

INNOVATIVE NURSING APPROACHES IN MANAGING LOWER BACK PAIN (LBP) AMONG THE ELDERLY PERSONS .A CASE STUDY IN MARIDI COUNTY, WESTERN EQUATORIAL STATE, SOUTH SUDAN

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LIST OF ABBREVIATIONS

LBP Lower Back Pain

RN Registered Nurse

DEFINITION OF KEY TERMS

Pain	UN pleasant feelings expressed by patient can be physical Psychological, or Spiritually.
Suffering	A situation of distress due to events that shortens life.
Acute pain	sudden unpleasant, physiological response to a stimulus
Chronic Pain	Physiological bad responses to a stimulus and it persists
Pain assessment	Comprehensive follow up of client patens related to his grief
Chemotherapy	Art of relief of pain by use of drugs
Geriatric	The aged group

ABSTRACT

The elderly generation, coexists with the rest of the population of the world (Jared T. Scott 2010).They suffer a great deal of several kinds of pain including lower back pain. In most cases this condition in the elderly is not managed by use of nursing interventions rather managed with other medical remedies, and yet the client spend most of their times with nurses, than, other health workers. This case study addressed the gap that could be filled by nurses by using innovative means in nursing to relieve pain of lower back in the elderly by ideal assessment then given specified nursing interventions to a specific individual, so as to avoid disabilities. Sackett et al (2000).

Conclusion: Disabilities in elderly related conditions can be assessed and managed by nursing

intervention hence preventing disabilities in the geriatric patients.

Recommendations: Nurses needs to be trained with more contemporary skills in assessing LBP, suggesting that the knowledge of nurse with higher qualification is paramount to meet the fourth coming challenges in the management of the elderly with LBP.

INTRODUCTION

BACKGROUND OF THE CASE STUDY

Most of the population of the world comprises of old human beings (Alan D. Kaye, Amir Baluch, and Jared T. Scott, 2010). Old age is inevitable. It starts from 65 years and above. This is incidentally estimated to be 506 million from 2008 to 2040, further threatening definitely to increase to 1.3 billion, with further expectation to grow more. This therefore means, suffering from aging related syndromes, mostly pain including the lower back known as low back pain (LBP) will be numerous due to physiological, psychological, degenerating problems. In Africa, the disease burden for lower back pain (LBP) prevalence is rated at 62% with expectation of rising (Morris L.D, (2007).

BACKGROUND OF THE STUDY AREA

Lower back is a global disease burden; many scholars have forecast that the prevalence of LBP, in Africa is rising with concern because Africa represents 14% of the world's population and poorest continent contributing to 40% of the global disease burden suggestive of many disabilities in Africa in future (*Tropical Doctor*, 2004).

In S. Sudan however there is no literature that shows any disease burden but the disease burden can be discussed in relations to the burden reported in various countries in Africa on assumption that they have resemblances in race, economics and culture.

In Maridi, the prevalence of elderly living unattended to in various villages could be escalating. This was confirmed by 'ward in charge of medical ward on 17th/ 10/2014 during a major medical round'.

PROBLEM STATEMENT

Lower back Pain prevalence amongst the aging is almost reported by all the elderly and with different presentations. The degree of the LPB ranges from mild moderate to severe depending on the cause. This in most cases leads to disabilities in the society. But many scholars have noted that it is not well managed; only some have been left to be managed by, surgeons, physiotherapists and other allied medical personnel (*African Journal of Physiotherapy* 2000)

This limited involvement of the nurses in using nursing interventions to manage LBP in the older person has occurred due to poor assessment of the nurses on LBP, inadequate communication and thus leading to poor management using the nursing interventions.

PURPOSE OF THE CASE STUDY

The main purpose of the study was to assess the nurses' rating of LBP and use of innovate nursing modalities in management and prevention of LBP.

OBJECTIVES

1. To determine how well the nurses rate LBP using current methods of assessment.
2. To assess the ability of the nurses in using innovative nursing modalities in the management of LBP
3. To evaluate the communication strategies the nurses use to prevent and treat LBP in their geriatric patients

THEORIES

Many theories have been in place for successful management of back pain in other places (Woolf A, Pfleger, 2003) on management of LBP such as

- Relief of pain by use of hot or positioning the pain
- To control on body weight by control of nutrients
- Positive and proper ways on the ascribed roles
- Health education
- Use proper body mechanics
- And increase on physical mobility

RESEARCH QUESTIONS

The study sought to answer the following research questions:

1. How well do the nurses rate LBP using current methods of assessment?
2. Do the nurses have the ability to use innovative nursing modalities in the management of LBP?
3. What communication strategies do the nurses use to prevent and treat LBP in their geriatric patients?

