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# Fear of Susceptible to Infectious Disease Experienced among the Hospitalized Patients in the University of Calabar Teaching Hospital, Calabar

Oyira, Emilia James<sup>1\*</sup>, Opiah, Margaret Mombel<sup>1</sup>, Ademuyiwa, Iyabo Yewande<sup>2</sup>

<sup>1</sup>Department of Nursing Science, University of Calabar, Calabar

<sup>2</sup>Department of Nursing Science, University of Lagos

\*Corresponding Author: emioyira@yahoo.com

## Abstract

This study sought to investigate the fear of susceptible to infectious disease experienced among the hospitalized patients in the University of Calabar Teaching Hospital. Two research questions one hypothesis were used. Do hospitalized patients in University of Calabar Teaching Hospital, Calabar have fear of susceptibility to infectious disease? What support do hospitalized patients in University of Calabar Teaching Hospital, Calabar received from family. The hypothesis states that; there is no significant relationship between fear among hospitalized patients and the support they received from family members. Literature was reviewed based on the research variables. The research instrument used in collecting data for analysis was a questionnaire administered to one hundred (100) hospitalized patients in University of Calabar Teaching Hospital, Calabar. Their responses were analyzed using frequencies, percentages and Pearson product moment correlation analysis and the following results were obtained, Results in Table 3 indicated that 68(68%) of the respondents agreed that they have received a significant support from their family members during the period of their hospitalization while 32(32%) disagreed. 24(24%) said the financial support they received from family members was too minimal while 76(76%) said it was not. 78(78%) agreed that their family members frequently visited them while 22(22%) disagreed. The above data, therefore, showed that hospitalized patients in UCTH, Calabar received both moral and financial support from family members. In line with the views expressed by the patients. It was recommended that more nurses should be employed to help avoid contacting the communicable disease. This implies that, the nurses would be able to manage two patients at a time instead of taking care of a large number of patients.

Keywords: Fear, Susceptible, Infectious Disease, Hospitalized Patient, UCTH.

## Introduction

In health care delivery system today, hospitalized patients in any level of health care all over the world despite the disease conditions in the hospital are faced with fear of infectious diseases. Infectious disease is caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another (WHO, 2020). Patients receiving treatment in the hospital may be experiencing fear of susceptibility to infection (such as tuberculosis and HIV/AIDS), lack of support from family members, low self-esteem, freedom curtailment, poverty, lack of money, loss of loved ones and loss of job and as such will not be able to interact very well with nurses and others in the

hospital due to the fear of getting infected with infectious diseases such as corona virus which is a global pandemic disease.

Weisman, Neucherlein & Synder (2003) defined fear of susceptible to infectious disease as problems that create difficulties in a person's external world leading to both environmental and emotional disturbance. If there is going to be a strategy of two patients to a nurse, the fear of susceptible to infectious disease and psychosocial problems will be controlled because there will be room for nurses to interact with their patients on one on one basis with long distance avoiding close contact especially when a patient is infected of contagious disease. Health care givers in the wards where these patients need to be shown love and respect. Due medication served on time and observations of the vital signs of temperature,

pulse, respiration, and blood pressure, even in some case where strict isolation technique supposed to have been in place, such as HIV/AIDS patients. Such patients are still nursed alongside with other patients but caution all in the effort to alleviate fear of susceptible to infectious disease.

Singer & Ruchinska (2000) observed that social factors generally and social support in particular have a vital role to play on how individual copes with illness. The study of fear of susceptible to infectious disease among hospitalized patients is an effort to help the health care delivery system solve the problem of prolonged hospitalization among patients. Therefore, the aim of this study is to assess the level of fear of susceptible to infectious disease experienced among the hospitalized patients in the University of Calabar Teaching Hospital, Calabar.

