FP method
Join partner to meet with FP counselor
Join partner to learn and choose FP method
Helping your partner to use modern FP methods correctly
Cooperating with partner to practice periodic abstinence
Seeking help from health care providers if side effects occur

Table 6: Perception of respondents of family planning methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning your family by limiting births and spacing them</td>
<td>324 (64.8)</td>
<td>26 (5.2) 45 (9.0) 86 (17.2) 19 (3.8)</td>
</tr>
<tr>
<td>Preventing unwanted pregnancy by using FP method</td>
<td>297 (59.4)</td>
<td>47 (9.4) 35 (7.0) 106 (21.2) 15 (3.0)</td>
</tr>
<tr>
<td>Join partner to meet with FP counselor</td>
<td>384 (76.8)</td>
<td>20 (4) 28 (5.6) 44 (8.8) 24 (4.8)</td>
</tr>
<tr>
<td>Join partner to learn and choose FP method</td>
<td>373 (74.6)</td>
<td>28 (5.6) 44 (8.8) 30 (6.0) 25 (5.0)</td>
</tr>
<tr>
<td>Helping your partner to use modern FP methods correctly</td>
<td>375 (75)</td>
<td>56 (11.2) 19 (3.8) 22 (4.4) 28 (5.6)</td>
</tr>
<tr>
<td>Cooperating with partner to practice periodic abstinence</td>
<td>300 (60)</td>
<td>51 (10.2) 38 (7.6) 54 (10.8) 57 (11.4)</td>
</tr>
<tr>
<td>Seeking help from health care providers if side effects occur</td>
<td>350 (70)</td>
<td>53 (10.6) 19 (3.8) 47 (9.4) 31 (6.2)</td>
</tr>
</tbody>
</table>

From table 6a large number of respondents supported family planning as role of men in maternity care in a supportive role and not as active participant in the use of FP methods as only 60% strongly agreed to cooperate with spouse in practicing periodic abstinence and preventing pregnancy by using FP methods.

Table 7: Community perception of men involvement in maternity care services

<table>
<thead>
<tr>
<th>PERCEPTION</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good perception</td>
<td>359</td>
<td>71.8</td>
</tr>
<tr>
<td>Fair perception</td>
<td>131</td>
<td>26.2</td>
</tr>
<tr>
<td>Poor perception</td>
<td>10</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

In table 7 majority (71.8%) of the population had good perception of men’s involvement in maternity care services, 26.2% had fair perception and only 2% of the population had poor perception of men involvement in maternity care services.

Table 8: Barriers to male involvement in maternity care.

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Level of agreement with barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of access to accurate information about safe motherhood</td>
<td>Strongly Agree (%) Agree (%) Disagree (%) Strongly Disagree (%) Undecided (%)</td>
</tr>
<tr>
<td>Services exclusively focused on women</td>
<td>487 (97.4) 9 (1.8) 1 (0.2) 2 (0.4) 1 (0.2)</td>
</tr>
<tr>
<td>Lack of appropriate policy that support men’s role</td>
<td>494 (98.8) 5 (1.0) 0 (0) 1 (0.2) 0 (0)</td>
</tr>
<tr>
<td>Dominance of female care providers</td>
<td>496 (99.2) 4 (0.8) 0 (0) 0 (0) 0 (0)</td>
</tr>
<tr>
<td>Unwelcoming approach of care providers to men</td>
<td>493 (98.6) 6 (1.2) 0 (0) 0 (0) 1 (0.2)</td>
</tr>
<tr>
<td>Hospital policy that does not encourage male participation</td>
<td>498 (97.6) 9 (1.8) 1 (0.2) 1 (0.2) 1 (0.2)</td>
</tr>
<tr>
<td>Manpower and space problem</td>
<td>497 (99.4) 2 (0.4) 0 (0) 1 (0.2) 0 (0)</td>
</tr>
<tr>
<td>Societal disapproval of open</td>
<td>492 (98.4) 5 (1) 0 (0) 2 (0.4) 1 (0.2)</td>
</tr>
<tr>
<td>Total</td>
<td>495 (99) 4 (0.8) 0 (0) 0 (0) 1 (0.2)</td>
</tr>
</tbody>
</table>
discussion of sexual matters
Religious disapproval of open discussion of sexual matters
Job responsibilities

<table>
<thead>
<tr>
<th></th>
<th>Partial (%)</th>
<th>Well (%)</th>
<th>Total</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious disapproval</td>
<td>497 (99.4)</td>
<td>2 (0.4)</td>
<td>0 (0)</td>
<td>1 (0.2)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Job responsibilities</td>
<td>496 (99.2)</td>
<td>3 (0.6)</td>
<td>0 (0)</td>
<td>1 (0.2)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

From table 8 majority of the respondents supported factors identified as barriers to male involvement in maternity care services.

Financial constraint, Poor health of husband and Ignorance were also identified by respondents as factors hindering them from participation in maternal care.

Table 9: Assessment of the association between age and male involvement in maternity care services

<table>
<thead>
<tr>
<th>Age</th>
<th>Partial (%</th>
<th>Well (%)</th>
<th>Total</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-42</td>
<td>65 (31.7)</td>
<td>140 (68.3)</td>
<td>205(41.0)</td>
<td>3.34</td>
<td>0.54</td>
</tr>
<tr>
<td>43-55</td>
<td>53 (24.3)</td>
<td>165 (75.7)</td>
<td>218(43.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56-67</td>
<td>20 (26.0)</td>
<td>57 (74.0)</td>
<td>77(15.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138 (27.6)</td>
<td>362 (72.4)</td>
<td>500 (100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 9, 74% of respondents within age 56 to 67 years were well involved in maternity care in comparison with 75.7% among those of age 43 to 55 years and those of age range 30 to 42 years. There was no significant relationship between age and level of involvement.

Table 10: Assessment of the association between religion and male involvement in maternity care services

<table>
<thead>
<tr>
<th>Religion</th>
<th>Partial (%)</th>
<th>Well (%)</th>
<th>Total</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christianity</td>
<td>107 (29.0)</td>
<td>262 (71.0)</td>
<td>369 (73.8)</td>
<td>1.38</td>
<td>0.24</td>
</tr>
<tr>
<td>Islam</td>
<td>31 (23.7)</td>
<td>100 (76.3)</td>
<td>131(26.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138 (27.6)</td>
<td>362 (72.4)</td>
<td>500 (100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table, religion was not significantly associated (p=0.24) with level of involvement of men, over 70% of respondents from both religions were well involved.

Table 11: Assessment of the association between ethnicity and male involvement in maternity care services

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Partial (%)</th>
<th>Well (%)</th>
<th>Total</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoruba</td>
<td>131 (28.3)</td>
<td>332 (71.7)</td>
<td>463 (92.6)</td>
<td>1.50</td>
<td>0.26</td>
</tr>
<tr>
<td>Others</td>
<td>7 (18.9)</td>
<td>30 (80.1)</td>
<td>37 (7.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138 (27.6)</td>
<td>362 (72.4)</td>
<td>500 (100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table 11 above, there was no significant association (p=0.10) between ethnicity and male involvement as 71.7% of respondents who are of Yoruba ethnic group were well involved in maternity care compared to 80.19% of the other tribes.

Table 12: Assessment of the association between educational status and male involvement in maternity care services

<table>
<thead>
<tr>
<th>Educational status</th>
<th>Partial (%)</th>
<th>Well (%)</th>
<th>Total</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>138 (27.6)</td>
<td>362 (72.4)</td>
<td>500 (100)</td>
<td>6.46</td>
<td></td>
</tr>
</tbody>
</table>
Level of education was significantly associated (0.04) with male involvement with 78% of respondents with tertiary education being well involved compared to 66% of those who had secondary education and 72% with primary school education.

### Table 13: Assessment of the association between number of wives and male involvement in maternity care services

<table>
<thead>
<tr>
<th>Number of wives</th>
<th>Level of involvement</th>
<th>Total</th>
<th>$\chi^2=13.92$</th>
<th>$p&lt;0.001$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partial (%)</td>
<td>Well (%)</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>107 (33.1)</td>
<td>216 (66.9)</td>
<td>323 (100)</td>
<td></td>
</tr>
<tr>
<td>$\geq2$</td>
<td>31 (17.5)</td>
<td>145 (82.5)</td>
<td>177 (100)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>138 (27.6)</td>
<td>362 (72.4)</td>
<td>500 (100)</td>
<td></td>
</tr>
</tbody>
</table>

In table 13 above, there was a significant relationship ($p<0.001$) between number of wives and level of involvement with 66.9% of those that had one wife among the respondents well involved in maternity care, while 82.5% of respondents that had more than one wife were well involved in maternity care.

### Discussion of findings

The demographic data shows that majority of the respondents were within the age range of 30-55 years and were Christians of Yoruba ethnicity who had tertiary school education. Most of the respondents had only one wife each and the number of children for majority varied from age 1-4. Also, the ages of the last child for majority were between 1-7 years.

Determining the level of involvement of respondents in maternity care services findings of this research study show that majority of the respondents were well involved, while below average were partially involved and none was not involved in maternity care services. This affirms the work of Jezowski et al, 2004 and Green et al, 2005 which refer to men as “gatekeepers” because of the role they play in the family. Also, majority of respondents agree with the named role of men in maternity care services at the prenatal delivery postnatal and Family planning levels in keeping with the Arrows for change publication of 1996, which stated that man plays a key role in decisions and needs pertaining to the health of his wife. It also pointed out that not only women participate in decision making of contraceptive use as in this study majority of the men strongly with use of contraception by women and not by them directly. This finding is consistent with the result of a 17-country analysis study conducted during the 1990s, which showed that men’s views on family size were closer to those of women than many in the family planning field hitherto believed (United Nations Population Division, 2005; United Nations Population Fund, 2004).

In an attempt to identify the community members’ perception of men involvement in maternity care services, the study revealed that well above average proportion of the respondents has good perception while below average of the population had poor perception about men involvement in maternity care services. This is in support of what Feyisetan(2000) and Orji(2007) said that male involvement in sexual and reproductive health has been recognized as an integral aspect of reproductive health.

From the findings, majority of the respondents supported factors identified by researcher as barriers to male involvement in maternity care services and were able to name other factors that they consider to be hindering them from being well involved in maternity care services. This is similar to the findings of New York Population Council and that of Arrows for Change that said Women bear many health burdens, such as child-bearing, fertility regulation and
associated contraceptive side-effects, and recourse to abortion as a consequence of non-use of contraceptives or method failure. It is also in consistent with other studies conducted in Uganda, Bangladesh and Tanzania (Raymond Tweheyo et al. 2010) Thus, married women of reproductive age (MWRA) have been the primary focus of reproductive health research and programme interventions. In the past, programmes had focused on demographic and target-oriented objectives with very little emphasis on quality issues. Programmes have also failed to address the relations among men and women and their responsibilities. Therefore, the role of man in reproductive health and their responsibilities as important decision makers in the process of reproduction have neither received an adequate attention nor have been investigated extensively. This is primarily because a man’s reproductive life-span is not as clearly defined as that of a woman.

Because of heavy emphasis of the past programmes on family planning, the use of male methods, such as condom, Vasectomy, and withdrawal, has long been considered as an indicator to describe “male involvement”, and “male participation” in Family planning.

The study found a significant relationship between educational status and level of involvement of men in maternity care services.

Another significant finding of the study is the discovery that there is no relationship between each of age, religion and ethnicity and level of involvement of men in maternal care. Also, there is relationship between number of wives and the level of involvement in maternal care among men. This is in keeping with the assertion by Griffin & Ringheim as well as that of Heinemann which states that for many decades, when the level of education was still very low relative to now, the popular belief was that men were not interested in taking responsibility in reproductive matters but now it can be seen that with education more men are involved in maternal health care.

5.1 Summary

Among the community members, over half have a right perception about men involvement in maternity care services. Therefore they consider it not bad for men to be involved in their wives’ utilization of maternity care services.

The level of involvement of men in maternity care services can be improved upon; though many of the men in the community have good knowledge about maternity care services, there are still some men in the community who are not well involved.

Some factors such as level of education and number of wives are predictors of male involvement in maternal health services

The respondents strongly agreed that there were barriers to male involvement in maternal care services.

5.2 Conclusion

In synopsis, the result of the study shows that males in the study community have a good understanding of their roles in maternal health services and they are willing to be involved if their spouses are ready to make use of them. However, their involvement is limited due to several barriers within the health care setting which make male participation difficult.

5.3 Recommendations

Based on the findings of this study, the following recommendations are made in order to improve on the involvement of males in utilization of maternal health services by their spouses.

1. Teachings on involvement of men in maternity care should start earlier before marriage at home, schools religious gatherings and other social sectors.
2. Policies should be put in place to remove or reduce barriers to male involvement in maternal health care.
3. A lasting basis should be created for the development of the knowledge of the community about the maternal health such as timely seminar, health talks at different working places and social gatherings.
4. Health practitioners should recognize and encourage involvement of men in maternity care services.
5. Policies should be made to encourage men to provide adequate support to their spouses especially during the reproductive years.
6. Paternity leave should be advocated for as is found in some countries.
7. A wider research study on this topic should be carried out covering a wider range of population so that the findings of this study can be generalized.
8. Marriage should be seen as a responsibility therefore, men should not marry more than the number of wives they can care for.

5.4 Suggestion for further studies

A similar research study should be carried out using community members of other Local Governments in and outside Osun State to examine the extent by which the findings of the study can be generalized.

References

[3.] Armstrong, B. (May 2004.) (Columbia School of Public Health) [Cyclical level of interest in men’s participation in reproductive health] Personal communication
[4.] Bang et al. (2007) Effect of Home Based Neo natal care and management of sepsis on neonatal mortality: field trial in rural India,
[49.] Ojofeitimi, E.O Ogunjuyigbe O.P, Ayotunde L,(2009). Spousal communication, changes in partner attitude, and contraceptive use among the Yorubas of Southwest, Indian journal of community medicine Vol. 34 Nigeria
Dear respondents,

I am a student of community health in Obafemi Awolowo University Ile-Ife conducting a research on Involvement of males in utilization of maternity care service by their spouses. You have been selected to participate in this study I thereby solicit for your sincere response to the under listed questions. Your response shall be used for research purposes only. Thanks.

**Questionnaire**

**Section a: demographical characteristics**

1. Age at last birthday (in years):  
4. Educational Status: a. None { }  b. primary { }  c. Secondary { }  d. Tertiary { }  
5. Number of wife (ves)  
6. Number of living children  
7. Age of your last child  

**Section b: knowledge on maternity care**

8. To what extent do you agree that the following services are components of maternity care

   SA= STRONGLY AGREE, A=AGREE D=DISAGREE SD= STRONGLY DISAGREE U=UNDECIDED

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>sA Reproductive health counseling</td>
<td></td>
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<tr>
<td>b. Prenatal care</td>
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<tr>
<td>c. Promotion of maternal nutrition</td>
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<tr>
<td>d. Skilled assistance during childbirth</td>
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<tr>
<td>e. Care for obstetric complications</td>
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<tr>
<td>f. Management of obstetric emergencies</td>
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<tr>
<td>g. Postpartum care</td>
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<tr>
<td>h. Management of abortion complications</td>
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<tr>
<td>k. Family planning counseling, information and services</td>
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<tr>
<td>l. Reproductive health education</td>
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</tr>
</tbody>
</table>

**Section c: roles of men in maternity care.**

9. To what extent do you agree that the following are roles of men in different aspects of maternity care services:
### 9.1 PRENATAL CARE

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>A</th>
<th>D</th>
<th>S</th>
<th>U</th>
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</thead>
<tbody>
<tr>
<td>a</td>
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<tr>
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<td>h</td>
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</tr>
</tbody>
</table>

**Ensure that the pregnant mother gets proper antenatal care**

**Provide transportation or funds to pay for pregnant mother antenatal visits**

**Accompany the pregnant mother on the antenatal visits, where you learn about normal changes that occur during pregnancy as well as danger signals of pregnancy complications.**

**Ensure that spouse receives good nutrition and adequate rest.**

**Taking active role in working out a plan for delivery of the baby.**

**Ensure that spouse receives appropriate immunization during pregnancy.**

**Ensure that spouse receives malaria prophylaxis or treatment during pregnancy.**

**Learning the symptoms of imminent delivery and of delivery complications.**

### 9.2 DELIVERY

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>A</th>
<th>D</th>
<th>S</th>
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<tr>
<td>a</td>
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<td>b</td>
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<td>e</td>
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</tbody>
</table>

**Ensuring that delivery is taken by trained attendant**

**Paying for the delivery services.**

**Paying for the services rendered during childbirth.**

**Arranging ahead of time for transportation.**

**Avoiding delays in deciding and seeking health care**

**Supporting spouse psychologically during delivery by staying with her.**

### 9.3 POSTNATAL

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>A</th>
<th>D</th>
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</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Helping spouse with heavy household works especially during postnatal period**

**Ensuring that your children receive all of the needed immunizations.**

### 9.4 FAMILY PLANNING
a. Planning your family by limiting births and spacing them at least two years apart.
b. Preventing unintended/unwanted pregnancies by using a method of contraception.
c. Join partner to meet with family planning counselor.
d. Together with partner learn about the available contraceptive methods and choose the one that best meets your needs.
e. Helping your partner to use modern methods correctly
f. Cooperating with partner to practice periodic abstinence.
g. Seeking help from health care provider if side effects occur or trying or endorsing another method if one method proves unsatisfactory.