JUSTIFICATION (SIGNIFICANCE OR SCOPE)

- To improve the idea of nurses in proper assessment of LBP.
- Comprehensively use the former and present theories of managing LBP in the elderly.
- To communicate the importance of Geriatric nursing especially in management of LBP.

CONCEPTUAL FRAMEWORK

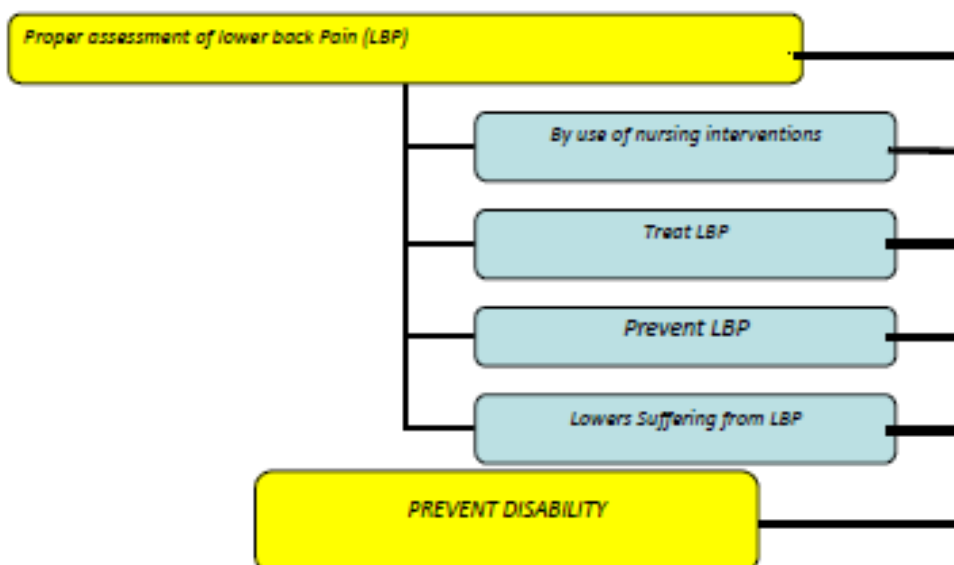


Figure 1: Conceptual framework for the study about the assessment of LBP by Nurses in Maridi Hospital.

In the conceptual frame work the optimum assessment of lower back pain and use of nursing interventions can improve lower back pain and prevent disability among the geriatric.

LITERATURE REVIEW

INTRODUCTION

Low Back Pain is a global challenge, especially now that the number of the elderly is increasing worldwide. This is expressed in the following literature. Sackett et al (2000) reported that Lower back pain can lead to disability; this is majorly due to musculoskeletal disorders such as rheumatoid arthritis osteoporosis low back pain and osteoarthritis. But out of these the most cause of disability is due to LBP

As a result of musculoskeletal disorders. Many results have shown that at least all Africans have at one moment got an episode of LPB once in life time, which can easily re-occur due to various reasons, which can be economical, or related to many predisposing causes. The unfortunate scenario is that, most of the priorities of resource in Africa are re- allocated to other epidemic diseases. (Walker 2000).

Other literatures shows that, lower back pain is a global health problem but, western world has got ways in place of managing the elderly but in the growing country the facilities and personnel's are either not enough or not present, to manage the aging.

Besides the above issue, originally elderly management has been more associated to be managed by the physicians; surgeon's physiotherapist's using either chemotherapy, osteopathic manipulations', but not using nursing modalities of modern means such as proper assessment of pain rating from scale of 1-10 and management.

This calls a greater plan for training nurses with specialized skills ready to be able to address these

challenges forth coming. By using very innovative means that can be available and manipulated by either the client, or the attendant depending on where the pain is originated from

The critical management of aging should vividly kick off with very good, competent assessment of lower back pain, then come up with a proper nursing diagnosis which will lead to elderly oriented nursing plans/interventions to manage so that that the aging are relived only by nursing care that other means such as chemotherapy, radiotherapy, surgery, which has got adverse effects and sometimes costly

This calls a greater plan for training nurses with specialized skills ready to be able to address these challenges forth coming. By using very innovative means that can be available and manipulated by the either the client .or the attendant depending on where the pain is originated from.