# Statement of problems

Hospitalized patients in societies and the world over have been neglected psychosocially, psychologically, and mentally this detrimentally affects patients' compliance to treatment. The nature of such problems includes: anxiety, fear of susceptibility to infectious disease, low selfesteem concept, lack of support from family members, freedom curtailment, lack of money, loss of loved ones, loss of job, stigmatization, and anger. On the part of nurses, the interaction will not be there much, because of the job stress through attending to a large number of patients every day thereby, making it difficult for a serious interaction (more nurses should be employed). On the part of the patients some of them will want to sign against medical advice to seek elsewhere for solution such as going to prayer houses (Oyira, Mgbekem & Edet 2016).

#### Literature Review

## Fear of susceptibility to infectious diseases

Weller (2005) supports that, nosocomial infection are infections that are acquired in the hospital. It is also regarded as a new disorder, not related to the original disease that is caused or precipitated during hospitalization. Nosocomial infections are acquired in the hospital at least 72 hours after admission. It is otherwise called hospital acquired infection. Moreover, Weller explains that contact transmitted infection is the most important and frequent mode of

transmission of nosocomial infections and may be either direct or indirect.

Direct contact transmitted infections involves direct body surface to body surface contact, such as occurs in patient care activities, for example bathing a patient. Indirect contact transmitted infections involves contact of a susceptible host with a contaminated intermediate object, usually inanimate, examples are contaminated instruments, needles, dressing or gloves. Unwashed, contaminated hands may also be a source of nosocomial infections.

The most common type of nosocomial infections are surgical wound infections, respiratory infection, genitor-urinary infections, as well as gastrointestinal infection. Nosocomial infections can either develop during a patient's stay in a facility or manifest after discharge. Eschericha coli, Staphylocous aureus, and enterococci are the most common infecting microorganisms. Moreover, there are factors that increase the susceptibility to infection. The factors include: age, heredity, level of stress, nutritional status, current medical therapy, and pre-existing disease process (Berman Snyder, Kozier & Elb, 2008). Berman, Snyder, Kozier & Elb, (2008) portals of exist are, nose or mouth through sneezing, coughing, breathing, or taking and this is applicable to respiratory tract, for gastrointestinal tract infections the routes are, mouth, saliva, vomitus, anus, feces, ostomues for tract infections-anus; the urinary feaces. colostomies, urinary meatus and urinary diversion.

Oyira, & Bassey (2016) states that, reproductive tract vagina: vagina discharge, urinary meatus, semen, urine. Blood – open wound, needle puncture, site, any disruption, tissue drainage from out or wound. Hospitalized patients' fear of susceptibility to infections is elevate because nosocomial infections extend hospitalization time, increases patient's time away from work, cause disability and discomfort, and even result in loss of life.

# Support system of family members

According to Hornby (2011) hospitalization is the act of keeping somebody in the hospital for the purpose of treatment. The degree of recovery of the hospitalized individual has a bearing to the social support system available. When people have unmet social support especially from the family members, they experience an overall feeling of unhappiness, tension, and insecurity and survival are threatened. However, how different people respond to these situations reflects their level of coping and maturity (Tijani & Anani, 2009). A lot had been said about fear of susceptible to infection among hospitalized patients, and measures have been suggested on how to alleviate these problems on the hospitalized patients. Among them is social support, which is defined as the availability of individuals on whom one can rely on for assistance and love. It has been referred to also as the provision of meaningful, appropriate and protective feedback from a social environment to a person that enables the person to negotiate intermittent or contrived environmental stressors (Tijani & Aneni, 2009). Support from family members is one of the recognized social support systems that have been very effective.