10. How often do you carry out the following roles relating to maternity care at family level? :

<table>
<thead>
<tr>
<th>Role</th>
<th>All the time</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Promotion of maternal nutrition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Ensure that mother gets proper care during pregnancy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Helping her with heavy household works</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Taking active role in working out a plan for delivery of the baby</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Avoiding delays in deciding and seeking health care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Recognition of danger signals in mothers and seeking early intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Proper involvement in family planning</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How often do you carry out the following roles of men in maternity care at individual level? :

<table>
<thead>
<tr>
<th>Role</th>
<th>All the time</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Active participation in programs that aim to improve mothers’ health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Learn and recognize the danger signals in mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Helping mothers with heavy duties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Encourage the mother to seek health care as necessary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Aiding in decision making in seeking obstetric care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Visiting antenatal clinic with the spouse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Being present with the wife during delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section d: barriers to male involvement in maternity care

12. To what extent do you believe that these factors had hindered you from getting involved in maternity care services?

<table>
<thead>
<tr>
<th>Factor</th>
<th>SA</th>
<th>A</th>
<th>SD</th>
<th>D</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Lack of access to accurate information about safe motherhood</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>b. Services that is exclusively focused on women</td>
<td></td>
<td></td>
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<tr>
<td>c. Lack of appropriate policy that support men’s role e.g. paternity leave</td>
<td></td>
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</tr>
</tbody>
</table>
### List of occupational groups

1. Drivers
2. Commercial motorcyclists
3. Traders
4. Newspaper vendors
5. Barbers
6. Men in various household
7. Teachers
8. Local government workers
9. Tailors
10. Bankers
11. Company officials
12. Furniture makers.
Acute Shortage of Nursing Professional in Pakistan

Article Review by Salma Parveen  
Nursing, Texila American University, Pakistan  
Email:- salmaperveen@outlook.com

Abstract

Human resources for health are known as one of the core building blocks for health care system. The health care system is facing a serious challenge of the lack of human resources. It is very difficult to put the model of qualified and right people in the right place in Pakistan because of rapid growing of population. The existing health institutions, facilities and services are not sufficient to cope with the health care provision to all people in Pakistan. Retention of nurses in health care system is a main concern to nursing communities throughout the world. Pakistan has made a big step in getting better access to health services since its independence and development of public health in the country at partition era in 1947. Although Pakistan is in the list of developing countries where the health care system is still on life support in which nurses have significant role in Human Resource for Health (HRH). Advanced Nursing Services in Pakistan needs to meet the health requirements of community and to face future challenges in health care setting. But shortage of nurses has been a constant challenge for nursing profession in many countries including Pakistan.

Although nursing is a noble profession, but our gender prejudices, negligence and ill-treatment has caused enormous damage to it. A big cause of migration of nurses from Pakistan to gulf countries is due to the reason that nursing has bright future in such places and is given its due respect. It is important to give the identification, value and required facilities to this profession as it will benefit the society at vast level.

Introduction

Nursing profession is a part of healthcare system focused on the detail-oriented care of individuals, families, and communities in attaining, maintaining, and recovering optimal health. According to Akhtar and Sherin (2014) Pakistan is the sixth most populous country in the world with approximately 190 million populations, with around 64% of the population living in the rural areas. According to Naeem, Ahmad & Shaukat (2013) “total Government expenditure on health per capita is =04%”.

Yusufzai (2013) “Pakistan's health care system is hamstrung by an acute shortage of nursing professionals. The most dissatisfying factors at work place are high workload, stress, and unfair nursing management, lack of appreciation, low monetary incentives, and rigid behaviour on the part of nursing management. The shortage of nurses is the result of “brain drain” from low income countries to high income countries”.

Buchan notes: (2008) “Shortage of nursing is a problem which undermines the effectiveness of the health system and needs to be solved. Until and unless this is understood and make better use of the available evidence which is condemned to endlessly repeat a cycle of inadequate, uncoordinated, obsolete and often inappropriate policy responses”.

Nurses have an important role in Human Resources for Health (HRH). In Pakistan, inadequate primary care workforce is incapable of managing a patient with multiple chronic illnesses. As a result, the numbers of chronically ill people admissions in tertiary-care hospitals continue to rise. Emergency departments of tertiary hospitals are used as alternative of original ambulatory and community-based models of care to manage the effects of chronic illness and thus the outcomes are expensive and below expectations. Furthermore these hospitals are unable to manage such complex patients with the shortage of personnel and
advance technology. The demand of the health workforce in developing countries like Pakistan is still slow, moving against communicable and other fatal diseases.

According to Admin (2013) “Nursing has put into practice innovative models of care that promote the goals of policymakers for health reforms like expanding access, improving quality and safety, and reducing costs. Extending the models of care to the general public will be difficult without action to strengthen the future nurse workforce”.

According to Chauhan (7, December 2014) “the medical sector in Pakistan has historically been more preoccupied with cure rather than care”. As a result, while the country continues to produce an enormous number of doctors every year, the nursing workforce has mostly been ignored. Regardless of their central role in patient care, they are rarely given the attention or identification they deserve, which has inevitably led to a rigorous shortage of nurses in the country.

Nursing situation in pakistan

Nurses are backbone in the health care system and the modern health system cannot excel in performance without professional nurses. The nurses communicate with the patients on a more personal level, such as history taking and giving quality care to the patient according to their diagnosis. Health care system with a limited number of nurses is unable to function effectively. While technology, diagnosis, and treatment are vital to the health system, quality of care will remain a myth without a strong arm of patient care provided by nursing staff.

According to Iftekhar (6, Jan 2015) “there are around 136 institutes that offer degrees, diploma and certificate programmes of nursing in Pakistan, but these institutes are not enough to produce the desired number of nurses”.

In Pakistan, the coexistence of nursing shortage in the domestic market and outflow of nurses to international markets is also known as a common problem. Particularly these nurses are migrating towards gulf countries to look for excellent service opportunities. At the same time, novice nurses are required to fill the gap between supply and demand in the domestic level.

Pakistan Nursing Council (PNC) is a sovereign, regulatory body constituted under the Pakistan Nursing Council Act (revised in 1973) and empowered to register (license) Nurses, Midwives, Lady Health Visitors (LHVs) and Nursing Auxiliaries to practice in Pakistan.

The actual number of nurses in Pakistan is indefinite, and the approximate numbers are usually different from reality. Government pointed-out that Pakistan need about 60,000 nurses but another study indicates that there is a shortage of 1 million nurses in the country. In 2009, “there were 47,200 Registered Nurses; 4,752 Lady Health Visitors (LHVs) and 3,162 midwives. PNC estimated (2008) nursing professionals to population ratio of 1: 3568 for nurses and 1: 54,276 for LHVs; and the nurse: physician ratio was 1: 2.5”. (Dawn Review, 2003) Nishtar et al (2013) “this dearth of the nurses becomes evident in light of the reversed doctor to nurse ratio of 2.7:1 in the country”.

According to Asma (2012) “WHO international standards are the ratio of doctors to nurses should be 1:3 however this is reversed in the case of Pakistan ratio of doctors to nurses is 3:1”. Dawn.COM (2009) “In Europe there are 4.2 nurses per doctor but in our country the situation is opposite, i.e. we have 4.5 doctors per nurse”. The Express Tribune, (24, June 2011) “the International Standards of patient care require 8 nurses for 1 doctor but in Pakistan there is only 1 nurse existing for 3 practising doctors and in some areas this ratio is as low as 1:6”.

According to Gul (2008) “The World Health Organization (2004) statistics shows that Pakistan has 4.6 nursing and midwifery personnel and 6.9 physicians per 10,000 populations”. Jamal, S. A (2009) supported that WHO statistics “Pakistan has one of the lowest nurse-to-population ratios in the world or fewer than six nurses for every 10,000 people”.

According to Chauhan (7, December 2014) figures cited by the Journal of Pioneering Medical Sciences (2013) “the existing nurse-patient ratio in Pakistan is approximately 1:50
whereas the ratio prescribed by the Pakistan Nursing Council (PNC) is 1:10 in general areas and 2:1 in specialized areas”. Albeit with variations, “the nurse to patient ratio in hospitals is as low as 1:60”. Pakistan observer (16, Feb 2013)” supported that even in some hospitals a nurse is looking after 50 to 60 patients”.

People’s perception of nursing is strongly influenced by nurses’ availability and the quality of nursing care which they receive. According to Gul (2008) Bradshaw (2000) and Mullen (2003) “this is an important not only for Pakistan, but also worldwide, where the ratio of qualified nurses to patients is shrinking, and much of nurses’ foundational role at the bedside has been taken over by a variety of healthcare assistants”.

Nursing shortage can be local, regional, national or global which leads to failure in improving health services. Express Tribune (7, December 2014) “the shortage of nurses, however, is not just a local problem. Infact, the downward trend is affecting medical care worldwide”. According to Admin (2013) the World Health Organization (WHO) “estimated that the world needs to increase the number of health workers by more than four million to achieve the global health goal in 2015 set by the Millennium Development Goals (MDGs)”. Globally shortage of nursing is not just a governmental challenge or a topic for financial analysis, but it affects the health care system.

Causes of shortage of nurses

The causes for the acute shortage of nursing staff in Pakistan are complex. One wonders why with such a population explosion, the shortage of nurses still exists. In Human resources nursing in Pakistan is mainly a female profession, so the low status of women in Pakistani society impacts significantly on the profession. Nurses are treated as blue-collar workers. The girls, who join nursing profession, mostly belong to lower-income groups and society treats them with least respect. According to Gul (2008) “the low socio-economic status of nurses, unsafe work environment, lack of respect from doctors, and the very nature of nurse’s work create a dichotomy in society’s attitude towards the nursing profession”. According to Chauhan that Rattani stated (7, December 2014) “Nursing is not the first choice for many. It isn’t considered as well-reputed profession”.

The Joint Learning Initiative Report in 2004 and the World Health Report in 2006 have listed “Pakistan has one of the 57 countries with critical workforce deficiencies”. According to Akhtar and Sherin (2014)” health system in Pakistan faced the challenges of governance; finances; service delivery; human resources; introduction of new technologies; and coping with huge burden of supplies requirement”.

Many socio-cultural, economic, and political factors affect the image of the nursing profession in the country, are thought to be responsible for the current status of nursing. Traditionally, Pakistan is a patriarchal society which indicates that women are primarily accountable for household and child bearing, and rearing activities; and men are accountable for economy and decision making in the families. According to Naeem et al (2013) “Female nurses are facing all sorts of social and moral threats from male dominant society and do not feel comfortable and secure to work in non-conducive environment”. Gul (2008) “Muslim families may not view modern nursing as an appropriate profession for their daughters because nursing requires both close interaction with members of the opposite sex and work outside the home”.

Pakistan is not preparing sufficient number of nurses necessary to meet the needs of the increasing population. However under preparation is not the only cause of nursing shortage in Pakistan. There has been a major brain drain to gulf countries for excellent job opportunities. Gul (2008) “many wards in Pakistan in hospitals do not have a regular supply of linens or soap and water for hand washing. Such issues of work surroundings provide as push factor to many nurses for good standard to work out of the country than in Pakistan”.

The media plays a negative role, because the media does not only influence the public perception of nursing, but also activates a poor self-concept among nurses. Gul (2008) also
supported that “lack of public awareness about the nursing profession is a big factor that impacts negatively on the image and desirability of the nursing profession”.

The perception of unsafe working conditions contributes to increase shortage and hinders local and national recruitment efforts. The frequency of depression among nurses is reasonably high. Prolong exposure to such depression without correct coping strategies, may emerge as a potential risk factor for many diseases. Furthermore high patient to nurse ratios, dissatisfaction with the quality of work, poor leadership, and insufficient empowerment at work place related to burnout and poor job satisfaction signify the shortage of nurses. Shumaila et al (2014) “The job dissatisfaction can produce stress and depression with resulting down fall in job performance”. In addition nurse’ patient workload increases the risk of error, risk of spreading infection to patients and staff, and risk of occupational injury. High turnover of nurses lead to higher cost for the employer and the health care system.

To sum up, the causes of nursing shortage in Pakistan include; insufficient number of quality nursing education institutes ; feminist perception of nurses as females only; lack of career advancement in nursing profession; lack of continuous nursing education; appearance of wrong image of nurses in electronic media; lack of law implementation on sexual harassment; lack of safety policies; lack of incentives for remote placements; lack of law implementation on horizontal and vertical bullying; lack of monetary incentives, and poor working conditions are in most of the public as well as private hospitals.

**Way forward management**

Nurses are the backbone in health care system. They take care of the patients round the clock persistently even in physical and psychological stress. According to Naz and Gul (2014) “Nursing profession is hectic and stressed so they need more comfortable work environment to perform their duties and they also deserve equal right like other employees who are working in other organizations, e.g., wages and benefits, suitable working environment, acknowledgment and promotion opportunities”.

Human resource management is a fundamental pillar of the health system that is responsible for any country’s most important benefit to its people. When countries invest in people wisely, the result is a satisfied and stimulated workforce to deliver high quality health services. Then country can achieve its health objectives, and contributes to the community by providing excellent services. In addition revision of rules and regulations according to rapid increasing population is necessary for achieving International Millennium Goal Standards 2015.

The nursing profession has been experiencing a workforce shortage in recent years which make the nurses valuable resource. The extensive shortage of nurses is mainly due to the emigration to developed countries in search for excellent salary and job. The work-life issues threatening retention of nurses is the serious concern for health administrators. Simple evidence-based low cost strategic measures can improve the retention of nurses. According to Hamid et al (2014) “Simple measures requiring better management practices could substantially improve the working environment and hence retention of nurses”. Consistent and committed workforce can also function more efficiently and effectively.

According to Cohen (2007) “we also need to recognize the effect of our behaviour outside of the workplace. Hospitals’ orientation programs and conducive working environment can be more cost-effective in the long term”. Recognizing problems and dealing with them positively and proactively is the cost-effective way forward in management. It includes transport facility and better working environment; appropriate pay and benefits; revising job plans; regular vaccination programme; ensuring adequate working hours; adequate number of nurses to share the workload; responsibilities and provision of enough resources; and appropriate physical working conditions, can contribute in retention of nurses in Pakistan.

The best way to handle with the stress is to eradicate its causes, so the stress should be dealt as preventive. Social support and relaxation techniques can be helpful in stress. Healy & McKey (2000) “The key interventional strategies for managing work-related stress in relation
to nursing are prevention, timely reaction and rehabilitation”. Shumaila et al (2014) “Nurses perform their duties with care and dedication; they must be stress free and satisfied with the job environment”. Stressful situation can overcome by immediate providing comprehensive and supportive working environment and by education. In addition the nurses should be encouraged to support the evidence of exercise and good nutrition.

The literature identifies several factors affecting the job satisfaction among nurses such as positive interpersonal relationships (truthfulness, belief, participation of general values) and quality of care, have been related to higher levels of job satisfaction. When nurses perceive patient care as central to their work, then job satisfaction improves. Clearly defined roles and responsibilities, balanced workload, and reward for effort are also associated with job satisfaction. The most satisfying factors are working with an internationally reputable organization, getting positive feedback from patients, and the availability of necessary resources.

Gul (2008) “Even though significant changes have occurred in nursing education in Pakistan the overall status of nursing in the country is still a concern”. Improvement in nursing education is known as positive effect on nursing image. Yet, to improve the recruitment and retention of nurses in Pakistan the overall societal image of nursing must be improved; otherwise Pakistan will continue to produce nurses only to meet the demand of nursing for other countries.

The different issues have been affected by unprepared decentralization processes. The ideal recommendations regarding the key issues of national and international agencies should be given critical knowledge of defining the necessary human resource. The national human resource managers, who are developing training programs, should prepare comprehensive policies. The research studies can support to focuses on improving the knowledge of workforce environment. It is also essential to identify the strategies which empower nurses for motivation and their performance after decentralization, and analyzing the most cost-effective best practices.

Overall the demand for nurses is growing as a critical part of the health system to give quality health care. It is very important for nursing profession to assist the nursing leadership and health sector to come with multiple societal perspectives. The policies for the safety of nursing profession are essential because nurses are working in the private and public sectors worldwide.

**Conclusion**

Nursing is a Nobel profession and is an important part of the health care system nationally and internationally. Pakistan has been categorized as one of the 57 countries that are facing Human Resource Health (HRH) problems, under the threshold level defined by WHO to deliver the essential health care required, reaching the Millennium Development Goals (MDGs) by 2015. The above mentioned contributing factors specifically in nursing profession haven’t changed much over the years, but continuous dichotomy in recruitment and retaining of qualified nurses appears to affect the profession’s performance.

It is very difficult to control the nursing shortage without improving or eradicating negative factors that impact the status of nursing. People in Pakistan have less knowledge about the profession of nursing, and this need to well built marketing methods to develop the image of the nursing profession by providing good quality care of the patient and by giving awareness through media.