METHODOLOGY

INTRODUCTION

The chapter discussed the study design, study setting, study population, sample size determination, sampling procedure, inclusion criteria, variables, research instruments, data management, data analysis, dissemination of results and other procedures that were employed in the proposed study.

STUDY DESIGN

The method used for the study was a descriptive design. The design was most appropriate for the study because it was able to provide information about nurse's knowledge of assessing lower back pain in the elderly, treat and prevent it to avoid disability.

STUDY SETTING

The study was carried out in Maridi hospital, located in Maridi county Maridi Payam in western Equatorials. Sudan. The town council is being inhabited by many tribes where the majorities are Bakas. All these people get treatment from Maridi Hospital which has many Health services, but lacking geriatric facilities suggesting most of the old are nursed at homes by their relatives; the hospital handles a patient load of 200 per day. Maridi hospital was therefore a suitable setting for the proposed study because it was easier to attain the required sample size of nurses.

STUDY POPULATION

The population targeted by the study consists of nurses, midwives who were currently working or teaching in national health training institute Maridi or had ever worked elsewhere as a registered nurse (RN)/Midwife. This district has not reported any thing about the disease burden of the elderly suffering with lower back pain. This population was chosen because in Maridi district, the gap could be identified for the care of elderly.

SAMPLING PROCEDURE

In the study random sampling technique was used in order to attain the required sample of 10 participants. The researcher went on different occasions to the hospital and obtained data from

Nurses/Midwives found on duty done randomly. Random selection of participants generated a representative sample to provide unbiased results.

INCLUSION CRITERIA

The inclusion criteria outlined below was used to select the participants for the study;

1. Must be a nurse with licensed certificate which should be recognised by the S. Sudan Nurses council.
2. Should be a staff of Maridi Hospital.
3. A nurse tutor teaching in national health training institute Maridi

STUDY VARIABLES

The proposed study measured two main variables which were; knowledge on assessment of Lower back pain in the elderly, available means nursing modalities of treating the lower back pain.

STUDY INSTRUMENT

An interview questionnaire was used for data collection in the study. The questionnaire comprised of three sections. The first section comprised of items on demographic characteristics. The second section comprised of items measuring knowledge of assessment of lower back pain. The thirds was on nursing modalities/intervention/ methods of treatment and prevention of lower back pain. The questionnaire was written in English the official language in S. Sudan. And this was also allowed for self-administering of the questionnaire by literate participants. The questionnaire comprised of both open and close ended questions.

PRE-TESTING AND RELIABILITY

The questionnaire was pre-tested using three final student nurses in Maridi Nurses training. The interviewers were trained to harmonize differences prior to data collection and other field work activities. They were trained on how to translate questions, interpret responses and on how to fill questionnaires appropriately. Interviewer's conducts were emphasized to cultivate discipline while on field work.

DATA COLLECTION PROCEDURE

After approval from Texila American University, the researcher sought approval from Maridi Hospital. On obtaining approval from Maridi Hospital then the researcher introduced herself to each in-charge as nurses were approached During working days the researcher explained the purpose and the procedure of the study to participants and those who agreed to participate were taken in a private room to complete the consent form and research questionnaire as part of the data collection. After participants had completed the questionnaires, they were thanked.

DATA MANAGEMENT

After the Questionnaires had been filled by participants the researcher checked them for completeness

and missing data. Where possible, the missing data were elicited from the participants before they left the interview room. Questionnaires with raw data were stored in doubled locked cupboards and were only accessible by the researcher. Data was entered in the computer in SPSS software and the files were pass-word locked and only accessible by the researcher. The questionnaires after data analysis were safely kept in a well-protected cupboard for safety.

DATA ANALYSIS

Data analysis was performed using SPSS software program. The results of data analysis were presented in varied formats such as frequencies, table.

ETHICAL CONSIDERATION

The researcher while conducting the study sought consent from the interviewees and maintained confidentiality at all times. Approval and an introductory letter were obtained by the researcher from the Texila American University, for secondment by the student coordinator nursing officer and the medical superintendent leaders in Maridi Hospital. This built confidence in the respondents and eliminated suspicions about the interviews. Client's confidentiality, privacy and autonomy were ensured through the consent form and all other activities which were part of the study.

LIMITATIONS

The following constraints were anticipated to be encountered and therefore limited the study;

Resource and time were not enough for the researcher to explore the problem to the required depth. And the time available for data collection was interfered with by other school activities.