Basavavanthapa (2008) concluded that a family is viewed as a group of persons united by the ties of marriage, blood or adoption constituting a single household, interacting and inter-communicating with each other in their respective social role of husband and wife, mother and father, son and daughter, brother and sister, creating and maintaining a common culture. The basis of family reaction to their relatives experiencing long hospitalization associated symptoms often is rooted in how the family interprets these symptoms and often most family members think that the member with fear susceptibility to infection due hospitalization was purposely designed to aggravation, annoy, or provoke family members (Hooley & Campbell, 2012). Additionally, parents, spouse and siblings are often unable to deal with their own individual or family developmental needs because the focus is so often on the relative who is hospitalized and sequence of the illness (Brady, 2014). Negative symptoms manifested by hospitalized patients such as lack of initiative, motivation, and inability to attend to his daily life activities, are often seen as laziness or a desire to remain dependent on family or society. There is need for families to enforce social support on hospitalized family members, in terms of visiting them, listening to their complaints, showing empathy, cooking for them, communication with them, and working together. Nurses and families can create environments that restore or recognize family functioning during illness and throughout the recovery process (Berman, Snyder, Kozier & Elb, 2008).

Many relatives of the hospitalized patients are not interested in the treatment or rehabilitation of the patients. Their main aim is to get patients admitted in the institution and get rid of him. Although they are not all at fault because treatment and rehabilitation of chronicallydiseased hospitalized patients are always difficult due to frequent exacerbation and relapses of the illness. So, to get rid of a hospitalized patient they may give wrong address of home or change the home after patient is admitted in the hospital (Berman, Snyder, Kozier & Elb, 2008). Sheth (2015) ascertained that the reasons why they want to dump patients are that some families' economic conditions are poor, so they cannot feed the patient and many families live in small house, which has no room for the patients. Based on these reasons' patients' relatives do not come to take patients home even after patients have improved completely. Despite differences in the definition, social support from family members has been the subject of health/behavioural research for over two decades. The universal conclusion has been that social support from family members has therapeutic value on the mental and physical health of the hospitalized patients (Sheth, 2015). Social support is a measure that improves the minds setting and man is a conscious being with ever-wondering mind. When event in man's environment enhance his ability to control the mind, pleasure and selfconfidence will be expressed. Conversely when man loses the control over his/her everwondering mind he would appear confused and seen as psychosocially unhealthy (Singer & Ruchinska, 2011).

Tijani & Aneni (2009) in their research on psychosocial problems on hospitalized patient in St. Mary's Hospital, Eleta, Ibadan, observed that patients recovered speedily as family members them appropriate social offered support. According to Romi & Melamed (2007) additional on-going activities geared to involving families in patient care are necessary in order to maintain contact between individuals in long-term hospitalization and their families. Most studies support the idea that family intervention improves the family atmosphere and ease the treatment burden. So, in order to balance the views of patients and their care givers, families should be involved in the treatment process and

support directed at hospitalized patients. Furthermore, family support programmes should promote understanding of the disease, thereby reducing the intensity of distress they experience and help cope with their relatives' disorders. Also, when families understand the patients' limitation and no longer attach blame, the relationships between all parties tend to improve (Doron, Raba, Kurs, Bleich & Melamed, 2009).

## **Methods**

## Research design

Non-experimental descriptive survey design was utilized in this study. It involved systematic collection, analysis, and presentation of data to give a clear picture of the present situation. This design was utilized because it helped in the understanding of the existing phenomenon in life as they naturally exist.

#### Research area

This study was carried out in University of Calabar Teaching Hospital, it is located at the south-east of Calabar. The hospital is made of three (3) annexes; permanent site, maternity and comprehensive health care Okoyong. The hospital renders the following services, clinical, man power development (teaching/training of nurses, paramedical and medical students) and research.

The University of Calabar Teaching Hospital is currently made up of 600 beds which are distributed among the three (3) annexes and has staff strength of about 550 nurses.

## Population of the study

This was made up of the target population and the accessible population was estimated to be 1,000 patients.

## **Target population**

The target population consisted of patients admitted in UCTH, Calabar, in both medical and surgical ward patients who had not spent one (1) month and above, and the out patients were excluded from the study.

## The Accessible population

The accessible population for the study consisted of patients admitted in the wards who

had been in the wards from one month and above and were present in the wards at the time of the study in wards 1, 2, 3, 4, and 5 there were 150 hospitalized patients.