It is very important, if any profession needs to attract, retain, develop and capitalize their human resources, then they will need to adopt systematic human resources measures rather than relying upon the human resource practice. Assurance from the government, acceptance from the public, and leadership ability among the nursing population are critical requirements which can enable the profession to provide quality care to the patients and to lessen the shortage of nurses in Pakistan.
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Factors Associated with Stress and Stressors among Nurses working in Critical Care Units at Muhimbili National Hospital in Dares Salaam, Tanzania, East Africa

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Abstract

Background: Stress is increasingly recognized as one of the most serious occupational health hazard for critical care nurses. Failure of proper stress management among nurses has a huge impact to health care delivery and quality outcome, it also results in increased health care cost hence poverty and poor economy.

Objective: The aim of this study was to identify prevalence of stress and various stressors, among the critical care nurses

Methods: A cross-sectional survey using quantitative research methods were used, where by 65 nurses who are working in critical care units were interviewed by using structured questionnaire consisting of close ended questions. Since ICU nurses were 100 in number they were both targeted to be recruited from the study, but only 65 nurses were the one who returned the questionnaire. Validity and reliability of data questionnaires were tested to 10 ICU nurses at MOI. The collected data were analyzed using the computer software program (SPSS version 16.0).

Results: Study finding reveals that a variety of factors influence stress among ICU nurses at MNH. Among these, working environment, workload, interpersonal relationship as well as personal characteristics are identified to cause stress. Under personal characteristics knowledge and confidence as well as working as a team leader, performing or preparing sterile procedures like dressing, ETT suctioning, bronchoscope, CVP/AL insertion and dealing with machines that support patient breathing and others for hemodynamic monitoring (67.7%, 72.3% and 78.5% respectively) are among the stressors mentioned. Additionally, out of work for the past six months is also reported of which 73% of respondents reported that they to be out of work for the past six months.

This is really a large number of staff since 25% of the remaining staff is most likely to be overloaded with work hence affecting productivity, performance and quality outcome of the services.

Conclusion and recommendation: It is concluded that work environment, work load, interpersonal relationship are among stressors which make nurses working in critical care unit very uncomfortable. It is strongly recommended that new strategies and measures should be put in place in order to improve ICU working environment as well as to improve psychosocial among nurses.

LIST OF ABBREVIATIONS

CCU: Coronary Care Unit
DSM: Dar es Salaam
HDU: High Dependency Unit
ICU: Intensive Care Unit
MNH: Muhimbili National Hospital
MUHAS: Muhimbili University of Health and Allied Sciences
SPSS: Statistical Package for Social Sciences
TAU: Texila American University
UK: United Kingdom
Background information

1.0 Introduction

Stress has been acknowledged as a significant problem in critical care units since their inception in the 1960s and arises from many different factors and conditions (Raja, Saadiah, Santhna, & Nizam, 2007). On the other hand, critical care nurses may feel inadequate and stressed when faced with the enormous demands of the critically ill patient. The nurse is often required by the prescribed treatment to inflict discomfort on the patient e.g. suctioning, and is frequently faced with death as an outcome of intensive care.

This project therefore intends to assess factors associating with stress and stressors among nurses who are working in critical care units at Muhimbili National Hospital, Tanzania.

1.1 Background information to problem

Stress has been acknowledged as a significant problem in critical care units since their inception in the 1960s and arises from many different factors and conditions (Raja, Saadiah, Santhna, & Nizam, 2007). Globalization and changes in the nature of health care delivery have resulted in increasing ICU nurse stress in developing countries. Stress in critical care nurses at present is already acknowledged as one of the epidemics of modern working life (Owolabi et al., 2012). Effect of work stressors to ICU nurses can be physical, psychological or behavioral changes (Raja et al., 2007).

A physical response to stress is associated with ulcers, cardiac disorders and skin rashes. Psychological response to stress is associated with outbursts of anger, unnecessary worries and frequent mood changes. Mood changes include tension, anxiety, fatigue and depression. Studies have indicated that increased stress can lead to job dissatisfaction, burnout, and precipitate attrition from critical care units, thereby increasing employment costs and can affect the competence and job performance of nurses and ultimately can have an impact on the patient and compromise patient’s care (Jennings, 2008; Mbuthia, 2009; Poncet et al., 2007 & Raja et al., 2007).

My experience working in the ICUs at Muhimbili National Hospital revealed a number of stress related problems among staff members of which the magnitude and origin has not been identified and documented. From experience, interpersonal conflicts (between nurses and between nurses and Doctors), physical illness, reduced morale to work, persistent lack of confidence among staff members and some saying that ICU is not a place to work for life (Jennings, 2008; Mbuthia, 2009; Raja et al., 2007) are also common conditions and complaints of ICU nurses at MNH.

I have also come across some staff members who are almost burnout. Uncovering prevalence and the origin of stress among ICU nurses at MNH will raise awareness to the nurses that will make them think of developing effective stress coping skills for their health, and this may lead to improved job performance and patient’s satisfaction.

The results will also increase awareness to the higher organization such as the Ministry of Health and Social Welfare (MOH &SW) so that appropriate actions are done.

Working in critical care unit alone is a stressor because of its complexity, highly technical impersonal environment. Longtime stay in such unit can have adverse effect on the nurse hence poor performance and poor quality outcome. The critical care nurse may feel inadequate and stressed when faced with the enormous demands of the critically ill patient. The nurse is often required by the prescribed treatment to inflict discomfort on the patient e.g. suctioning, and is frequently faced with death as an outcome of intensive care. The nurse has to deal with emotions, feelings of the patient, significant others and her own. It is difficult for the nurse to escape as the patient require constant attention and close monitoring, hence
critical care nurses are prone to stress and burnout. More often efforts to reduce stress is directed on the patient alone, leaving the nurse who also is equally stressed.

This project is aimed at identifying prevalence of stress and various stressors, among the critical care nurses and to find possible effective ways of how the nurse can cope with stress, and avoid adverse effects, A stressed nurse can never produce good quality outcome hence increased morbidity and mortality rate.

1.2 Problem statement

A number of studies revealed that nursing profession is an occupation with a huge number of stressful conditions (Duquette, 1994). Stress has a cost for individuals in terms of health, well-being and job dissatisfaction, as well as for organizations in terms of absenteeism and turnover, which in turn may impact the quality of patients care (ibid). Research studies on stress in nursing have identified a variety of stressors that depend upon the clinical speciality. However, some common stressors across nursing specialities include poor working relationships between nurses and doctors and other health care professionals, demanding communication and relationships with patients and relatives, emergency cases, high workload, understaffing and lack of support or positive feedback from senior nursing staff (McGrath, Reid and Boore, 1989).

Currently, Muhimbili National Hospital Management has instituted in-house training on caring of critically ill patients; this is all about improvement of quality of service among ICU nurses. Despite all the efforts made, and knowing the impact of stress among nurses, no training has been done to ICU nurses concerning, stress, stressors as well as how one can cope with stress while at work environment. Little is known as to why this is not happening while stress is known to impact quality of patients care as well ICU nurse. This study therefore ought to assess factors with stress and stressors among nurses working in critical care units at Muhimbili National Hospital.

1.3 Objectives of the study

This project was guided by the following broad and specific objectives;

1.3.1 Broad objective

The main objective of this project is to identify stressors and factors that increase stress levels among nurse who are working in critical care unit at Muhimbili National Hospital.

1.3.2 Specific objectives

The following specific objectives were attained,

a) To identify signs of stress on the ICU nurse at MNH
b) To ascertain effects of stress on the nursing performance and quality outcome.

1.4 Project questions

a) What are the signs of stress among ICU nurses at MNH?
b) Why is it essential to identify effects of stress on the nursing performance and quality outcome?

1.5 Rationale of the study

This study poses useful information for both nursing administrators and nurses who work in ICUs. It increases the degree of awareness of stress related symptoms among nurses so that they can find coping skills, take personal measures to prevent symptoms of stress and deal with the factors that make the ICU environment stressful for nurses. It might also build foundation for future studies on stress among nurses in Tanzania. The study results may also help nursing administrators to deal with all the organizational factors that are associated with stress and apply appropriate actions.
1.6 Conceptual framework

The conceptual model for this study is guided by ideas of Roy’s Adaptation Model (Frederickson, Jackson, Strauman, & Strauman, 1991). Roy assume that human beings are constantly exposed to environmental stimuli on which, if one adapt positively will have enhanced growth and competence (health) and for those with negative adaptation will end up with burnout (illness). Interpersonal conflict, work overload and its demands, personal characteristics, management issues and ICU environment are among the postulated sources of stress (stimuli) to ICU nurses in the previous studies (Jennings, 2008; Ling, Taiwanai, Lai, & Peng, 2005; Mbuthia, 2009).

This model has been used to guide the researcher in literature review, development of study tool and discussion of the results.

Figure 1.1 herein, represents the said model;

![Conceptual framework on Factors associated with stress.](image)

From Figure 1.1 above, each factor has a meaning in this framework, the following are the description of each factor;

**Interpersonal relationship** as stressor has been assessed by asking nurses whether they had conflict with fellow nurse, supervisor or a doctor in the previous six months including the date of the study.

**Work overload and its demands** has been explained by the number of patients taken care of by a nurse per shift; so nurses were asked whether they are comfortable or not to take care of two to three patients.

**ICU environment** is also a source of stress, noise from alarms of machines connected to the patient and those coming from systems not connected to the patient; Climatic condition (cold) of ICU is also very uncomfortable to some staff members leading to physical inactivity and reduced work performance; inadequate safety due to slippery flows in some units; lack of user friendly equipment like oxygen sources; continuous exposure to death and dying patients, human suffering, and despaired relatives who constantly need psychological and emotional support are also very Stressful situations to ICU nurses.

**Personal characteristics** can also determine whether a nurse is being stressed or not. Gender, age, level of education, work experience, marital status and having ICU trained or not are elements of personal characteristics.

**Management issues** were assessed for whether being a stressor or not by asking nurses about their perception on the roles they perform according to their education levels; also nurses were asked about how they feel when they are taking care of a critically ill patient who sometimes needs vital sign recording at 15 minutes interval, at the same time required to trace other paramedics who sometimes take hours to respond. This is very common at Muhimbili hospital, shortage; poor ICU organization; and inadequate workers motivation may be the reasons for that and poor remunerations.

**Positive adaptation** means constructive response to sources of stress that lead to personal growth and enhanced competence.
Negative adaptation means destructive response to stressors that lead to burnout.

1.7 Definition of the key terms

Critical Care Unit:
This is also known as intensive care unit, intensive therapy unit or intensive treatment unit, it is a special department of a hospital or health care facility that provides intensive care medicine.

Stress:
Is a state of psychological and/or physiological imbalance resulting from the disparity between situational demand and the individual's ability and/or motivation to meet those demands?

Stressors:
These are physical, psychological, or social force that puts real or perceived demands on the body, emotions, mind or spirit of an individual.

1.8 Organization of the paper

This project has been systematized into five chapters and every chapter is more divided into several subdivisions. The first chapter of this study gives out introduction and background to the study. In this chapter the study also poses the objective of the study, research question followed by relevance of the study as well as the conceptual framework.

Chapter two of this study reviews different literatures concerning stress among nurses working in critical care units. It well shows general overview of stress and stressors further break it into stress and stress factors among nurses in Tanzanian context and empirical related literatures as far as stress among healthcare service delivery is concerned. This section is followed by research gap and a short summary of the chapter in the end.

The third chapter provides methodology which was used to gather information from study respondents, study design, population of the study, ethical clearance as well as data analysis procedures.

Chapter four of this study provides the analysis and discussion of the study findings. The analysis and discussion was done based on the objectives of the study as related to the empirical literature. The final chapter is the fifth chapter that provide conclusion of the whole project and the recommendations as far as factors causing stress among ICU nurses is concerned.

Literature review

2.0 Introduction

This chapter presents literature used in this project. It explains stress overview as well as available literatures that some scholars have written concerning stress and stressors. It is well showed how the research problem is related to previous studies. It also encompassed the causes of stress as well as the effects of stress among nurses who are working in intensive care units.

2.1 Stress overview

Stress is an essential part of human beings' mechanisms and can be considered a stimulant, a source of satisfaction and balance. It is the adaptive response to any requirement the environment or the person him/herself poses (Vaz Serra, 2005). Stress is the condition that results when person/environment transactions make the subject feel a discrepancy between the demands of a given situation and biological, psychological or social resources (Santos, 1998).

It is important to recognize that stress is a state, not an illness, which may be experienced as a result of an exposure to a wide range of work demands and in turn can contribute to an equally wide range of outcomes (Doherty, 1998), which may concern the employee’s health and be an illness or an injury, or changes in his/her behavior and lifestyle.
2.2 Stress and stressors

2.2.1 Work load and demands

There is a lot of physical labor in critical care such as turning patients, suctioning etc hourly medications and observations resulting in exhaustion of the nurse and ineffective coping. Increased demands from the critically ill patient and significant others attributes largely to stress among nurses (Roberts et al.,) Lack of human resources significantly attributes to increased workload and low nurse patient ratio, hence one nurse cares more than one patient, the ideal nurse patient ratio in ICU stands on 1:1 and HDU

- Interpersonal relationships
- Ineffective behaviors Increased Demand for energy
- Decreased
- Tension state
- Effective behaviors

Criticare nursing is a multi-displinary collaboration, it needs interaction with others, subordinates, seniors, doctors and other paramedics. Negative interaction with each other result is good source of stress (Bakker et al 2005). When nurses fail to appreciate each other’s work or behavior conflicts occurs, negative attitude such as gossiping, constant criticisms, arguments, framing and belittling. The recipient of these attacks often suffer from humiliation, low self-esteem, fatigue and low morale resulting in stress and burnout (Mbuthia 2009).

Teamwork and cooperation between nurses and doctors in patient care is of paramount, when the two cooperates and discuss the care, setting goals together, the nurse feels respected and worthy hence reducing stress on her. Raja et al concluded that verbal attacks and aggression from doctors brings about violence and reduce morale, causing stress among nurses.

2.2.2 Management issues

Nurse Managers can greatly attribute to stress among nurses if they fail to create a conducive environment to the subordinates. Lack of effective communication skills, poor decision making, and critical thinking by nurse managers causes stress among nurses. Respective clinical supervision reduce stress (Bennett, LOWE, Mathews Dourali, & Tatters et al 2001). Effective clinical supervision brings about minimal stress leading to job satisfaction and retention of nurses ( Dill, 2008).

2.2.3. ICU environment

The environment ion ICU is noisy from alarms and noise is a stressor not only to the nurse but the patient as well. Alarms should be kept under control and volume minimized. The cold temperatures in ICU makes the environment to be unfavorable to the nurse who is by the bed side all the time resulting in frequent attacks of cold and other diseases associated with low temperature

2.3 Cause of Stress among nurses

Job design and workload Interpersonal relationships at work Relationships with patients and their families Work organization and management of work Technical aspects of nursing Personal dealing with death and dying, ambiguity conflict with other staff inadequate preparation for dealing with emotional needs of family lack of staff support (RN shortage) and resources concern about treatment and patient care Concern about technical knowledge and skills.

Moreover, age and shift working is also reported among causes of stress among nurses. Nurses with age between 35 to 54 reporting high work stress; the highest among age groups Health care providers who worked 35 or more hours per week were much more likely than those working fewer than 35 hours per week to report high stress. Health care providers whose schedule was other than a regular daytime shift were more likely to report high work
stress.

In giving out the description of the causes of stress, each stressor is expressed herein;

2.3.1 Working environment

According to Moustaka, et al., (2010) as cited in a study done by Gray-Toft and Adderson (1981), they identified three stressful situations that affects work performance; these are physiological, psychosocial and social environment. However, according to European Organization for Safety and health at work (2002), reported that working conditions such as the wrong ventilation, lighting and the inadequate temperature levels are among the potential work-related stressors among nurses. On the same note Cooper (1998) support that difficulties in coping with stress combined with psychological or emotional instability could lead to violence.

Furthermore, healthcare institutions are of different in sizes and nature, and nurses are confronted with different work tasks and working hours; nightshifts, understaffing and stress related situations as well as the suffering and death of patients (Cooper, 1998).

2.3.2 Interpersonal relationship

Blair and Littlewood (1995) emphasized that work relationships are potential stressors. Two sources of stress in this field are the conflicts with co-workers and the lack of staff support. Another assessment done by Sveinsdottir, et. al., (2006) showed that lack of social support from colleagues and superiors and less satisfaction with the head nurses contributed significantly to the appearance of stress. Similarly, other study identified the negative effect of lack of understanding and support from their managers, on workers’ stress.

2.3.3 Nature of nursing

Nature of the job is another cause of stress among nurses because some people just decided to enter this profession since they wanted employment, but once they faced the reality of the job they soon realize that is not the way they thought it would be (Sky Hudgins, 2008). According to Moustaka, et. Al., (2010) as cited in Marshal (1980), stress is taking its charge considering the nature of nursing tasks and the involvement with death and dying people hence those who enrolled to the profession wrongly face the consequences.

2.4 Effects of stress on health

Plainly speaking, there are appears to be general agreement that the experience of work-related stress generally detracts from the quality of nurses’ working lives, social life, increases minor psychiatric morbidity, and may contribute to some forms of physical illness (Khai and Josh, 2007). It is also true, that stress can have far reaching consequences for nurses which is why stress management for nurses is so important, since occupational stress has been found to be one of the major work related health problems for the workers (Gray, 2000) as well as one of the greatest forced cost for the hospitals (Aike, et al., 2001).