DISSEMINATION RESULTS

The results of the study shall be submitted to, Texila American University, State ministry of Health Yambio and Maridi Hospital. Efforts shall be made to present findings of the study during nursing conferences and other professional meetings.

DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS:

The study involved 10 participants who were trained nurses or midwives licensed and working in Maridi hospital or teaching student nurses in a training school in Maridi Health science institute.

Table 1: Demographic characteristic

PROFILE	CHARACTERISTICS	NUMBER OF PARTICIPANTS	PERCENTAGE (%)
GENDER	Female: Nurse range 1-9	9	90
	Male: Nurse range 0-1	1	10
DISCIPLINE	Nurses	8	80

	Midwifes	2	20
LEVEL OF EDUCATION	Masters	0	0
	Degree	1	10
	Diploma	2	20
	Certificate	7	70

The study involved 10 participants who were trained nurses or midwifes licensed and working in Maridi hospital or teaching student nurses in a training school in Maridi Health science institute.

The data was collected from 10 participants who were of both sexes; male constituted 10% and female 90%. Both disciplines were interviewed and the result shows that the nurses constitute 80% and midwifes 20%.

Concerning education level; certificate nurses were 70%, diploma 20% degree 10% and none of them had masters.

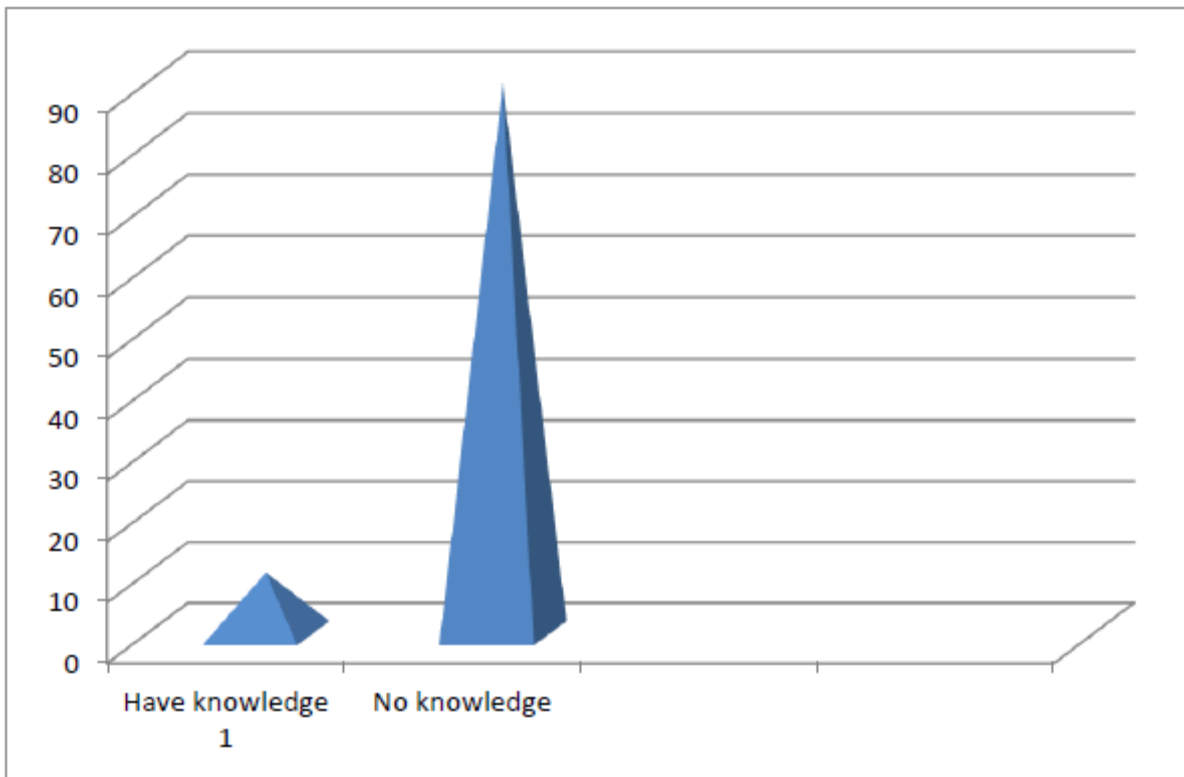


Figure 1: knowledge or speciality of the respondents in geriatric nursing

Assessment knowledge on lower back pain all had no idea representing 90% which is suggestive that nurses and midwifes in south Sudan have little knowledge on assessment of pain as other scholars noted Sackett et al (2000) this has left the elderly in pain and probably many elderly are in pain and heading to disability.