This implies that in each ward, 30 hospitalized patients were selected for the study making it a total of 150 for the sample size

## Sample and sampling technique

Stratified sampling method was used in selecting the 100 patients from wards 1 to 5 for the study using 20 respondents from each stratum. Out patients and patients who were out of the ward at the time of administering questionnaire were not used for the study. Twenty patients from each ward who had spent at least one month and above in the ward were qualified for the study.

#### **Instrument for data collection**

A structured questionnaire constituted the instrument for data collection. The questionnaire consisted of two sections: A and B. Section "A" elicited information on demographic data. While section "B" is on psychosocial problems and it is sub-divided into four sub-sections with six items each. The subsections are on the level of support from family members, the level of fear of infectious disease, the level of anxiety and the level of esteem of self-concept among hospitalized patients.

## Validity of the instrument

In order to validate the instrument, psychosocial problems questionnaire copies were presented to scrutinize for face validity of the fact that the content measured what was meant to measure.

## Reliability of the instrument

In order to test the reliability of the instrument a pilot study was carried out on ten hospitalized patients in the General Hospital, Calabar. A test re-test reliability method was used in determining the reliability of the instrument. Here the questionnaire was administered on the respondents and after one week it was again administered on the same respondents and a Pearson product moment correlation coefficient was calculated as presented in Table 1.

Table 1

Test re-tests reliability of the assessment of Fear of susceptibility to infectious disease experienced by hospitalized patients in University of Calabar Teaching Hospital, Calabar.

Variables	No. of items	Testing	X	SD	r
Level of fear of infection	6	1 <sup>st</sup>	19.72	1.98	0.98
		$2^{\text{nd}}$	20.90	2.48	
Level of support by family members	6	1 <sup>st</sup>	21.04	2.66	0.82
		2 <sup>nd</sup>	19.82	2.88	

The reliability coefficients ranged from 0.74 - 0.98. These values were considered to be high enough for the study.

## **Ethical consideration**

Letter of introduction was collected from the ethical committee which introduce the researchers to the Chairman, Medical Advisory Committee, University of Calabar Teaching Hospital (UCTH), permitted the researchers to proceed with the collection of the data for the study.

The patients were informed by the researchers that anonymity and confidentiality would be maintained in all the information given. Informed consent was obtained.

The inclusion criteria include:

- 1. Hospitalized patients of various wards including medical/surgical patients in the University of Calabar Teaching Hospital.
- 2. Will be those that consented.

Exclusion criteria include:

Will be those that declined participation.

## Method of data collection

The questionnaire was administered through a group administration after due explanation. The respondent filled the questionnaire and same collected at the spot.

## Procedure for data analysis presentation

Data collected from respondents were coded and transferred into a spread sheet and summarized using frequency. Data were analyzed using frequency counts and percentage, Hypothesis was tested using Pearson product moment correlation analysis.

## **Results**

## Socio-demographic data

The socio-demographic data of the respondents is as presented in Table 2 below.

Table 2. Socio-demographic data of respondents

Variable	Frequency	Percentage
Age:		
<b>20</b> -25 years	14	14
26-30 years	21	21
31-35 years	28	28
36-40 years	22	22
41-above	15	15
	100	100
Sex:		
Male	41	41
Female	59	59
	100	100
Religion:		
Christianity	64	64
Muslim	24	24
Other	12	12
	100	100
Occupation:		
Student	12	12

	1	I
Civil Servant	26	26
Trading	22	22
Farming	20	20
House wife	9	9
Others	11	11
	100	100
Marital status:		
Married	62	62
Single	18	18
Divorced Widowed	12	12
	8	8
	100	100
Educational		
qualification:	12	12
FSLC	26	26
SSCE	23	23
ND	24	24
B.Sc	15	15
Others	100	100
Ward:		
1	36	36
2	15	15
3	17	17
4	16	16
5	16	16
	100	100
<b>Duration of</b>		
hospitalization:	38	38
1 month	33	33
3 months	29	29
6-above month	100	100