Effects of stress differs with individuals, if it gets out of control it may harm one’s health, disturbs the nurse patient relationships hence poor patient care, social relationships, poor team work and poor performance in general. This literature review is guided by the conceptual framework with factors associated with and effects of stress on the nurse, also included are the physiology of stress according to Hans Seyle.

2.5 The physiology of stress

The experience of stress is accompanied by many physiological changes. Selye’s General Adaptation Syndrome. Hans Selye, a pioneer in the field of stress research, proposed that stressors of many different kinds result in a nonspecific bodily response. He said the body’s stress response consists of a general adaptation syndrome, which has three stages: alarm, resistance, and exhaustion.

Stage 1
In the alarm stage, an organism recognizes a threatening situation. The sympathetic
nervous system activates, giving rise to the fight-or-flight response. Digestive processes slow down, blood pressure and heart rate increase, adrenal hormones are released, and blood is drawn away from the skin to the skeletal muscles.

**Stage II**

The resistance stage occurs when stress continues. Physiological arousal stabilizes at a point that is higher than normal.

**Stage III**

If stress is prolonged, organisms reach the exhaustion stage. The body’s resources run out, and physiological arousal decreases. In this stage, organisms become more susceptible to.

### 2.6 Related literature on stress among nurses

In a study done in UK (1993), Musculo-skeletal disorders were the most common cause of ill-health among all respondents (42%), followed by stress and depression. Nurses were among the highest groups who reported significantly raised rates of stress and depression.

### 2.7 Research gap

Many researchers have been done on stress and stressors among nurses/healthcare providers worldwide. However, taking into consideration the significance stress, then the available researches has not provided clear insight of on strategies which should be done to encounter the same in Tanzania, therefore this research project highlights the problem and its solution on the aspect stress and solution to the challenges facing critical care nurses.

### 2.8 Chapter summary

Chapter two of this project gives out the details of stress overview as well as causes of stress among nurses. This was done determinedly so as to gain a comprehensively forthcoming and facts information regarding stress with the urge of answering the research questions at hand. The chapter presents very well the theories related to the study.

### 3.0 Methodology

This chapter presents description of study design, study area, study population, sample estimation, Inclusion and exclusion criteria, sampling procedures, data collection procedures. Study variables data management, analysis and ethical consideration.

#### 3.1 Study design

A research design is the framework or plans, used to guide in collecting and analyzing data (Churchill, 1995). It is the blueprint that has to be followed in completing a study’. Indeed, research design is like an architect’s blueprint for the house through which all major parts of the research will be guided (ibid)’. With this regard, descriptive cross-sectional was opted. It is a design concerned with determining the frequency with which something occurs or the relationship between two variables (ibid). Descriptive study, is rigid in methodology and requires a clear statement of *who, what, when, why, and where* of the research (ibid). Applying a descriptive research in this study, a Cross-sectional Analysis of case study was applied. It was applied for a snap shot study of assessing factors associating with stress among nurses at MNH. Descriptive research design dealt with the frequency in which stress occur and prevail. Importantly, it was used for explaining relations between variables such management issues, work environment and stress.

#### 3.2 Setting

The study was conducted at Muhimbili National Hospital in Dar es Salaam, Tanzania, East Africa. The hospital has a bed capacity of 1500 beds and has two functional ICU’s plus a high dependency unit, Main ICU with 6 beds, Cardiac ICU with 10 beds, coronary care (CCU) with 8 beds and HDU with 15 beds. This hospital was selected since it the places where I
work, therefore giving me the advantage of carrying out my project, also it is the one and only national, referral, and largest teaching hospital in the country.

3.3 Population

Study population is the entire aggregation of cases in which researcher is interested in (Polit and beck 2000). In this study therefore; all nurses working with the Muhimbili national hospital’s critical care units (ICU+HDU) were recruited from the study.

3.4 Sampling technique and sample size

Since it is hard for an investigator to cover the entire population, sampling is one of the best methodical practices for selecting a group of individuals. Simple random technique was employed to select study participants.

Simple random technique is opted because every object has the same possibility to be chosen. According to Kothari (2000) Simple random sampling is a process of selecting a sample at random from the sampling frame. Each member of the population has an equal chance of being selected for the sample. Simple random sampling maintains the original sampling frame, but the number of elements available to be drawn decreases as each element of the sample is removed before the next choice is made.

3.4.1 Sample size calculation

Sample size refers to the number of items to be selected from the study setting to represent a sample. Nassiumas (2000) formula was used to estimate the sample size; with Nassiumas formula, if population is less than a thousand, a researcher can take the whole population. In this project therefore, all 100 nurses were recruited in the study.

3.5 Sampling procedure

Convenient sampling technique was used to recruit study participants in this project. This method was chosen due to time constraints and limitation of resources. Convenience sampling was used when a researcher has reason to believe that the population that is being sampled is either homogeneous or else has characteristics being measured that are so randomly distributed that the outcome would not be materially affected by more sophisticated methods of sampling (Dorofeev & Grant 2004). Because respondents in this study were nurses who are working in critical care units, all of them were recruited in this study. A total of 100 questionnaires were distributed to all critical care nurses.

3.6 Data collection technique and data collection tools

3.6.1 Sources of data

Two sources of data were employed in this study. These are primary data and secondary data. According to Kothari (2008), secondary data refer to the data which are available; they are already been collected and analyzed by someone else. Secondary data may be found in published or unpublished data which involve the data from the books, journals, gazette, and articles as well as from the internet. Secondary data can be easily gathered and they are inexpensive compared to primary data.

Primary data on the other hand, are those data which are collected afresh and for the first time and thus happen to be the original data (Kothari, 2008).

3.6.2 Data collection tools

There are several collection tools particularly in collecting primary data since secondary data are being collected by merely compilation of the available data. These tools are questionnaires, interview guide questions, observation. This study employs questionnaire as well as using observation hence these two tools were explained below;
3.6.2.1 Questionnaire

This is the most popular tool for data collection. According to Kothari (2008), questionnaire consist a number of questions which are well typed and printed in a definite set of forms (see Appendix A). The questionnaires can be mailed to the study participant or can be hand delivered by the researcher or research assistant. In this study all questionnaire were hand delivered.

3.7 Inclusion criteria

Inclusion is simply known as the “somebody or something included” in a research the term inclusion criteria entails the set or guidelines to be considered or met when one is to be included in the study.

In this study therefore, inclusion criteria used was the availability of all the professional nurses at the time of the study and agree to participate in the study.

3.8 Exclusion criteria

Exclusion on the other hand meant “to eliminate or keeping out”. In this perspective the exclusion criteria are the guidelines that give identification of who is not supposed to participate in the study.

Exclusion criteria was absence of nurses as well as those who decline to participate in the project.

3.9 Ethical consideration

The project proposal was submitted to TAU for learning purposes. Furthermore, verbal communication with unit managers for consent to do the study in each unit was done and participants were informed to sign a consent form to participate in the study. Decision to participate was free, nobody was coerced in participating and no forms of payment were given. Participation was purely voluntary; no harm is expected during the study and for confidentiality no names mentioned, only code numbers were used.

3.10 Validity and reliability

Validity and reliability are the crucial elements as far as research is concerned. Conclusions drawn from analysing survey data are only acceptable to the degree to which they are determined valid.

In order to confirm the strength of the research tool, 10 drafts of questionnaires were distributed to the Muhimbili Orthopaedic Institute ICU nurses for pre-testing so as to make sure the strong points are met and its uniformity. This in turn helped the researcher to modify questions and authenticate the research tools before actual data gathering.

3.11 Data analysis

Data analysis commences immediately after data collection. All collected data were grouped into required categories prior to analysis. Statistical Package for Social Sciences (SPSS version 16.0) was used to analyse collected data. Obtained data were then presented into histograms as well as tables.

3.12 Limitation of study

a) Since the study was done in one hospital alone, therefore; the findings of this study are limited to critical care nurses who are working at MNH only.

b) The use of convenience sampling is always accompanied by some potential for bias.

c) Since this is a cross-sectional study in nature, meaning that it takes place at one point in time. Such a study does not take into account staffing changes, managerial changes or the patient census of the units at the time when the study is conducted, and these factors may exert an impact on the responses of the nurses.

d) In self-report, participants may exaggerate stress symptoms in order to make the
situation worse or may under-report the severity or frequency of the problem/event.

3.13 Dissemination of findings

The result was disseminated to TAU Authority and to Muhimbili ICU management for planning strategic management in coping with stress among nurses. This entails that, issues of absenteeism, poor cooperation as well as interpersonal relationships will be dealt upon.

Presentation of the findings and discussion

4.1 Introduction

This chapter presents the study findings and analysis made on data which were congregated during data collection. Principally, the section above all deals with evidences and statistics revealed by means of the data. Subsequently, it infers the gathered data in detail, in order to present main findings of the study so as to encounter objectives of the study. In doing so, all the research questions meet their answers. In short this chapter delivers a comprehensive assessment of the factors associating with stress and stressors among nurses working in critical care units at MNH.

In this regard, the analysis of this research sought to answer two research questions;

a) What are the signs of stress on the ICU nurse at MNH?

b) How does stress affects performance and quality outcome of the services delivered by ICU nurse at MNH?

4.2 Response rate

According to Buckingham and Saunders (2004) response rate is usually refers to the proportional of respondents in the sample who complete and return a questionnaire. As such, any conclusion drawn by the researcher is based on a sub-sample of the original sample (Viswesvaran, et al., 1993). Table 4.1 below presents the questionnaire sent out and those which were returned back.

<table>
<thead>
<tr>
<th>Questionnaire Sent</th>
<th>Questionnaire Returned</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>65</td>
<td>65%</td>
</tr>
</tbody>
</table>

Source: Researcher, 2013

From the table above 100 questionnaires were distributed to study respondents but only 65 were returned back, making a response rate of 65%. The obtained response rate is considered sufficient as per Polit and Beck (2004). According to them a response rate of 65% or more is usually considered sufficient for most research purpose.

4.3 Characteristics of the respondents

A brief personal profile of respondents is provided in this part of the capstone project. This information was obtained from the questionnaire. Personal information includes respondent age and gender is indicated in Table 4.2 and Table 4.3 below;

Table 4.2: Respondents Demographic Characteristics

<table>
<thead>
<tr>
<th>Gender</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>16</td>
<td>24.6</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>75.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>26</td>
<td>40.0</td>
</tr>
<tr>
<td>Married</td>
<td>38</td>
<td>58.5</td>
</tr>
<tr>
<td>Widow</td>
<td>1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Level</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=65</td>
<td></td>
</tr>
</tbody>
</table>

11
Enrolled Nurse 8 12.3  
Diploma Registered Nurse 45 69.2  
Advanced Diploma Nurse 4 6.1  
Degree Registered Nurse 5 7.6  
Specialist Nurse 3 4.6  

**RESPONDENTS AGE**  
N=65  
<25 6 9.2  
26 – 35 43 66.1  
36- 44 11 16.9  
46 and above 5 7.7  

Table 4.3: Training on ICU and years working in ICU  

<table>
<thead>
<tr>
<th>TRAINING IN ICU</th>
<th>N=65</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
<td>10.8</td>
</tr>
<tr>
<td>No</td>
<td>58</td>
<td>89.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEARS WORKING IN ICU</th>
<th>N=65</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1</td>
<td>4</td>
<td>6.1</td>
</tr>
<tr>
<td>1 – 3</td>
<td>27</td>
<td>41.5</td>
</tr>
<tr>
<td>4 – 6</td>
<td>19</td>
<td>29.2</td>
</tr>
<tr>
<td>7 – 9</td>
<td>9</td>
<td>13.8</td>
</tr>
<tr>
<td>10 and above</td>
<td>6</td>
<td>9.2</td>
</tr>
</tbody>
</table>

As illustrated in table 4.2, the age distribution was obtained. Majority of study participants were having the age between 26 – 35 years (66.1%). From these findings it is noted that 66.1% of study respondents are many compared to other age groups, this could be attributed due to the middle age where these generation are energetic and that can move quickly depending with the nature of the work. Gender wise, the study reveals that females were many in this profession as compared to their counterparts’ males (75.4% and 24.6% respectively).

Profession wise, the findings revealed that majority of study respondents are diploma registered nurse as presented by 69.2%. Consideration was also given to the respondents who attained ICU training, the findings revealed that only 7 (10.8%) respondents had attained special training on ICU but the good majority 58 (89.2%) had not received special training on ICU. From researcher point of view it is wise for critical care nurses to be trained on handling critical care patients as well as how to manage stress while working under critical care unit. This would develop enhance confidence and capabilities to interconnect doctors and other nurses, including interns as well as other nurse students, this in turn will cultivate a strong teamwork.

### 4.4 Signs of stress on the ICU nurse

Signs of stress among nurses were examined as a part of factors that can hinder provision of service among patients. This is well presented in Table 4.4 below;

<table>
<thead>
<tr>
<th>Signs and Symptoms of Stress</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back pain</td>
<td>55 (84.6%)</td>
<td>10 (15.4%)</td>
</tr>
<tr>
<td>Headache when you are at work place</td>
<td>54 (83.1%)</td>
<td>11 (16.9%)</td>
</tr>
<tr>
<td>Chest Pain</td>
<td>49 (75.4%)</td>
<td>16 (24.6%)</td>
</tr>
<tr>
<td>Stomach upset</td>
<td>45 (69.2%)</td>
<td>20 (30.8%)</td>
</tr>
<tr>
<td>Weight gain/loss</td>
<td>55 (84.6%)</td>
<td>10 (15.4%)</td>
</tr>
<tr>
<td>Poor concentration at work</td>
<td>45 (69.2%)</td>
<td>20 (30.8%)</td>
</tr>
<tr>
<td>Bouts of anger easily</td>
<td>42 (64.6%)</td>
<td>23 (35.4%)</td>
</tr>
<tr>
<td>Self - pity</td>
<td>44 (67.7%)</td>
<td>21 (32.3%)</td>
</tr>
<tr>
<td>Feeling tired even with no significant work</td>
<td>48 (73.8%)</td>
<td>17(26.2%)</td>
</tr>
</tbody>
</table>
Prone to committing errors/mistakes  49(75.4%)  16(24.6%)

With respect to the signs which can cause stress among nurses who are working in critical care units at MNH, it is well seen that the good majority of the ICU nurses working in ICU units are stressed at least by one of the mentioned signs. This is well noted since at each sign mentioned and for those who have ‘yes’ as response occupied more than 60%.

**4.5 Effects of stress on the nursing performance and quality outcome**

It is well believed that stress can hinder performance and quality outcome of any service rendered. With this regard, the study participants were asked if at all they were out of work for the past six months, the findings are presented in Figure 4.1 below;

![Figure 4.1: Out of work for the past six months](image)

As the figure depicts 75% of respondents reported that they were out of work for the past six months. This is really a large number of staff since 25% of the remaining staff is most likely to be overloaded with work hence affecting productivity, performance and quality outcome of the services. This is in line with the study done in America which revealed the similar results. The same is also true from the study done in Malaysia.

Moreover, respondents who were not at work for the past six months were asked to state the reasons which persuaded them not to reach at work for the said months; their reasons are presented in Figure 4.2 below;

![Figure 4.2: Reasons for being out of work for the past 6 months](image)

As illustrated in figure 4.2 above, malaria, backache and maternity leave are the reasons which are mentioned (71%, 23% and 6% respectively). Malaria is taking the biggest percentage because it is a tropical disease mostly affecting Sub Saharan Africa states. Secondly, the nature of work involving shifts which might take at times longer work schedules leading to exhaustion and fatigue

**4.5.1 ICU environment**

ICU environment was among the factors that lead to stress among nurses. With this respect respondents were asked if machines connected are causing disturbances or if they are uncomfortable with cold temperature. The findings are presented in Table 4.5 below;

<table>
<thead>
<tr>
<th>ICU Environment n = 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICU Environment</td>
</tr>
</tbody>
</table>
Disturbance with machine                  Yes   No
51 (78.5%)                              14 (21.5%)  
Uncomfortable with cold temperature     59 (90.8%)   6 (9.2%)  

As illustrated above; findings reveal that machines as well as cold temperature in ICU are likely to cause stress since response from respondents is higher (78.5% and 90.8% respectively). From the researcher’s viewpoint, it is seen that ICU environment was quietly responsible in enhancing stress among ICU nurses. These findings are in line with the study done by European Organization for Safety and Health at work (2002) that working conditions such as the wrong ventilation, lighting and the inadequate temperature levels are among the potential work-related stressors among nurses.

4.5.2 Work load demand

Consideration was also given on work load demand. The findings are well presented in Table 4.6 below;

Table 4.6: Work load demand n = 65

<table>
<thead>
<tr>
<th>Work load demand</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overwhelming caring for critically ill patients</td>
<td>54 (83.1%)</td>
<td>11 (16.9%)</td>
</tr>
<tr>
<td>Stressed caring for dying patients (Resuscitation)</td>
<td>60 (92.3%)</td>
<td>5 (7.7%)</td>
</tr>
</tbody>
</table>

Table 4.6 above revealed that 83.1% respondents are overwhelmed caring for ill patients while 92.3% respondents were stressed caring for dying patients. With these findings it is clearly seen that there is association between stress and work load.