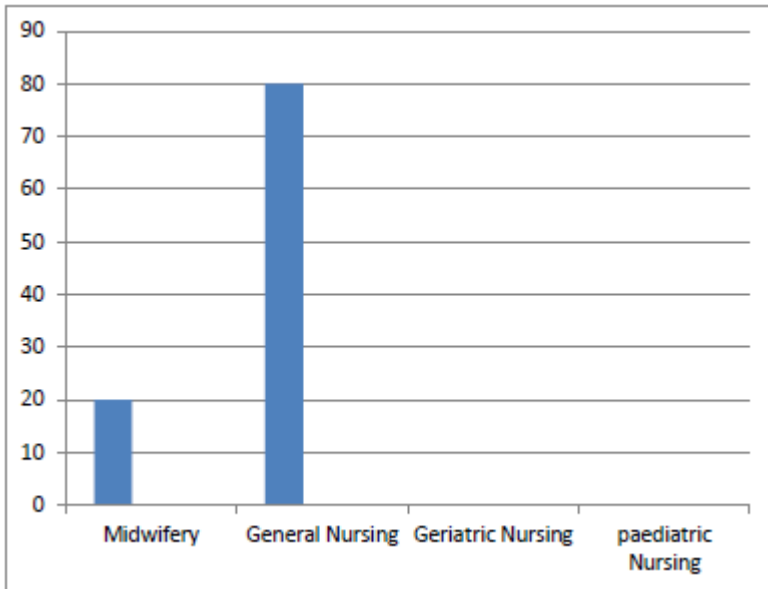


Figure 2: Interest of respondents to specialize in the various disciplines of nursing

The study have shown that there is no interest of specialising to manage the elderly, suggesting that elderly are still managed in a tradition way and many could be neglected in this nation. Therefore this call for sensitization of training many disipline especially in geriatric nursing.

During the study, the despondences were asked whether they had ever nursed elderly patients with LBP,

The majority said they had never nursed. This is sworn in the figure 3 below

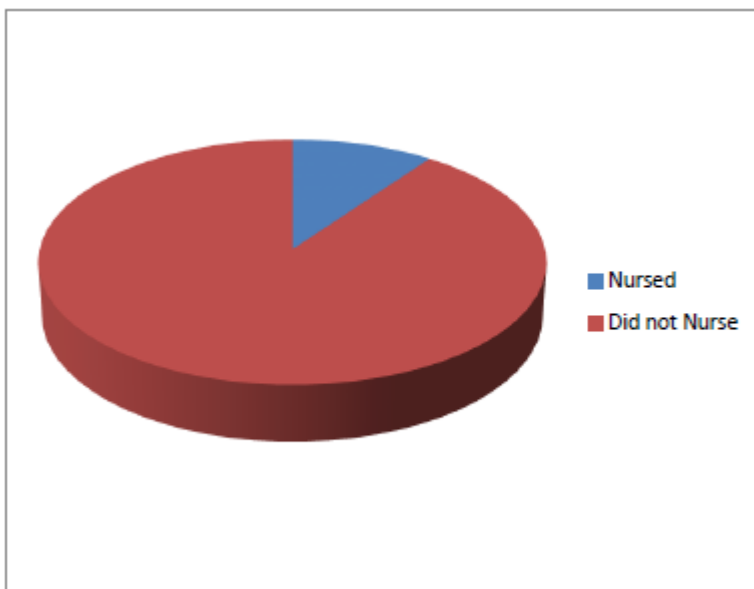


Figure3: The nurses according to whether they have ever nursed an elderly patient with LBP

This figure shows despondence experience whether they had nursed an elderly with LBP unfortunately 90% never nurse only 10 % had ever nursed suggesting that LBP is not a quick killing disease so in this place people are only brought early in the hospital with fast killing diseases and yet

those with LBP suffer at their home then probably brought with disabilities

DATA SYNTHESIS

Sub-theme was derived from transcribed in-depth individual interview discussion data. This focused on

1. Demographic data level of education is still a problem as such, many are under educated and lacked many ideal knowledge about LBP
2. Knowledge of assessment of LPB ,It is suggestive that most nurses and midwives are still green on how to asses pain general and particularly LPB
3. By using Innovative means of nursing approach of LPB, many acknowledged not to know how to asses LBP.