The socio-demographic data the respondents indicated that 14(14%) of the respondents were aged 20-25 years, 21(21%) were 26-30 years, 28(28%) were 31-35 years, 22(22%) were 36-40 years while 15(15%) were 41 years and above. 41(41%) were male while 59(59%) were female. 64(64%) were Christians, 24(24%) were Muslims while 12(12%) belonged to other religions. On their occupation, 12(12%) were students, 26(26%) were civil servants, 22(22%) were traders, 20(20%) were farmers, 9(9%) were house wives while 11(11%) belonged to other professions. On their marital status 62(62%) were married, 18(18%) were single 12(12%) were widows and widowers, 8(8%) were divorced. 12(12%) had first school leaving 26(26%) certificates, had senior school

certificates, 23(23%) had national diploma, 24(24%) had a bachelor's degree while 15(15%) had other qualifications. On the medical ward where the patients were admitted, 36(36%) were admitted in ward one, 15(15%) in ward two, 17(17%) in ward three, 16(16%) in ward four and 16(16%) were related to medical while 34(34%) were related to surgical. 38(38%) as at the time of the research had spent one month, 33(33%) had spent three month, 29(29%) had spent six month and above.

## **Research question 1**

What supports do hospitalized patients in University of Calabar Teaching Hospital, Calabar receive from family members?

**Table 3.** Support received by hospitalized patients from family members

	AGREE	DISAGREE
I have received a significant support from my family members	68	32
during the period of my hospitalization.	(68)	(32)
The financial support I received from family members is too	24	76
minimal.	(24)	(76)
My family members frequently visit me.	78	22
	(78)	(22)
I received regular assurance from my family members.	69	31
	(69)	(31)
I receive affection and acceptance from my family members.	79	21
	(79)	(21)
I do not receive financial assistance and love from my family	14	86
members.	(14)	(86)

**Note:** Numbers in parentheses are percentages.

Results in Table 3 indicated that 68(68%) of the respondents agreed that they have received a significant support from their family members during the period of their hospitalization while 32(32%) disagreed. 24(24%) said the financial support they received from family members was too minimal while 76(76%) said it was not. 78(78%) agreed that their family members frequently visited them while 22(22%) disagreed. 69(69%) agreed that they received regular assurance from their family members while 31(31%) disagreed. 79(79%) agreed that they received affection and acceptance from their

family members while 21(21%) disagreed. 14(14%) agreed that they did not receive financial assistance and love from their family members while 86(86%) disagreed.

The above data, therefore, showed that hospitalized patients in University of Calabar Teaching Hospital, Calabar received both moral and financial support from family members.

# Research question II

Do hospitalized patients in University of Calabar Teaching Hospital, Calabar have fear of susceptibility to infections disease?

**Table 4.** Patient fear of susceptibility to infections disease

	AGREE	DISAGREE
I feel that I might contact another disease if I stay in the hospital	71	29
for so long.	(71)	(29)
I sometimes feel that nurses' hands habour a lot of infections in	21	79
their uniform	(21)	(79)
I sometimes feel that the whole hospital atmosphere is polluted		
with different forms of disease which one can be susceptible to.	61	39
	(61)	(39)
I sometimes feel that hospital equipment habour a lot of	66	34
infections	(66)	(34)
I feel that hospital beds are full of micro organisms	56	44
	(56)	(44)
Sometimes I feel that direct contact with other patients with		
infections disease is dangerous	73	27
	(73)	(27)

Note: Numbers in parentheses are percentages

Results in Table 4 indicated that 71(71%) of the respondents agreed that they felt that they might contact another disease if they stayed in the hospital for so long while 29(29%) disagreed. 21(21%) agreed that they sometimes felt that nurses' hands haboured a lot of infections while 79(79%) disagreed. 61(61%) agreed that they sometimes felt that the whole hospital

atmosphere was polluted with different forms of disease where one could be susceptible to while 39(39%) disagreed. 66(66%) agreed that they sometimes felt that hospital equipment haboured a lot of infections while 34(34%) disagreed. 56(56%) agreed that they felt that hospital beds were full of micro-organisms while 44(44%) disagreed. 73(73%) agreed that sometimes they felt that direct contact with other patients with infectious disease was dangerous while 27(27%) disagreed.