4.5.3 Management issues

Relationship between stress and management issues was also considered. The research was in opinion to know the association between stress and management issues as presented in Table 4.7 below;

Table 4.7 Management Issue n = 65

<table>
<thead>
<tr>
<th>Issues</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stressed caring more than one patient</td>
<td>61 (93.8%)</td>
<td>4 (6.2%)</td>
</tr>
<tr>
<td>Stressed tracing other paramedics?</td>
<td>52 (80.0%)</td>
<td>13 (20.0%)</td>
</tr>
<tr>
<td>Long shifts (shortage of staff)</td>
<td>58 (89.2%)</td>
<td>7 (10.8%)</td>
</tr>
<tr>
<td>Lack of identified/recognized job description</td>
<td>60 (92.3%)</td>
<td>5 (7.7%)</td>
</tr>
</tbody>
</table>

Findings under current project revealed that all the issues stressed above are the factors that are likely to cause stress. This is well presented since both issues mentioned occupied 80.0% of “yes” and above response.

4.5.4 Interpersonal relationship

Interpersonal relationship was also considered among the factors that influences stress among nurses working at critical care at MNH. The analysis of this capstone project is presented under Figure 4.3 below;
Figure 4.3: Working in the presence of doctors

Figure 4.3 above revealed that 72% of respondents reported that working in the presence of doctors/consultants and administrators likely to cause stress while 28% of study respondents denied.

4.4.5 Personal characteristics

Personal characteristics were also considered. The research was in opinion to know how personal characteristics can cause stress among nurses as presented in Table 4.8 below;

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working as a team leader (confidence &amp; knowledge)</td>
<td>44 (67.7%)</td>
<td>21 (32.3%)</td>
</tr>
<tr>
<td>Performing sterile procedures (ETT, CVP, etc.)</td>
<td>47 (72.3%)</td>
<td>18 (27.7%)</td>
</tr>
<tr>
<td>Hemodynamic monitoring (knowledge &amp; confidence)</td>
<td>51 (78.5%)</td>
<td>14 (21.5%)</td>
</tr>
</tbody>
</table>

As revealed from Table 4.8 above, majority of respondents reported that personal characteristics likely to cause stress and agreed that knowledge and confidence working as a team leader, performing or preparing a sterile procedures like dressing, EET suctioning, bronchoscope, CVP/AL insertion as well dealing with machines that support patient breathing and others for hemodynamic monitoring (67.7%, 72.3% and 78.5% respectively).

Conclusion and recommendation

5.0 Introduction

This chapter presents the conclusion and recommendation for further studies.

5.1 Conclusion

From the aforementioned discussion it is well noted that many factors included work environment, work load, interpersonal relationship as well as personal characteristics are among stressors which make nurses working in critical care unit very uncomfortable.

Clearly stated and researched; there a number of symptoms which causes stress among nurses. Among symptoms mentioned are, headache when at work place, back pain, chest pain, stomach upset, weight loss, bouts of anger easily was commonly cited, added is staff being out of work for the past six months. The common reason mentioned is malaria which has taken higher percentage as well as back ache. Actually this undermine the required service being offered accordingly, since shortage of staff by that particular time made other staff being overloaded with work. Additionally, poor organization amongst staff was also mentioned.

Basically, workload demand as well as ICU environment was practically mentioned among stressors, equally important management issues was also mentioned and prove to among stressors. On the same note, respondents reported that personal characteristics likely to cause stress included are concrete knowledge and confidence working as a team leader, performing or preparing a sterile procedures like dressing, ETT suctioning, bronchoscope, CVP/AL insertion as well dealing with machines that support patient breathing and others for hemodynamic monitoring.

5.2 Recommendation

From the above project results, the following are recommendation which should be taken into immediate action;

- **Absent from work**

  Since the study revealed that, majority of staff are not able to come at work due to unavoidable reasons especially ill health, and malaria taken the biggest percent (71%). It is recommended that, fumigation as well as prophylaxis measures should be
taken so as to avoid such occurrences.

- **Good Coordination and team building**
  Research also revealed that there is poor coordination between staffs; ICU Unit team should recommend on the good coordination between staff which will enhance better working environment to each other as a results the whole work will be done as planned/scheduled.

- **Training on ICU speciality**
  Study findings revealed that out of 65 nurses participated in the study, only 7 (10.8%) had ICU training and the rest 58 (89.2%) did not have special training on ICU training. With this regard, it is highly recommended that critical care nurses should be imparted with training on ICU theories and consequences of caring critically ill patients. This in turn will reduce stress for those who are scared caring for dying patients.

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1. Introduction

Namibia as a country is not an exception to adverse events due to inadequately managed bedside handover. The country has similar contributing factors which may cripple the inefficiency of patient handover, for instance high patient turnover in wards, lack of specific handover guidelines in public hospital settings. Bedside handover are overlooked in its importance as in the case of Namibia where it can be regarded as the possible cause of death (that is still under investigation). From this study support this phenomenon as 60% of the respondents indicated that they are neutral on such a high-risk matter where they were supposed to be highly alerted. Currently, bedside handover in public hospitals is a day-to-day communication event by the health professionals. However, in Namibia information conveyed is not structured and the patient participation is not stressed. There is a constant outcry of the implications of inadequate bedside handover in the public health facilities. A recent example which ended up in litigation is where a registered nurse was involved with a high risk pregnant woman who was admitted to a public hospital for an elective caesarean section for the following day, but since it was a public holiday (May 1), the operation was not performed. Subsequently the patient died (New Era, 29 April 2014). This case is possibly a result of miscommunication during the handover process and shows a lack of accountability.

Bedside handover has become the most useful way of communication however, it does not happen in vacuum as it is bounded to a legal obligations as stated in American Medical Association (AMA) in its definition that handover is an action of transferring of responsibility and accountability for patient care from one provider or team of providers to another (AMA 2006). Therefore, all nurses are expected to be responsible as individuals, and to use their knowledge and skills to achieve high accountability levels at their health institutions. The goals of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires a standardized approach to handover communication that in-particular allows for the opportunity to ask and answer questions accurate, current information about a patients care, condition, and recent or anticipated changes (2006:37). Effective communication with a patient during total hospital stay is a difficult task due to high patient turnover and time constraints (Catchpole 2007.) Thus, in most cases handover information may be given in a hurried manner, which may compromise the care of patients involved. Nursing staff carries a heavy workload daily as wards are understaffed (Report of Commission of Enquiry into Health Industry 2014). In such situation it is evident to face challenges with various clinical responsibilities within the hospital setting. One of these responsibilities is to communicate effectively and to recognize the risks involved in bedside handover process in order to safeguard and ensure continuity of care. The respondents of this study are not sensitive enough towards bedside handovers and they are lacking knowledge of the significance of basic teamwork skills to allow the team to work in harmony and to coordinate bedside handover meetings successfully. Due to the fact that most respondents are neutral to disagree which is an indication that they are not fully aware that it can result in adverse events such as medical errors; prolonged patient stay in hospital and delay in treatment and care.

Furthermore, it is internationally recognized that, with any patient handover there is a likelihood of risk involved and errors in handover can be fatal to the patient outcome (Manser 2013). Jones stated that cognitive errors occur; nurses’ clinical decisions may be inaccurate and associated with inappropriate interventions that can lead to increased and untimely patient
mortality (Jones 2012). Furthermore, Thurgood stated, that patient reporting is a task that repeatedly testing nurse’s knowledge, skills and communication (Thurgood 1995).

Given the fact that a constant movement of new nursing graduates entering hospital settings, it is imperative they bear adequate knowledge and skills to organize a seamless, error free bedside handover. Thus, this project focused of the knowledge about bedside handover elements such as preparation, introduction, information exchange, patient involvement and safety scan and some adverse event that may take place during the bedside handover process. Thus, this study aimed at assessing the knowledge regarding the importance of bedside handover procedure; the awareness of implications; and to verify the knowledge of the practical application amongst the final year Bachelor of Nursing Science students at the University of Namibia, Main Campus.

2. Literature review

Literature Review for this study is woven around the objectives and it is used as the themes of the study and how it is discussed. The objectives are:

- To determine the if the correct preparation procedures is known
- To identify perils during bedside handovers.
- To verify knowledge of effective practical application of bedside handover.

Patient handover is considered to be a very complex communication situation as stated by Kerr, which occur among a very diverse health team on a daily basis (Kerr 2001). Currently the patient acuity is adding some constrained of efficiency in information sharing. Current studies on bedside handover suggest that healthcare environments experience problems with respect to knowledge sharing during handover (Jacobs and Roodt 2007). However, Sexton stated that bedside hand over was noted as the preferred option of transferring information and is a widely used method within developed protocols (Sexton 2007).

Communication has diverse challenges and according to Wood, we need to understand the complexity of handover better to grasp the challenges. Mbomba stated that it has been discovered that poor communication handovers have resulted in adverse events, such as delays in treatment, error in medication and these may decrease the level patient satisfaction with patient engagement as chance to clarify and cross –check is set (Mbomba 2005).

Therefore, it is imperative for the nurses be certain of bedside usage and its expectation. Mayor alludes that task uncertainty may cause handover duration to be too long, resulting that some patients are given a thorough handover and other are hurried off (Mayor, 2014).

Brixey stated that interruption are frequent events in health care settings as it interrupt the routine nursing activities as well, including bedside handover resulting in decrease efficiency which contributing to medical errors (Brixey 2005). Brixey emphasized to recognize that distraction may lead to wrong site surgery procedure and robust leadership in good pre-preparation for bedside handover, prior updating the handover records, informing patient and staff for pending handover might aid to avoidable interruptions and create a opportunity to increase a continues flow of information exchange (JCAHO 2006).

In fact, the main focus in bedside handover is patient safety; Jeffcott (2009) confirms that, report of errors and fatalities in healthcare that may be directly attributed to inefficiencies of the handover process. It has been reported that poor handover is influenced by the lack of structure in how handoffs According to McCann, McHardy et al. 60.9% of doctors in a New Zealand hospital have experienced clinical problems caused by poor handovers (McCann, McHardy et al. 2007). Furthermore, 31% of doctors surveyed in the United States have also experienced clinical problems during their shifts that could have been avoided with more efficient handovers (Borowitz 2008). Surprisingly, researchers who studied the styles of handover, McKenna’s and Pothier did not propose any specific efficient style (McKenna’s 1997) (Pothier 2005). It is important to conclude instead, that no documented technique emphasizing best practice in patient handover.

Parker argues that bedside handover shows to be futile, an Australian study concluded that bedside handover was less efficient as it was often simply a recitation of fact rather than

Sexton (2004) that if information presented, happen to be irrelevant, repetitive, speculatively it is due to lack of guidelines of patient handover whereby the structured information is conveying was not in a systematic way (Nadzam 2009) resulting in poor communication handover, Alvarez & Coiera stated that it creates some gaps in knowledge regarding patient needs and changing condition, establishing the opportunity to err in clinical decisions with potential to impact patient safety (Alvarez & Coiera 2006). McMurray conducted a study concluded that bedside handover provides opportunity for patient to be an active participant in process as they can amend the inaccuracies in information being communicated, however, exclusion criteria may rise non participation communication dilemma (McMurray 2011). Critiques of bedside handover states, that patient confidentiality is compromised as other patients can over hear what is being said about a particular patient, however, if professional accountability is adhered to, sensitive information management effectively, for instance avoidance of technical jargon however an informed choice of patient’s consent is crucial as it determine the handover style as well (Lu 2013). Chaboyer suggested that to maintain bedside handover confidentiality integrity nurses should lowering their voices in sharing sensitive information and being away from the bedside, use of written information gives a back-up in continuity care (Chaboyer 2008).

However, handovers have been acknowledged as an important part of a nurse’s learning experience participants indicated that they received little or no training as part of their formal education on how to conduct handover (Wolf 1989). Furthermore, Lu agreed that attention is needed to ensure that adequate training is provided to nurse in order to minimize medical jargon (Lu 2013). Additionally, Pfaff (2014) identified that new graduate nurses often lack confidence in inter-professional interactions, and this may compromise the delivery of safe and effective healthcare (Pfaff 2014).

3. Methodology

The research design was chosen, to determine if nursing students in Namibia know and understand the importance of bedside handovers. It is considered that because the fourth year students are advance students and they should be ready to enter full time employment and render a proper service. There are about eighty final year nursing students and about 42 students took part in this study. The quantitative method is used to emphasize objective measurements statistical, mathematical, or numerical analysis of data collected through questionnaires, that could provide a generalized feeling about the current practice of bedside handovers. Purposeful sampling was used on a tool that was designed to cover all objectives and piloted as well as adjusted before authentic data collection. Purposeful sampling was done with a sample of final year nursing students. They had to respond after they wrote an examination. Firstly they are not skilled in bedside handovers and neither are they knowledgeable. The tool (questionnaire) covered questions under 3 themes such as:

- To determine the if the correct preparation procedures is known
- To identify perils during bedside handovers.
- To verify knowledge of effective practical application of bedside handover.

The objectives are the foundation for two overarching themes and the questions on the questionnaire are interwoven to gather that specific data. Fourth year students who are assumed to be the most advance of the nursing students component are selected as respondents. The total number of respondents is the sample that was selected of 42 students (the sample size was 42 which is n=42). The data collection method is a questionnaire with closed questions is easy to use and coded and they give the respondents the chance to choose from two or more fixed alternatives. Most closed questions use scaling to ensure uniformity in response and one of the most widely used scales are the Likert scales. The scale allowed for respondents to be asks to respond in one of the following ways: strongly agree, agree, and disagree. The sample selected was done purely on the availability of students. Actually such study should be conducted with full time nursing staff to get a more reliable outcome. The
**Research instrument** is a predesigned questionnaire with close-ended questions that was piloted and amended before the actual data collection started. The **procedure** of the study was to get permission for the study from the Nursing faculty, from individual respondents and they were all promised confidentiality, as (ethical requirement as per all research studies), when they gave their permission to conduct the study. A specific date was arranged for conducting the questionnaire, up to data collection. The **data analysis** is orderly arranged data from the questionnaires that are summarized and the similarity, differences and variables be highlighted concerning the bedside hand over into meaningful information.

**4. Analysis**

**4.1 Below are the data in graphs and summary table, analyzed in Excel.**

![Figure 1](image1)

**Table 1**

<table>
<thead>
<tr>
<th>No.</th>
<th>Group</th>
<th>Total number</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21-24</td>
<td>30</td>
<td>72</td>
</tr>
<tr>
<td>2</td>
<td>25-30</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>31-36</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>36 and older</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

In the Figure 1 and Table 1, above is a condensed version of all the ages of the participants in this study. All the respondents are final year nursing students and most of them are between the ages of 21 -24 years and for this study, it represents 72% of the total population. Six of the students are older and belongs to the category 25 – 30 and they represent 14% of the total population. A further group of 5 respondents are a bit older and belongs to the age group category of 31 -36 and they are composition of 12% of the total pollution of this study. One student who took part in this study are older than 36. The responses for this study can be regarded as valid as the respondents are mature adults and these mature respondents are a 72% of the total respondents. This contributes to consider this study as valid and reliable and the outcome and recommendations should be considered accordingly.

![Figure 2](image2)
Table. 2

<table>
<thead>
<tr>
<th>No</th>
<th>Female/male</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>37</td>
<td>88%</td>
</tr>
</tbody>
</table>

In the Figure 2 and Table 2, above is a summary of the representation of gender in this study. The male representation are 5 respondents are males and 37 are female responses which provides a unequal representation of gender as the females are 88% and the males are 12%. With the outcome of the study, it should be known that this study was conducted with more female opinions and few male opinions and the findings should be interpreted likewise. It is always better to have a balanced opinion and that is gathered from a balance in both male and female responses. It is important to note that this variable is not strange coming from the health industry, because worldwide where it is known that fewer males enter the nursing industry and that there is always more females that become nurses, so it relates to the international world. To compare it with the male female intake at UNAM it also relates to that intake, as fewer males are enrolled at the Nursing faculty.

Figure. 3

Table. 3

<table>
<thead>
<tr>
<th>No</th>
<th>Participation</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>39</td>
<td>93%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>3</td>
<td>7%</td>
</tr>
</tbody>
</table>

Figure 3 and Table 3 provide data of participation during Bedside Handover. Most of the respondents (93%) indicated that they have participated in bedside handovers. There was only a mere 7% that indicated that they did not take part in such procedure. For the study this is valuable to have respondents that are knowledgeable about the issue under investigation and this increase the validity of the study. It is important to know that from the total of 42 students a mere 3% did not participate and 39% did take part in bedside handovers. This shows that the respondents are fully aware of the issue they needed to respond on.

Figure. 4
Table. 4

<table>
<thead>
<tr>
<th>No</th>
<th>Year of training</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Year 1</td>
<td>19</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Year 2</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Year 3</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Year 4</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

The procedure of the first bedside handover is displayed in the data of Figure 4 and Table 4. The data reveals that during the first year of nursing about 45% (19 participants) already conducted some bedside handovers. During the second year about 22% of the nursing students (10 participants) who responded in this study did some bedside handovers. In the third year of studies about 21% of student nurses (9) participants responded in this study. The last group of student nurses (4) that are a 10% of the total respondents indicated that they only did their first bedside handover during that fourth year of studies.

Figure 5

Table. 5

<table>
<thead>
<tr>
<th>No</th>
<th>Coverage</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>31</td>
<td>74</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>11</td>
<td>26</td>
</tr>
</tbody>
</table>

Figure 5 and Table 5, displays data of the coverage of bedside handover. A number of 31 respondents indicated positively that it is covered in their study programme, where 11 respondents denied that it is covered. This means that 74% of the student nurses feel that they studied about bedside handovers were 26% felt they did not study about it at all.