DISCUSSION OF RESULTS

- Elderly Nursing is not practiced commonly in S.Sudan; the study showed that, many nurses did not show an interest of specializing in the disipline
- There is no knowledge of management of pain and specifically in the elderly.
- Many had low standard of education, results showed that many remained in certificate level and it is possible that their curriculum is not updated with the contemporary knowledge.
- The few nurses are relying on surgeons and other means of treatment of LBP but not using innovative nursing measures.

CONCLUSION

This study has shown poor level of knowledge of nurses in the followings

1. Assessment of pain in the LBP
2. No innovative use of nursing knowledge in management, and prevention of lower back pain in the elderly
3. Low standard of nursing education in this country

RECOMMENDATIONS

1. Nurses should be done refresher courses frequently on vital nursing procedures such as health assessment especially in pain assessment so that they can care for all types of pain and care of elderly.
2. Put measures of innovative means of management and prevention of LBP in the elderly
3. Curriculum for nurses be reviewed regularly and in comparison to other developed Countries curriculum so that such gaps are bridged

4. An elderly bed with all its appliances could be invented for management of pain. Besides the other nursing means of managing LBP.
5. Have an exchange visit for nurses to exchange ideas.

IMPLICATION FOR NURSING PRACTICE

The current study has strong implications for nursing practice. One of its major findings is about the activities that nurses regularly perform with patient's i.e. proper assessment, health education. And to be innovative while managing patients

This study highlights the importance of health assessment, and how it is communicated to the clients, so that patient complies with treatment. Therefore nurses have to ensure and understand the process of proper assessment of LBP.

This can improve adherence to instruction given by nurse to patients and outcomes of nursing care. If nurses assess patient well, patients will get better health, stay for fewer days in the hospital and eventually reduce the patient load in the hospital. Hence disability reduced in the elderly.

LIMITATIONS AFFECTING GENERALIZATION OF FINDINGS

The major limitation of this study was a small sample size, use of self-report method of measuring level of assessment of pain in the elderly and lack of standardised tool for the study. However the methods for measuring assessment used in this study have also been used in so many other studies worldwide, therefore the result of this study are still very important in the healthcare of geriatric conditions like LBP.

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APPENDIX 1: RESEARCH QUESTIONNAIRE

INTRODUCTION AND INSTRUCTIONS

This questionnaire collected data about innovate methods of managing lower back pain in the elderly

SECTION A: DEMOGRAPHIC CHARACTERISTICS

Q1. Gender: 1= Male 2= Female

Q2. Age: _____

Q3. Discipline

1= Nurse 2= Midwife

Q4 Level of Education

1= certificate Nurse 2= diploma Nurse 3= Bachelor's degrees

4= Postgraduate Nurse

Q5. Do you have any knowledge or speciality in geriatric nursing 1.No 2. Yes

Q6. What would be you like to specialize in nursing in future?

SECTION B: KNOWLEDGE ON ASSESMENT OF LOWER BACK PAININ THE ELDERLY

Q7. In your Nursing experience have you ever nursed an elderly with History of lower back pain?
1= No 2= Yes

Q8. If No

if yes, how old was the patient 1= young 2= Middle aged 3= Elderly

Q9 What. Did you do first to the patient with lower back pain? 1= ask questions 2 = examine
painful area 3=gave treatment 4= did nothing

Q10 How much pain did you think the patient had

1= mild

2=moderate

3=severe

4= I don't know

Q 11. Do you know or heard any ways of rating pain

1= No 2= Yes

Q12. If yes which one do you know

Q 13. Was the method you used taught or learnt by yourself?

1= taught, 2= learnt by self, 3= doesn't apply.

Q14 Using the provided line below can you use it for rating pain in the elderly

0 _____ 5 _____ 10

Q15. Have you used five finger digits for rating pain 1= Yes 2= No

Q 16. If yes how

SECTION C: INNOVATIVE NURSING METHODS TO RELIEVE PAIN IN THE ELDERLY

Q17. In your opinion, do you THINK nursing interventions can relieve pain adequately?

1= strongly disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

Q18. What did you first to relieve the pain?

1= advise 2= treatment nursing measure 3= I don't know

19 Do you know any nursing means of relieving LBP in the elderly? 1= NO 2= Yes

Can you mention some of them?

Q20. In your opinion, do you feel nurses have other means of relieving LPB in elderly?

1= strongly disagree 2= Disagree 3= Neutral 4= Agree 5= strongly Agree

If strongly agree which are those means?

Q 21. Is there anything else you want to let me know about assessment, and management of lower back in the elderly?

_____ Thank you _____