Based on the responses above it was concluded that hospitalized patients in University of Calabar

Teaching Hospital, Calabar had fear of susceptibility to infectious disease.

## **Hypothesis 1**

There is no significant relationship between patients' fear of susceptibility to infectious diseases among hospitalized patients and the support they received from family members. This hypothesis was tested using Pearson product moment correlation analysis as presented in Table 5.

**Table 5.** Pearson product moment correlation analysis of the relationship between fear of susceptible to infectious diseases among hospitalized patients and the support they receive from family members

Variables	$\sum_{\mathbf{y}} \mathbf{x}$	$\sum \mathbf{x}^2$ $\sum \mathbf{y}^2$	∑xy	r
Fear of infectious diseases among hospitalized patients	988	3674		
Support received from family members	974	3124	10855	0.198

Not significant at 0.05, df = 98, critical r = 0.200

Results in Table 5 indicated that a calculated r-value of 0.198 was obtained. This valued, when compared to the critical r-value of 0.200 at 0.05 probability level and 98 degrees of freedom, was found to be lower. On the basis of this observation, the null hypothesis was retained meaning that there was no significant relationship between anxieties among hospitalized patients and the support they received from family members.

## **Discussion of Findings**

The result of findings also revealed that hospitalized patients in University of Calabar Teaching Hospital, Calabar had fear of susceptibility to infectious disease. This result is supported by Berman, Snyder, Kozier & Elb, (2008) who pointed out that hospitalize patients' fear of susceptibility to infection were elevated because nosocomial infections extend hospitalization time, increases patients' time away from work, caused disability and discomfort and even resulted in loss of life.

Results of findings revealed that hospitalized patients in University of Calabar Teaching Hospital, Calabar received both moral and financial support from family members. This result is supported by Brady (2004) who observed that because of the focus of family members on the relatives who were hospitalized and the

sequence of the illness, they were often unable to deal with their own individual or family developmental needs. Berman, Snyder, Kozier & Elb (2008) also support this result when they suggested that there was need for family members to enforce social support on hospitalized family members, in terms of visiting them, listening to their complaints, showing empathy, cooking for them, communicating with them working together, nurses and families can create environments that restore or recognize family functioning during illness and throughout the recovery process. The result is again supported by Tijani & Aneni (2009) who in their research observed that patients recovered speedily as family members offered them appropriate social support. Supporting the result also, Romi & Melamed (2007) opined that additional ongoing activities geared to involving families in patient care were necessary in order to maintain contact between individuals in long term hospitalization and their families.

## **Conclusion**

Based on the result of findings, it is concluded that even though family members of hospitalized patients gave them both moral and financial support, they were still anxious about their health condition. Nevertheless, reassurance covers both the medical and surgical patients concerning fear.

## Recommendations

In line with the views expressed by the patients, the following are recommended for the improvement of the management of patients in the hospital.

- 1) More nurses should be employed to help in the strategy of a nurse to two patients, this implies that a nurse should be assign to two patients at a time in other to adequately manage the patients instead of a large number of maybe 20 50 patients to a nurse which is applicable to UCTH.
- 2) Regular seminar on psychosocial problems of hospitalized patients should be organized to all patients in the wards, in the sense that this will aid calm and reassure the patients that after a while they will return home strong and healthy.
- 3) The cost of hospitalization should be subsidized by the state and federal governments to enable patients that have spent longer times in the hospital to still maintain self-esteem.
- 4) All drugs prescribed for patients should be made available in the hospital pharmacy. This will definitely help to ensure that patients receive their treatment promptly.

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