Figure 6

Table. 6

<table>
<thead>
<tr>
<th>No</th>
<th>Accountability</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
<td>16</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>20</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
In Figure 6 and Table 6 it is displayed how it is perceived to transfer responsibility and accountability concerning bedside handovers. The two highest intensities are the group that agreed which are 16 respondents (38%) and the other group that strongly agree of 20 respondents and a percentage of 48%. The options of neutral disagree and strongly disagreed totals to 6 respondents that reveal 14% of the total respondents.

In Figure 7 and Table 7 it is important to realise that respondents indicated that a nominated leader in the team that does the bedside handover rounds in the wards at the hospital.

In Figure 8 and Table 8 reveals data about the consent of a patient concerned. There were 7 respondents (17%) that indicated they strongly believe so and others who are also in agreement are 20 respondents (48%) of the total group of student nurses. A group of 13
respondents (31%) of student nurses indicated that they are neutral, but 1 respondent (2%) indicated that he/she felt to strongly disagree and another 1 respondent (2%) felt to just disagree.

Figure 9 and Table 9 reveals data on the opinion of respondents whether there should be relatives present during bedside handovers or not. The highest number plotted is 13 respondents that are 31% of the student nurses who were part of the population of this study and they all agreed to this statement. The group that strongly agreed is about 8 respondents that amounts to 19%. A further 8 students indicated that they are neutral that amounts to 19% of the respondents felt to be neutral to this comment. There are 8 respondents (19%) who strongly disagree and there are 5 respondents (12%) who disagree.

Figure 10 and Table 10 reveals data on the opinion of respondents whether the records of patients should be updated before the bedside handover. There are 17 respondents that are 40% of the student nurses who were part of the population of this study and they all agreed to this statement. The group that strongly agreed is about 18 respondents that amount to 43%. A
further 4 students indicated that they are neutral that amounts to 10% of the respondents felt to be neutral to this comment. There are 1 respondent (2%) who strongly disagree and there are 2 respondents (5%) who disagree.

![Figure 11: Prior Notification](image)

<table>
<thead>
<tr>
<th>No</th>
<th>Prior Notification</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>21</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

About prior notification, Figure 11 and Table 11 reveal data on the opinions of respondents. There are 9 respondents (21%) who were part of the population of this study and they all strongly agreed to this statement. The group that agreed is about 21 respondents (50%). A further 7 students (10%) indicated that they are neutral to this comment. There are a further 3 respondents (7%) who strongly disagree and there are 2 respondents (5%) who only just disagree.

![Figure 12: Staff Participation](image)

<table>
<thead>
<tr>
<th>No</th>
<th>Staff</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>6</td>
<td>14</td>
</tr>
</tbody>
</table>

About staff participation, Figure 12 and Table 12 reveal interesting data on the opinion of respondents. There are 8 respondents (19%) that strongly agreed to this statement. The group that agreed is about 13 respondents 31%. A further 8 respondents (19%) indicated that they are neutral. There are 7 respondents (17%) who strongly disagree and there are 6 respondents (14%) who disagree.
In Figure 13 and Table 13 the request for visitors is revealed. There are 28 respondents (67%) that strongly agreed to this statement. The group that agreed is about 8 respondents (19%). A further 3 respondents (7%) indicated that they are neutral. There are 2 respondents (5%) who strongly disagree and there are 1 respondent (2%) who disagree.

In Figure 14 and Table 14 it is displayed how respondents feel about the patient’s comfort. Some respondents strongly agreed with the statement and they totaled to 18 with a percentage of 43%. The group that agreed which are 16 respondents (38%). The options of neutral disagree and strongly disagreed totals to 7 respondents that reveal 17% of the total respondents.
Table. 15

<table>
<thead>
<tr>
<th>No</th>
<th>Info format</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>19</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

About the format of the information, Figure 15 and Table 15 reveals the data from the populated sample. There are 13 respondents (31%) that strongly agreed to this statement. The group that agreed is about 19 respondents 31%. A further 10 respondents (24%) indicated that they are neutral. There are no respondents who strongly disagreed or disagreed.

Table. 16

<table>
<thead>
<tr>
<th>No</th>
<th>Duration</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>26</td>
<td>62</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

About the duration of bedside handover duration, Figure 16 and Table 16 reveal all gathered data. There are 4 respondents (10%) that strongly agreed to this statement. The group that agreed is about 8 respondents 19%. A further 26 respondents (62%) indicated that they are neutral. There are 3 respondents (7%) who strongly disagree and there is 1 respondent (2%) who disagree.
Figure 17 and Table 17 reveals the consideration of importance of information clarification. The 7 respondents (17%) strongly agreed to the importance of information clarification. The group that agreed is about 12 respondents (29%). A further 11 respondents (26%) indicated that they are neutral. There are 8 respondents (19%) who strongly disagree and there are 4 respondents (10%) who disagree.

Figure 18 and Table 18 reveals the summary of data concerning the consideration of importance of information clarification. There are 4 respondents (10%) that feel they strongly agreed to the importance of information clarification. The group that agreed is about 11 respondents (26%) that agreed and a further 13 respondents (31%) indicated that they are neutral. There are 7 respondents (17%) who strongly disagree and there are 7 respondents (17%) who disagree.
Figure 19

Table 19

<table>
<thead>
<tr>
<th>No:</th>
<th>Discharge inclusion</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 19 and Table 19 reveals the discharge planning inclusion. The 10 respondents (24%) that strongly agreed to the importance of discharge planning inclusion. The group that agreed is about 25 respondents (60%). A further 7 respondents (17%) indicated that they are neutral. There is nobody who responded on strongly disagreeing or who disagrees.

Figure 20

Table 20

<table>
<thead>
<tr>
<th>No:</th>
<th>High risk</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly agree</td>
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<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

In Figure 20 and Table 20 data reveal that the Bedside Handover activity is considered as a highly important activity. From the total sample 1 respondent (2%) strongly agreed. The group that who agreed is about 8 respondents 19%. A further 25 respondents (60%) indicated that they are neutral. There are 7 respondents (17%) who strongly disagree and there are 1 respondent (2%) who disagree.
In Figure 21 and Table 21 data reveal the cause of incorrect bedside handover procedures and it indicates that it causes prolonged stay of the patient in the hospital. The 2 respondents (5%) strongly agreed to the importance of information clarification. this statement. The group that agreed is about 19 respondents 45%. A further 14 respondents (33%) indicated that they are neutral. There are 4 respondents (16%) who strongly disagree and there are 2 respondents (7%) who disagree.

Figure 22 and Table 22 reveal data of delaying of the treatment of patients if bedside handover was not correctly conducted. The 2 respondents (5%) strongly agreed to the importance of information clarification. this statement. The group that agreed is about 19 respondents 45%. A further 14 respondents (33%) indicated that they are neutral. There are 4 respondents (16%) who strongly disagree and there are 2 respondents (7%) who disagree.
Figure 23 and Table 23 the data reveal the influence of medical error. The 6 respondents (14%) strongly agreed to the importance of information clarification. This statement. The group that agreed is about 12 respondents 29%. A further 13 respondents (31%) indicated that they are neutral. There are 10 respondents (24%) who strongly disagree and there are 1 respondent (2%) who disagree.

Figure 24 and Table 24 the data reveal that bedside handover allows room for error rectification. There are 3 respondents (7%) strongly agreed to the importance of information clarification. This statement. The group that agreed is about 24 respondents 57%. A further 14 respondents (33%) indicated that they are neutral. There are 1 respondent (2%) who strongly disagree and there are no respondents who disagree.
Figure 25

Table 25

<table>
<thead>
<tr>
<th>No:</th>
<th>Medical terms</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>Strongly agree</td>
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<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>23</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>4</td>
<td>10</td>
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<tr>
<td>5</td>
<td>disagree</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 25 and Table 25 reveal the importance of the use of medical terms. The 1 respondent (2%) strongly agreed to the importance of information clarification. This statement. The group that agreed is about 23 respondents 55%. A further 14 respondents (33%) indicated that they are neutral. There are 4 respondents (10%) who strongly disagree and there are no respondents who disagree.

Figure 26

Table 26

<table>
<thead>
<tr>
<th>No:</th>
<th>Equipment</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
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<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Agree</td>
<td>27</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>disagree</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 26 and Table 26 reveal data about the equipment scan. From the total population there are 7 respondents (17%) strongly agreed to the importance of information clarification. This statement. The group that agreed is about 27 respondents 64%. A further 8 respondents (19%) indicated that they are neutral. There are no respondents who strongly disagree as well as no respondents who disagree.
4.2 Findings and discussion

The data collected was organized and condensed in a way that it was manageable and themes were created from the objectives of the research study. The data is integrated and presented in this paper in the form of (Table 1 above) descriptive narrative under the objectives as the themes. Themes were created for the content analysis namely:-

- The organizational feature bedside handover procedure
- To indentify the perils during bedside handover
- To verify the knowledge of practical application of bedside handover

4.2.1 The organizational feature bedside handover procedure

Handover is fundamentally a nursing activity that determines the quality of care that the patients will receive Sherlock (1995). A nurse has a professional responsibility toward the well- organized bedside handover preparation. Chaboyer (2010)stated handover needs to be well- organized with an leader elect , the finding shows a 57% respondent on the scale of strongly agree to agree, although the positive margin is high, a worrisome 24% being indecisive, and 19 % disagrees this indicates that it is less important to receive instructions. On the contrary, this will affect the selection and allocation of staff members who are nominated to ensure continuity of patient care, 50% respondent positively that staff allocation is crucial and 19% are neutral and 31% negatively opposed the importance of continues care. The neutral and negatively agreed respondent comprises of 50% of the total population of the study. The knowledge of staff thus is less responsibility of ensuring continues handover and maximizing the utilization of staff available. A study was conducted in Namibia about health work force shortages and some inequities in their distribution of work are stated in the findings in a case study (McQuide 2013).

This study confirms that most of the respondents (86%) in which 38% and 48% provided strongly to agree responses on the scale. However, an insignificant amount of 18% ranging from neutral to strongly disagreement was among respondents of indicating the responsibility to the bedside handover. Furthermore, responses regarding the preparation related issues are demonstrating a conflicting pattern, as one of the responsibilities in bedside handover preparation is to avoid interruptions, which according to Brixey (2005) is a frequent event within health care settings. In Table: 1 below is contributing activities that may cause interruptions during bedside handover if not managed properly.

In Table: 1 below is contributing activities that may cause interruptions during bedside handover if not managed properly.

Notification of handover to the patient and staff members ensures readiness and willingness for the procedure and it minimizes unnecessary traffic in ward. Consequently it gives an opportunity to reconfirm the consent of the patient to participate in the process. The finding indicates a positive response 71% in favor of prior notification and 17% neutral, and 10% disagreed negatively. Surprisingly, the respondent draws a picture of patient’s consent disregarded in bedside handover 17% hence, 65% do support that the patient consent that should be obtained before the process.

The family plays a supportive role in the patient care, and may assist to alleviate hospital anxiety by being companions to the patient. The results below indicate an equal split 50% of the respondents values the presence of the family at handover and the other 50% of the respondents are divided amongst 19% who are neutral to 31% of the respondent that disagrees in their responses.

The responses of the visitors indicate a hospitable value of 86 % of the respondents that agrees to the fact that visitors should leave the ward before bedside handover. In this way the integrity of the patient is surely safe guarded. However, privacy should be maintained for instance, the staff to lower their voices (confidentiality and privacy) pitch neutral and be friendlier and more caring to the patients.

The table below is a summary of how to conduct bedside handovers per opinion of the respondents of this study.
Updating of the patient record before bedside handover is fundamental in the nursing bedside handover as it provides an opportunity to identify lost written information and it may serve as backup tool for verbal communication. Webster (1999) reported that information obtained at handover provides nurses with little detail about the patient, the nursing needs or the effectiveness of the previous. In Table: 2 below indicate, majority of 83% the respondent value the importance of a records that should be updated to be current and congruent with patient’s condition. However, a merely 7% disagree. The patient comfort is a very important aspect as it increases the patient’s engagement. Most 81% of the respondent agreed with patients comfort whilst 12% are neutral and mere 5% are opposing the notion. The table below is a summary of how to conduct bedside handover as per opinion of the respondent.

### Table 1

<table>
<thead>
<tr>
<th>Beside Handover Preparation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior notification and alertness of the pending handover process to the patient is imperative</td>
<td>9</td>
<td>21</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of respondent</td>
<td>21%</td>
<td>50%</td>
<td>17%</td>
<td>7%</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May patient’s relatives be allowed at the handover</td>
<td>8</td>
<td>13</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of respondent</td>
<td>19%</td>
<td>31%</td>
<td>19%</td>
<td>19%</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior handover visitors should be requested to leave to ensue privacy</td>
<td>28</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>67%</td>
<td>19%</td>
<td>7%</td>
<td>5%</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient’s consent</td>
<td>7</td>
<td>20</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>17%</td>
<td>20%</td>
<td>13%</td>
<td>1%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2

<table>
<thead>
<tr>
<th>Beside Handover Preparation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient record should be updated prior to the handover process</td>
<td>18</td>
<td>17</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of respondent</td>
<td>43%</td>
<td>40%</td>
<td>10%</td>
<td>2%</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient comfort (e.g. pain free) should be ensured before handover commences</td>
<td>18</td>
<td>16</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of respondent</td>
<td>43%</td>
<td>38%</td>
<td>12%</td>
<td>5%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.2.3 To Identify the Perils of Bedside Handovers

Threats to patient safety during clinical handover have been identified as an ongoing problem (Botti 2009). Therefore, it’s crucial to ensure that the information is conveyed is, in current, knowledgeable and detailed way (Parker, 2004).

The respondent indicates an infrequent rating regarding the bedside handover as a risk event, majority 60 % are indecisive and 21% do agree to be a risky procedure 19% disagree.

Medication errors and wrong procedures respondent 41% are recognizing this fatal danger, 31% are indecisive and 26% do not agree that bedside could adversely implicate the patients outcome.

However, respondent indicates a consistency in one aspect in both that bedside handover prolongs patient hospital stay and delays in treatment with even rates 33% being neutral and with the trend of 50% and 45% agreeing respectively whilst a non significant difference responses poses by those who disagree ranging from 23%-24% respectively. Furthermore, (Kaur 2014) argues that safe nursing practice needs an understanding of the legal boundaries, and in bedside handover is to be legally accountable for one’s action. Additionally, it is reported that gaining knowledge raises awareness of personal and professional accountability and the dilemmas of practices (Hall 2006:34).

Therefore, is imperative the nurse to be aware of possible danger embedded in the bedside handover procedure in order to increase its accuracy, effectiveness and patient safety.
The table below is a summary of how to conduct bedside handover as per opinion of the respondent.

**Table. 3**

<table>
<thead>
<tr>
<th>Bedside Handover Perils</th>
<th>1</th>
<th>8</th>
<th>25</th>
<th>7</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handover is a high risk event</td>
<td>Percentage of respondent</td>
<td>2%</td>
<td>19%</td>
<td>60%</td>
<td>17%</td>
</tr>
<tr>
<td>Handover can cause medication errors and wrong procedures</td>
<td>Percentage of respondent</td>
<td>14%</td>
<td>29%</td>
<td>31%</td>
<td>24%</td>
</tr>
<tr>
<td>Handover may prolonged stay of patient in the hospital</td>
<td>Percentage of respondent</td>
<td>5%</td>
<td>45%</td>
<td>33%</td>
<td>16%</td>
</tr>
<tr>
<td>Bedside handover creates delays in patient treatment and care</td>
<td>Percentage</td>
<td>12%</td>
<td>29%</td>
<td>33%</td>
<td>19%</td>
</tr>
</tbody>
</table>

5. Conclusion and recommendations

In conclusion, this study of bedside handover amongst final year nursing students in a Namibian training institute provides a description of the knowledge and underrating of the bed handover’s structures, processes and adverse events that could arise during the process this information may be used as of training the pre service students for more effective practical application This study may give an opportunity for the following: To replicate a similar study with a larger sample. To conduct an observational study to observe any changes in practice of nurses after providing them with adequate knowledge concerning bedside handover Finally, to contact a study to assess knowledge, practice and attitude of nurses regarding bedside handover in nursing care.

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The 7 Habits of Highly Effective People

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Source literature


Introduction

The excerpted literature is a fraction of Part 2, Habit 2 of the book “The 7 Habits of Highly Effective People”. It discusses about the particular sense and explanation or rationalization of the meaning of Habit 2. To lead the readers into better position of understanding and broader perception of what it means to “Begin with the end in mind”, the author establishes the clarity, definitions, and bases of common understanding between the reader and the author.

For an idea to be properly understood and digested by the readers, it is imperative for the author to provide a foundation of the facts, principles and definitions for the important matters being discussed about Habit 2 and its essence and significant connection to every contextual principle being considered and explained in the book.

The excerpt thus, elucidates the principles and bases on which habit 2 are based and founded upon. These explanations and bases help the readers to accurately understand the views and paradigms that the author is trying to convey to them. The extract explains that habit 2 is based on the principles of personal leadership and on the principle that “All things are created twice” however, not all first creations are consciously designed by a person himself. The author illustrates that if we do not generate our self-awareness, we will always reactively live by the influence of other people, environment and pressures of circumstances. This influence was termed by the author as scripts handed to us in our early years.

Review of literature

Habit 2 of the 7 Habits of highly effective people postulates that one way to be highly effective is to begin with the end mind. It means that you have to set your paradigm and goals and make a clear picture of how things should be at the end of your life. The goals you laid down will set the frame of reference and criteria of everything that you do in life and channel all your efforts to reach the goals. It means having a lucid thoughts and perception of objectives and end goals. You have to clearly define where you are going and recognize where you are now so that every stride will lead you to the right direction. Such principles have a valid application for people in walks of life. Without these principles, people stand prey and get lock in a very busy life without really being effective.

People strive so hard to get higher echelon only to discover that stairs they are climbing is tilted towards the wrong direction. Our extremely busy lives has plunged us into ineffectiveness that subsequently led us to attain meaningless triumphs that have cost us so many things that we later recognize to be more important to us. Our very busy struggle to climb the echelon leading to the wrong direction has obscured our vision, and only when these more important things in life were gone that we become aware that these were the ones that really matter to us.

“Begin with the end in mind” is based on the principle that all things are created twice (p. 99, para. 2). The first creation is the mental creation (plans, outline, design, raw details), and the second creation is the actual physical creation. Before we do things, before we make or
construct anything and before we start anything, activity, project, and undertaking, we first plan and create a detailed mental visualization of procedures, system, organization, outcome, regulations and necessities. It means that before putting things into actual reality, we first mentally visualize all the details and necessities. Not all first creations, however, are consciously created by us. In considerable part and length of our lives, especially in the early years of our lives, we subconsciously and reactively live according to the influence of peers, elders, family, environment and circumstances. These influences were passed on to us as part of culture, customs, upbringing and ways of living and were termed as scripts. Unless we develop our own personal conscious capacity and self-awareness, we will not be able to clearly define and make our own personal “first creation”.

In other words, “Begin with the end in mind” is also based on personal leadership. Which means that leadership is the mental creation (the first creation) and management is the physical creation (the second creation). To have a clearer distinction between leadership and management and as expounded by the author, try to visualize a group of manufacturers (leaders and problem solvers) clearing their way through a forest and the managers (procedure and policy makers) follow them to fix and sharpen all the equipment required to clear the way. The leader is person who goes up the highest tree and analyzes the whole scenario, and shouts that we are in the wrong forest. We are always busy clearing the underbrush without realizing that we are in the wrong forest. According to Peter Drucker and Warren Bennis, “Management is doing things right; leadership is doing the right things”. Management is the competence in going higher in the echelon, and leadership ensures that the echelon stair is leaning towards the right direction.

Article summary

This article explicates Habit-2 (“Begin with the end in mind”) of “The 7 habits of highly effective people”. It means that in everything we do, we should start with a clear picture of our future or the end goal of our lives. We have to begin with our objectives and we have to recognize where we are today and where we presently stand to be able to find the best means and ways toward our end, our goal. Such end or goal will guide us to integrate and consolidate all our efforts, behavior, and visions towards that goal. Since it is very easy for us to be trapped in a very busy atmosphere of our lives, the end in mind will set the parameters to which everything we do will be referred and everything else will be scrutinized according to the context of such end or goal. Subsequently, this will ensure that as we struggle to go higher in the social echelon, the stair we are climbing is not leaning towards the wrong medium.

“Begin with the end in mind” is based on the principle that everything goes through two creations, the mental creation and the actual creation. All that we do and make are first visualized and planned with details before we actually execute and make them, but not all first creations are consciously created by us. Our own personal first creation is unconsciously influenced by our culture, customs, family, peers, training and environment, and unless we develop our personal awareness and realize that we should unshackle ourselves from this influence and be independent, we will not be able to make, manage and lead our own first creation.

That simply means that “Begin with the end in mind” is also based on the principle of personal leadership and that leadership is the mental creation and management is the second creation. Leadership will ensure that we are in the right direction and medium, and management will ensure that we have the appropriate requirements and equipment as we progress toward the end we have in mind.

Article structure

To illustrate how this article has been organized, the article structure is hereby provided. This will guide the reader on the format and arrangement of discussions and presentation of facts. At the outset are the facts regarding the source literature that will attest to the veracity
and real existence of the academic material on which this article was based. This segment declares the details of the author, publisher, publication date, book etc. from which the source literature was extracted.

Immediately follows, is the introduction that purposely serves as an abstract and subsequently establishes the background of the source literature and this article. This particularly provides the readers with the bird’s eye view of this article and the source literature, acquaints the readers about the topics, and guides the readers on what to expect in the succeeding discussions.

Follows thereafter is the review of literature. In line with the views of the author, this section fleshes out, re-evaluates and show the relationships of the most important points, ideas, principles, details and arguments of the source material. This is the main discussion of the whole article that presents the re-examination of the concepts, facts, essence and the whole thought of the material.

After the review, comes the summary. It is the short version of the whole material itself. The summary pulls together all the major points. This section is the objective, condensed and concise restatement of author’s main ideas including few opinions of the literature reviewer which are analogous to the author’s views.

The last part of the article is the critique which is the objective evaluation of the aptitude and credentials of the author and the accuracy, currency, relevance and objectivity of the contents of the source material.

**Article critique**

**Authority**

Over his lifetime, Stephen inspired millions with the power of universal principles. As he travelled the globe many times over, his message was a simple one: for true success and meaning in life, we must be principle-centered in all areas of life. A teacher at heart, he often taught: "there are three constants in life: change, choice and principles."

From the oval office, the board room, community halls and to the school house and family room, Stephen taught the mindset, skill set and toolset found in the 7 habits of highly effective people, his seminal work. His legacy is woven in the 7 habits, and, just as these habits are universal and timeless, so is Stephen R. Covey, who is admired around the world for his simple, yet powerful, universal, timeless teachings.

Recognized as one of Time magazine’s 25 most influential Americans, Stephen R. Covey was one of the world’s foremost leadership authorities, organizational experts, and thought leaders.

Covey was the author of acclaimed books, including the international best seller, The 7 Habits of Highly Effective People, which has sold more than 25 million copies in 40 languages throughout the world. Other best sellers authored by Covey include First Things First, Principle-Centered Leadership, The 7 Habits of Highly Effective Families, and the 8th Habit: From Effectiveness to Greatness.


Millions of people and thousands of clients throughout the world have personally experienced Covey's approach and commitment to teaching universal principles. His approach has been enormously empowering and it transcends differences of every kind—political, philosophical, religious, socio-economic, generational, gender, lifestyle, etc.

Over the years, clients from around the world—including from India, Japan, Korea, Africa, Israel, Saudi Arabia, Indonesia, and beyond—have commented to Stephen Covey that The 7 Habits intimately relate to their culture, country, organization, and family. He responded, "You recognize these principles because they are common to every society that prospers and
endures." These universal, timeless principles have stood the test of time with millions of people around the world and will continue to do so in the future.

Stephen Covey passed away on July 16, 2012, with his loving wife, children and their spouses, grandchildren and great-grandchildren present. His legacy to the world is Principle-Centered Leadership and his many contributions will live on through the principles he loved, taught and espoused.

**Accuracy**

All the main points, argumentations, paradigms, principles and ideas in the source literature were properly, clearly, accurately and logically explained. The details were very clear and were very reasonably presented and elucidated. The supporting explanations, evidences, examples and illustrations of the highly academic ideas and psychological realities were exceptionally factual and are precisely happening in our real life setting. The terminologies and word choices and the methods by which they were expounded were very easy to comprehend. The main points and the supporting ideas were logically organized. Subsequently, this certainly ensured a very smooth flow of ideas and well thought-of concept of presentation of facts and consequently this again guaranteed the comprehensive digestion of the whole literature. The truthfulness and accuracy of the facts and explanations were all based on real life settings and actual psychology of human behaviour. The references and the cited materials that help support the main ideas were taken from the works of highly qualified scholars who are experts in their respective field of discipline.

**Currency**

Considering that the book from where the article was taken was first published in 1992, the article is fairly old but its value and application did not and will not change or will be outdated with the passage of time. The article exemplifies the psychological realities of our modern day to day busy life. The truths expounded by the source literature are actually happening in our lives. Everything that were discussed and logically explained are factual and are based on the real psychology of human tendencies, actuations, behaviour, mores, culture, customs and traditions. In fact, all discussions and elucidations are true and are applicable and inherent to all kinds of human race living in this planet. Every point and its explanations in the source literature are based on real life experiences and are excellently articulated beyond reasonable doubt and beyond question. The psychological principles and aura of the main ideas are valid in any level of human life and have a very legitimate application for people in all walks of life. On personal note, most if not all the points examined therein, are true and still exist in my personal life and mostly are parallel and congruent to my own personal experience.

**Relevance**

The contents of the source literature are coherently and legitimately relevant to its title. Every information, idea and principle conveyed in the contents of the article explains and supports the main idea of Habit-2. The quoted materials and references were very relevant to the to the title and to the main ideas that were develop to clearly explain the meaning of “Begin with the end mind” and explicate the principles, realities and intrinsic psychological propensity on which the Habit 2 was based and instituted. The cited materials and references combined with the expertise and personal and real life experience of the author, explicitly articulated the relevance of the content to its title and further provided broader and straightforward understanding to the readers. The logical arrangements of ideas and detailed discussions, the coherence of sentences and paragraphs and the smooth transitions naturally verbalized their concrete significance and relevance to the title. Consequently, such relevance certainly facilitated an easy flow of comprehensive, conceptual and contextual absorption of the gist and essentials of the article.
Objectivity

All the information contained and detailed in the source literature were gathered, organized and developed objectively based on facts and not on the subjective opinion of the author. Considering the fact that the cited materials and quotations from references that were used to support the major arguments and the essence of the article as a whole were taken from highly acclaimed books, scholarly writings and academic articles of authors who are excellent professionals and experts of their respective field of discipline, the contents of the article evolved from a highly objective collection of facts, real life experiences, academic endeavour, psychology of human nature and psychosocial realities. The contextual illustrations and examples that further explain the substance of the main ideas and the facts were objectively based on real life experiences and not on the emotional and sentimental opinion of the author. With reference to the credentials, track record, expertise and the scholarly writings of the author, it is very evident that the source literature was objectively developed, free from subjective judgement, personal biases, and opinionated partiality.

References

Case Study Report of Master A.A with Osteomyelitis and Pathological Fracture

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Abstract

This case study is about Master A. A, a 4 year old boy with sickle cell disease who was diagnosed of osteomyelitis with pathological fracture of the right humerus. Patient has been hospitalised before for dactylitis on the 7th July, 2015, was treated and discharged home on the 16th July, 2015. He was however readmitted via Children Outpatient Department of Oni and Son Memorial Hospital, Ibadan, Nigeria on the 21st July, 2015 on account of history of fever of 6 days duration and swelling of the distal 2/3 third of the left forearm, there was also swelling of the right upper hand which was associated with pain and loss of function. A provisional diagnosis of osteomyelitis with pathological fracture of the right humerus was made by the doctor in charge. He was later reviewed by the paediatric team and was admitted into Ward I for further investigations and proper management. Afterwards, Master A, A had cast applied on the right humerus due to the fracture as confirmed by the X-ray report. Nursing management was carried out by adopting Quality Care Model which was proposed by Duffy J. R (2005).

Keywords: Sickle cell disease, Osteomyelitis, Pathological fracture, Master A. A

Background to patient’s case study

This case study is about Master A. A, a 4 year old boy with Sickle cell disease (SCD) who was diagnosed of osteomyelitis with pathological fracture of the right humerus. He lives with his parents at No.2, Peace Street, Akaru, Oluyole extension, Ibadan, Oyo State. Nigeria. First contact with the client was in Ward I, Oni and Sons Memorial Hospital where he was admitted for proper management. The objectives of this case study is to have current knowledge and skills about management of patients with osteomyelitis and pathological fracture in SCD paediatric patient and to utilize the opportunity of nursing process to provide individualized care for the patient.

Introduction

Osteomyelitis is an inflammation of the bone caused by an infecting organism although bone is normally resistant to bacterial colonization, events such as trauma, surgery, presence of foreign bodies, or prostheses may disrupt bony integrity and lead to the onset of bone infection (Robinson, 2014). Osteomyelitis can also result from hematogenous spread after bacteremia. When prosthetic joints are associated with infection, microorganisms typically grow in bio-film, which protects bacteria from antimicrobial treatment and the host immune response. Early and specific treatment is important in osteomyelitis, and identification of the causative microorganisms is essential for antibiotic therapy. The major cause of bone infections is Staphylococcus aureus (Wright & Nair, 2010). Infections with an open fracture or associated with joint prostheses and trauma often require a combination of antimicrobial agents and surgery. When bio-film microorganisms are involved, as in joint prostheses, a combination of rifampicin with other antibiotics might be necessary for treatment (Concia, Prandini, Massari, Ghisellini, Consoli & Menichetti, 2010).
A pathologic fracture on the other hand is a bone fracture caused by disease that led to weakness of the bone structure. This process is most commonly due to osteoporosis, but may also be due to other pathologies such as: sickle cell disease cancer, infection, inherited bone disorders, or a bone cyst (Arkader & Dormans, 2010). Only a small number of conditions are commonly responsible for pathological fractures, including osteoporosis, osteomalacia, Paget's disease, osteitis, osteogenesis imperfecta, benign bone tumours and cysts, secondary malignant bone tumours and primary malignant bone tumours. Pathological fractures present as a chalkstick fracture in long bones, and appear as a transverse fractures nearly 90 degrees to the long axis of the bone. In a pathological compression fracture of a spinal vertebra fractures will commonly appear to collapse the entire body of vertebra. In circumstances where other pathologies are excluded (for example, cancer), a pathologic fracture is diagnostic of osteoporosis irrespective of bone mineral density (Arkader & Dormans, 2010). Pathological fractures of the long bones are a common complication of metastatic disease caused by a variety of primary malignant tumours (Zimmerli & Sendi, 2011). Pathological fractures are fractures that occur in abnormal bone. Although the term can be used in the setting of a generalized metabolic bone disease, it is usually reserved for fractures through a focal abnormality.

Pathological fracture in children

Pathological fractures in children can occur as a result of a variety of conditions, ranging from metabolic diseases and infection to tumours (Dormans & Pill, 2002). Snyder, Hauser-Kara & Hipp (2006) suggested that fractures through benign and malignant bone tumours should be recognised and managed appropriately by the orthopaedic surgeon. The most common benign bone tumours that cause pathological fractures in children are unicameral bone cysts, aneurysmal bone cysts, non-ossifying fibromas and fibrous dysplasia. Although pathological fractures through a primary bone malignancy are rare, these should be recognised quickly in order to achieve better outcomes. They stated further that, pathological fracture should be suspected in a paediatric patient when there is a fracture associated with minimal trauma, when the location of the fracture is unusual or when an abnormal process in the bone is seen in the radiographs. Supporting this notion, Dormans & Pill (2002) documented that, intrinsic processes, such as changes in the mineral density of the bone from bone tumours (both benign and malignant), diseases like osteogenesis imperfecta, or infection; and extrinsic processes, such as internal fixation, biopsy tracts and radiation, can cause changes to the normal biomechanics of bone. The altered strength of the bone and the load applied are the factors that will determine the risk of a pathological fracture (Dormans & Pill 2002; Snyder, Hauser-Kara & Hipp, 2006). Pathological fractures are often associated with pain and deformity and can be differentiated into micro- or macro-fractures. Micro-fractures most commonly occur in trabecular bone in the metaphysis or vertebral bodies and are typically non-displaced. Many of these go unrecognised (Dormans & Pill, 2002). A thorough history, physical examination and review of plain radiographs are therefore crucial to determine the cause and guide treatment (Jackson, Theologis, Gibbons, Mathews, & Kambouroglou, 2007). In most benign cases the fracture will heal and the lesion can be addressed at the time of the fracture, or after the fracture is healed. To treat these fractures appropriately, a comprehensive approach must be used, and attention to detail is paramount (Peabody & Simon, 1996).

What is sickle cell disease (SCD)?

Sickle cell disease (SCD) is a group of well-defined hemoglobinopathies involving abnormal alternation of the globin moiety. The molecular basis of SCD has been demonstrated to be the substitution of valine for glutamic acid in the sixth position from the N-terminus of the beta chains of hemoglobin (Hb) (GBD, 2014). Decreased oxygen causes the Hb molecules to form insoluble tetramers, which subsequently polymerize, causing deformation of the red cell membrane into a sickled shape. The result is a red blood cell that
is less able to transverse the capillaries of the microcirculation, disposing the end organ to hypoxia and ischemic damage when sickle cells are present in sufficient quantity. Common genotypes include homozygous S mutation (sickle cell anaemia, HbSS disease), heterozygous combinations such as HbS and HbC (HbSC disease), and beta-thalassemia mutation (HbS-beta-thalassemia) (GBD, 2014).

Almost 300,000 children are born with a form of sickle-cell disease every year, mostly in sub-Saharan Africa, but also in other parts of the world such as the West Indies and in people of African origin elsewhere in the world. In 2013 it resulted in 176,000 deaths up from 113,000 deaths in 1990 (GBD, 2014). The condition was first described in the medical literature by the American physician James B. Herrick in 1910, and in the 1940s and 1950s contributions by Nobel prize-winner Linus Pauling made it the first disease where the exact genetic and molecular defect was elucidated. Sickle-cell disease may lead to various acute and chronic complications, several of which have a high mortality rate (Yawn, Buchanan, Afenyi-Annan, Ballas, Hassell, James et.al, 2014). Three quarters of sickle-cell cases occur in Africa. A recent WHO report estimated that around 2% of newborns in Nigeria were affected by sickle cell anaemia, giving a total of 150,000 affected children born every year in Nigeria alone(WHO, 2010). The carrier frequency ranges between 10% and 40% across equatorial Africa, decreasing to 1–2% on the North African coast and <1% in South Africa.(WHO, 2011) There have been studies in Africa that show a significant decrease in infant mortality rate, ages 2–16 months, because of the sickle-cell trait. This happened in predominant areas of malarial cases (Oniyangi & Omari, 2006; Aidoo Terlouw, Kolczak, McElroy, ter Kuile, Kariuki et al.2002).

**Investigations carried out on the patient, results and their significance**

<table>
<thead>
<tr>
<th>Date</th>
<th>Investigation</th>
<th>Results</th>
<th>Normal Readings</th>
<th>Significance of Results: High, Low, Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>27/7/15</td>
<td>x-ray</td>
<td>Fractured bone with fragment on the upper 2/3 of the right humerus</td>
<td></td>
<td>Revealed fracture right humerus</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Pack Cell Volume</td>
<td>20%</td>
<td>Male-40-54% Female-37-50%</td>
<td>Low</td>
</tr>
<tr>
<td>28/7/15</td>
<td>White Blood Cell</td>
<td>8,700 cells/mm³</td>
<td>4000-10000 cells/mm³</td>
<td>Normal</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Neutrophil</td>
<td>28%</td>
<td>20-50%</td>
<td>Normal</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Lymphocytes</td>
<td>72%</td>
<td>20-50%</td>
<td>High</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Eosinophil</td>
<td>00%</td>
<td>1-8%</td>
<td>Low</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Basophil</td>
<td>00%</td>
<td>0-1%</td>
<td>Normal</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Monocytes</td>
<td>00%</td>
<td>2-10%</td>
<td>Low</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Blood group</td>
<td>ARh D Positive</td>
<td>A, O, B, AB</td>
<td>Normal</td>
</tr>
<tr>
<td>28/7/15</td>
<td>Haemoglobin genotype</td>
<td>HbSS</td>
<td>Hb AA, AS</td>
<td>Abnormal</td>
</tr>
</tbody>
</table>

**Source:** Patient’s case note number 1278540 August, 2015
Parasitology

<table>
<thead>
<tr>
<th>DATE</th>
<th>INVESTIGATIONS/TESTS</th>
<th>RESULTS</th>
<th>NORMAL READINGS</th>
<th>SIGNIFICANCE OF RESULT: HIGH, LOW, NORMAL.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Malaria parasite</td>
<td>-</td>
<td></td>
<td>Normal</td>
</tr>
</tbody>
</table>

**Source:** Patient’s case note number 1278540 August, 2015

**Management of master A. A**

**Ethical consideration**

Informed consent was taken from the mother to present this case study in a conference and for possible publication. In addition, permission was granted by the Management of Oni and Son Children Hospital, Ibadan, Oyo State, Nigeria to be involved in the care of Master A. A for a period of 6 weeks while on clinical posting.

**Nursing management**

The Quality Care Model (QCM) Theory was adopted in the care of Master A. A. According to Duffy (2005), knowledge of caring relationships is a significant issue for nursing. The theory emphasises the importance of quality care and that through caring relationships, nurses interact, connect, and come to know the meaning of illness, beliefs, and preferences of the patient and families. The QCM assumes that feeling cared for is a positive concept and is desired by recipients of the health care process. It also defines persons as "multi-contextual beings who are connected to the larger pluralistic world (Duffy, 2005; Duffy & Hoskins, 2003) Furthermore, persons are viewed in relation to one another, and thus are interdependent with others, the model suggests that feeling cared for occurs as a result of caring interactions, and that receiving quality healthcare is a patient expectation. It is also contextual and specific to each individual patient; no two are the same.

Applying Duffy’s theory, Master A. A was nursed in a conducive therapeutic environment in Ward I of Oni and Son Children Hospital along with other patients. He was made comfortable on bed with required provision to meet his daily needs. His physical and nursing care were met by the nurses and other care giver especially his mother through guiding; directing, and teaching. These approaches strengthen his care in the contemporary concept of health promotion and health maintenance towards recovery.

**Conservative treatment**

**Prescribed medication on admission**

<table>
<thead>
<tr>
<th>DRUG</th>
<th>ACTION</th>
<th>NURSING IMPLICATION</th>
<th>ADVERSE EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intravenous Pentazocine</td>
<td>-Treats moderate to severe pain. -Is sometimes given before or after a surgery. -May also be given with a general anaesthesia before an operation. -Belongs to a class of drugs called narcotic analgesics.</td>
<td>-It should not be taken on empty stomach. -It should not be used with alcohol. -Overdosage should be avoided. -Patient should be monitor for possible side effect.</td>
<td>Dizziness; drowsiness; exaggerated sense of well-being light-headedness; nausea; redness, swelling, or irritation at injection site; vomiting. -High dose may cause high blood pressure or high heart rate. -It may also increase cardiac work after myocardial infarction when given intravenously and hence this</td>
</tr>
<tr>
<td>Intravenous Cefuroxime</td>
<td>- It acts against Haemophilus influenzae, Neisseria gonorrhoeae, and Lyme disease. - Unlike most other second-generation cephalosporins, cefuroxime can cross the blood-brain barrier.</td>
<td>- Avoid overdose. - If ingested after food, this antibiotic is both better absorbed, so do not administer in an empty stomach.</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Syrup Cataflam</td>
<td>Cataflam is a nonsteroidal anti-inflammatory drug (NSAID) taken or applied to reduce inflammation and as an analgesic reducing pain in certain conditions</td>
<td>Liver function should be monitored regularly during long-term treatment. - Avoid over dosage. - Do not administer to patient with history of ulcer. - Do not administer in an empty stomach. - Transaminases should be monitored within 4 to 8 week after initiating treatment with diclofenac.</td>
<td></td>
</tr>
<tr>
<td>Syrup Paracetamol</td>
<td>- It is to treat many conditions such as backache, toothache, headache, muscle pain and fever. - It alters the response of heat regulating centre in the hypothalamus and raised the pain threshold.</td>
<td>- Do not administer without food. - Avoid overdosage. - Monitor patient closely for possible side effect. - Common side effect are abdominal pain, nausea, vomiting, sweating, - Paracetamol hepatotoxicity can occur as a result of over dosage and most especially along side with alcohol intakes. -</td>
<td></td>
</tr>
</tbody>
</table>

use should be avoided where possible. - Likewise rarely it has been associated with agranulocytosis, erythema multiforme and toxic epidermal necrolysis - Cefuroxime is generally well-tolerated and its side effects are usually transient. - Most common side effects of diarrhea, nausea, vomiting, headaches/migraines, dizziness, and abdominal pain.
<table>
<thead>
<tr>
<th>DRUG</th>
<th>ACTION</th>
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<th>ADVERSE EFFECT</th>
</tr>
</thead>
</table>
| Intravenous Pentazocine | -Treats moderate to severe pain.  
- Is sometimes given before or after a surgery.  
- May also be given with a general anaesthesia before an operation.  
- Belongs to a class of drugs called narcotic analgesics. | - It should not be taken on empty stomach.  
- It should not be used with alcohol.  
- Overdosage should be avoided.  
- Patient should be monitor for possible side effect. | Dizziness; drowsiness; exaggerated sense of well-being light-headedness; nausea; redness, swelling, or irritation at injection site; vomiting. |
| Intravenous Cefuroxime | - It acts against Haemophilus influenzae, Neisseria gonorrhoeae, and Lyme disease.  
- Unlike most other second-generation cephalosporins, cefuroxime can cross the blood-brain barrier. | - Avoid overdose.  
- If ingested after food, this antibiotic is both better absorbed, so do not administer in an empty stomach. | Cefuroxime is generally well-tolerated and its side effects are usually transient.  
- Most common side effects of diarrhea, nausea, vomiting, headaches/migraines, dizziness, and abdominal pain |
| Syrup Cataflam       | Cataflam is a nonsteroidal anti-inflammatory drug (NSAID) taken or applied to reduce inflammation and as an analgesic reducing pain in certain conditions | Liver function should be monitored regularly during long-term treatment.  
- Avoid over dosage.  
- Do not administer to patient with history of ulcer.  
- Do not administer in an empty stomach.  
- Transaminases should be monitored within 4 to 8 week after initiating treatment with diclofenac. | Can lead to stomach ulcer  
- Liver damage occurs infrequently, and is usually reversible.  
- Patients with osteoarthritis more often develop symptomatic liver disease than patients with rheumatoid arthritis. |
| Syrup Paracetamol    | - It is to treat many conditions such as backache, toothache, headache, muscle pain | - Do not administer without food.  
- Avoid overdosage.  
- Monitor patient | Common side effect are abdominal pain, nausea, vomiting, sweating, Paracetamol hepatotoxicity |
and fever. It alters the response of heat regulating centre in the hypothalamus and raised the pain threshold. closely for possible side effect. can occur as a result of over dosage and most especially alongside with alcohol intakes.


Special procedure

These were in three categories:

- The patient - physical care was ensured throughout hospitalization. The mother was given psychological support; his family members and Imam were allowed to visit and prayed for Master A.A.
- The affected upper limb - daily observation of the affected limb was done to prevent further injury. Active and passive exercise was encouraged.
- The Cast - checking for proper anatomical alignment was done. The skin area around the cast was clean and dry. Day - to - day care of the patient was also ensured.

Nursing care plan for Master A. A
### WARD/UNIT: Ward 1

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>S/N</th>
<th>Nursing Diagnosis/Problem</th>
<th>Objectives</th>
<th>Nursing Orders</th>
<th>Scientific Principles</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>27/7/15</td>
<td>1.</td>
<td>Acute pain related to movement of bone fragments, oedema and injury to the soft tissue evidenced by reports of cry and pain</td>
<td>-Patient will display relaxed manner and stop crying within 30 minutes of intervention. -Patient will be able to sleep and rest appropriately.</td>
<td>-Maintain immobilization of the affected part by means of bed rest, cast. -Support the injured humerus. -Avoid the use of plastic sheets and pillows under limbs in cast. -Evaluate and document reports of pain or discomfort. Note characteristics including intensity (0-10 scale), relieving and aggravating factors. -Note non verbal pain cues (changes in vital signs, emotions and behaviour). -Administer syrup Ibufen 3.5 mls &amp; I/V Pentazocine 7.5 mg b.d as prescribed.</td>
<td>-Relieves pain, prevents bone displacement and extension of tissue injury. -Promotes venous return, decreases oedema and can reduce pain. -It can increase discomfort by enhancing heat production in the drying cast. -Influences effectiveness of interventions. -Absence of pain expression does not necessarily mean lack of pain. Given to relief pain by blocking the pain pathway.</td>
<td>-Patient displayed relaxed manner -Patient was able to sleep well and pain was relieved. -Patient’s level of pain was maintained at scale of 4</td>
</tr>
</tbody>
</table>

28/7/15

| 2.  | Impaired physical mobility related to reduced motion, that is, reduced flexion of the right arm evidenced by motion below 45°C and restricted therapy (limb immobilization and mobility to use the hand). Disturbed sleep pattern related to | -Patient will regain and maintain mobility within 2 weeks of intervention. Patient will enjoy adequate sleep for at least 6 hours at | -Assess degrees of immobility and note patient’s perception of immobility. -Check the plaster cast and ensure it is not too tight -Check the extremities | -Patient may be restricted by self view or actual physical limitations. -To avoid oedema of the fingers and possible pain. -Comfort will make patient to relax and induce sleep. | Patient still on cast but could move fingers gradually. -Patient’s fingers were not oedematous. Patient enjoyed adequate sleep. -Patient did not... |
| Pain as evidenced by interrupted sleep. Risk for disuse syndrome related to pathological fracture. Risk for impaired skin integrity related to application of cast. | Night. Patient will adapt to the use of the right hand till the cast is removed. Patient will maintain intact skin throughout the period of hospitalization. | For adequate blood flow. Teach patient how to exercise fingers. Make patient comfortable on bed. Maintain a therapeutic environment. Plan nursing activities without disturbing the patient’s sleep. Give warm bath before bedtime. Teach patient how to use the right hand (that is, the affected hand gradually). Inspect the skin regularly and report any abnormal change. Ensure the cast is not tight on the affected upper limb. Give patient well balanced diet including protein, roughage and fluid. Encourage high personal hygiene. Therapeutic environment relaxes patient and may induce sleep. Adequate planning of nursing activities will prevent undue disturbance of the patient. Teaching patient how to use the affected hand will not lead to disuse syndrome. Teaching patient how to use the right hand (that is, the affected hand gradually) will prevent disuse syndrome and will help in regaining the function gradually. To avoid break in the continuity of skin. Tight cast will prevent adequate circulation of blood to the surrounding areas and can prevent body’s natural process of repair. This provides a positive nitrogen balance to aid in bone healing and to maintain general good health. This prevents nosocomial infection. Experience any form of disturbance. Patient did not develop any disuse syndrome throughout the period of hospitalization. Patient did not suffer any disuse syndrome throughout the period of hospitalization. Patient’s skin was intact and its integrity maintained throughout the period of hospitalization. |
Day- to- day care of the client

29/7/2015-31/7/2015

Patient was made comfortable on bed, vital signs were checked and read. Temperature, 37°C, pulse 126b/m, Respiration 44c/m, Blood pressure not assessed. He had intravenous Pentazocine 7.5mg, Syrup Cataflam 3.5mls, and Paracetamol 7.5mls. The upper limb on cast was well positioned and his mother was reassured.

1/8/2015

Nursing care was given, bed making was done, patient’s environment was cleaned and tidy, and made comfortable on bed, vital sign; temperature was 36.9°C, pulse 122b/m, Respiration 42c/m, Blood pressure 80/60mmHg. He had his routine medication; Syrup Cataflam 3.5mls and Paracetamol 7.5mls with good effects. He was fed with protein diet (beans) that was served by the hospital staffers from the kitchen. Mother was encouraged to purchase some oranges for him which she gladly did. Patient also drank about 70mls of water. Active and passive exercise encouraged.


He was bathed and dressed, his bed was made and his environment well kept. Vital signs were checked; temperature read 36.5°C, pulse 120b/m, respiration 40c/m, Blood pressure not assessed. Due drugs Syrup Cataflam 3.5mls and Paracetamol 7.5mls were administered and documented. His cast was dried maintained in proper alignment and patient’s mother was educated on the need to maintain the cast in proper alignment and should avoid undue movement.

5/8/2015

Patient remained calm and stable on bed and still on his routine analgesic syrup. Active and passive exercise was encouraged, assisted nursing care were rendered. Vital signs were checked and documented as follows: temperature 36 oC, pulse 116b/m, respiration 44c/m, blood pressure 80/60mmHg. Post skeletal check X-ray was done patient’s mother was reassured. The medical team reviewed him and eventually discharged him on the 18th August, 2015 to Physiotherapy unit for exercise of the limb. As public health nurse, patient mother’s phone number was collected for contact and home visit was made in three consecutive time before termination.

Health education of the patient on discharge

- Mother was educated on the importance of balanced diet rich in protein and vitamins to aid bone healing.
- To continue personal hygiene
- To keep physiotherapy appointment and schedule
- Encouraged to continue active and passive exercise for her son.
- Early use of the affected upper limb as soon as re-check of post skeletal check X-ray confirms healing.
- Mother was encouraged to attend sickle cell clinic for proper monitoring of the child.
Conclusion

Based on our involvement in the care of Master A. A, we observed that his SCD condition made him to experience crisis and role limitation due to physical problems as evidenced by his previous diagnosis (dactylitis) which led to hospitalization for weeks after which he was later readmitted on account of Osteomyelitis and pathological fracture. Mother was also noticed to be psychologically down due to stress, prolong period of hospitalization, financial constraint and fear of unknown concerning prognosis.

Implication of the care study for community/public health

There is psychological complication in both children and adults with SCD including appropriate pain coping strategies, reduced quality of life owing to restrictions in daily functioning, anxiety and depression including neuro-cognitive impairment. It therefore means that, the individual family and community need precise and concise genetic counselling education on how to prevent SCD. Since psychological complication in patient with SCD mainly result from pain and symptoms on their daily lives and society’s attitude towards them, it therefore means that, community/public health practitioners should engage patients with SCD and their carer on special educational support programme that will focus on improving their quality of life.

Recommendations

The following recommendations are made based on the context of our involvement in the care of Master A. A

• There is need for continuous genetic counselling prior to marriage to avoid HbAS marrying themselves. This could be achieved through community mobilization and diagnosis
• Philanthropists should assist in helping patients with SCD to pay hospital bills which will in turn help to alleviate their suffering.
• There is need for psychological intervention therapy for parent of SCD patient.
• To improve prognostic index, SCD patients and their carer must have good understanding of the disease process for positive outcome.

References

Lot A, Goedverwagting, Sparendaam, East Coast Demerara, Guyana, South America.
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