Nurses' Knowledge, Attitude and Practices Related to Patient's Health Assessment in Minia University Hospital

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Abstract:

Background: Health assessment is an essential nursing function which provides foundation for quality to nursing care and intervention. It helps to identify the strengths of the patient that promoting his health. **Aim of this study**: To evaluate nurses' knowledge, attitude and practices related to patient's health assessment in Mina university hospital. **Research Design**: Descriptive study design was carried out in the present study. **Setting:** This study was carried out in Minia University hospital, in medical, surgical and intensive care unit**. Subjects**: The study sample included all nursing staff currently assigned to work in the departments in morning shift in Minia University Hospital with total number (n=59). **Tools of the study**: Two tools were used that are an interview questionnaire and an observational checklist. **Results**: The results revealed that a statistical significant was found between nurses' practices and their age. Concerning the years of experience, there was a statistical significant between nurses' practices and their years of experience. The results revealed that a statistical significant was found between the level of knowledge and level of practices with (P= 0.09).**Conclusion**: The study concluded that, a statistical significant was found between nurses' knowledge and their qualification. There is higher knowledge percent among nurses with Bachelor degree than diploma nurses. The results revealed that a statistical significant was found between the level of knowledge and level of practices. Finally, the findings showed that the nurses with good level of knowledge have fair practices. The study **recommended** that in-services training program should be provided to nurses about clinical health assessment role in nursing practice, adding a clinical health assessment form has recorded by a nurse and it is documented in patient's file.

Key Words: Nurses' Knowledge and Practices, Health Assessment**,** Minia University Hospital

Introduction:

Physical assessment is an important tool in nursing care generally and particularly in intensive care. It helps in the identification of patients' existing and potential nursing problems, and enables the staff to set care protocols. Despite of the importance of physical assessment still many nurses think that it is not part of their jobs. [1]

The primary duty of every nurse is to assess of a patient's physical and emotional well-being. It is basic-skill learned to first nursing class, will use every day with his or her patient. A complete assessment will quickly alert the nurse about the patient's current state of health e.g. if it is a positive or negative finding. [2]

Assessment is the first stage of the nursing process, the nurse should be carried out a complete and holistic nursing assessment of every patient. Nursing practice is primarily caring relationship between nurse and person[3].Health assessment are used

by nurses to gather information about their patient's condition that help to formulate a nursing plan of care for them. Usually, an assessment framework based on a nursing model .Assessment stage is identified the patient's problems which are expressed either actual or potential, for example a patient who has been rendered immobile by a road traffic accident may be assessed as having "potential for impaired skin integrity related to immobility. [4]

Standards of nursing practice are assessment, diagnoses, outcome identification, planning, implementations, and evaluation. [5] The American nurses association mentioned that the standards of practice based on nursing process and assessment which is the first and foundational step to collect comprehensive data about the patient's health or situation is performed by nurses in all setting. [6]

Nursing practice is the actual provision of nursing care. When providing patient's care the nurses are implementing the nursing care plan which is based on the client's initial assessment. It is based around a specific nursing theory which will be selected as appropriate for the care setting. [7] Types of health assessment are comprehensive assessment, problem- based focused assessment; follow up assessment and screening assessment. [8]

The components of health assessment include the following: conducting a health history (the collection of subjective data), performing a physical examination (the collection of objective data) and documenting the findings. [9] Taking a nursing history prior to the physical examination allows to nurse to establish a rapport with the patient and his family. History elements includes: Health status; Course of present illness

including symptoms; Current management of illness; Past medical history including family's medical history; Social history and Perception of illness. [10]

Practical assessment of clinical examination skills (PACE) aims to examine and detect the presence or absence of physical signs, interpret physical signs, make appropriate diagnoses, develop and discuss emergency, immediate and long-term management plans and demonstrate the clinical nurse of history taking. Core physical examination skills are to examine the skin, head, eyes, ears, throat, chest, lungs, cardiovascular, musculoskeletal, abdomen, neurology and genital area. [8]

The characteristics of clinical examination may related to the system of physical examination, identification and interpretation of physical signs, interpretation and uses of information gathered through checks of information and interpreting history to create a problem list. The last criteria may be related to case discussion of implications to the patient's problems and strategies for solving the problems. Health assessment depends on several factors including the context of care, the setting, patient needs, and the experience of the nurse. [11]

Aim of the study:

To evaluate nurses' knowledge, attitude and practice related to patient's health assessment at Minia university hospital.

Significance of study:

Performing an accurate physical assessment and being able to differentiate normal from abnormal findings is one of the most important roles for today's health care practitioner. If an accurate physical assessment cannot be performed, whether for baseline data or when the patient's condition changes, then the

patient is not receiving the level of competent care that should be given. [12]

Physical assessment has not routinely been performed, while the advancement of nursing roles, it has been argued that physical assessment has become a key nursing skill. So the important aim in our study to assess nurses' knowledge, attitude and practice related to patient's health assessment at Minia university hospital.

Research questions:
1. What is the level of nurses' knowledge towards health assessment of patients at Minia University Hospital?
2. What is the level of nurses' practice towards health assessment of patients at Minia University Hospital?
3. What is the level of nurses' attitudes towards health assessment of patients at Minia University Hospital?
4. What is the relationship between knowledge, attitudes and practices of nurses towards health assessment of the patient at Minia University Hospital?

Subjects and Method:
Designs:
It is a cross-sectional descriptive study
Setting:
This study was carried out in medical, surgical, and intensive care unit at Minia university hospital.
Subjects:
The study sample included all nursing staff currently assigned to work in morning shift at Minia university hospital with total number (N=59).
Tools of data collection:
Data were collected using an interview questionnaire and observational checklist that was

developed by the researchers after reviewing several published international studies.
I. An interview questionnaire: consists of two parts
▪ **1st part**: Socio-demographic characteristics of study nurses including, (sex, age, marital status, qualification and years of experiences).
▪ **2nd part**: questionnaire sheet was designed in Arabic language and developed by the researchers to assess the nurses' knowledge toward health assessment. It includes 9 items.
▪ **3rd part**: nurses' attitude assessment, It includes 2 items related to attitude of nurses (questions 13,14)
Scoring system for nurses knowledge:
Total score of nurses knowledge about health assessment was (9) questions. The score classified as the following: poor 0-2, fair 3-5, good 6-9, and (2) questions was related to attitude of nurses (questions 13, 14). It was scored (1) when negative while it was scored (2) when positive attitude about health assessment for nurses.
II. An observational checklist:
It is related to health assessment. It includes (111) questions including six categories as following pain assessment, Assessing urinary and intestinal elimination, Nutritional status, vital signs, Mental and emotional status and physical examination. Each item of statement with two response options, it was scored (Zero) when incorrect answer, while it was scored (1) when correct answer.
Tools Validity:
Tools were submitted to a panel of three experts in the field of administration, education and Medical-Surgical to test the content

validity. Modification was carried out according to the panel judgment on clarity of sentences and appropriateness of content.

Field work:

The actual field work was carried out from 1-9-2010 to 1-12-2010 for data collection. The researchers were available three days /week in morning shift in medical, surgical and ICU & CCU departments for three months .The nature and the purpose of the study was explained by the researchers to all nurses included in the study. The average time needed for the completion of each questionnaire was around 45-60 minutes).

Pilot study:

A pilot study was carried out on 10% of the total sample to check clarity of items and determined the feasibility of the study. Data collected from the pilot study were reviewed and used in making the necessary modifications prior to the final application of the study tools. The nurses in the pilot study were excluded from the study sample.

Administrative and ethical Considerations:

After approval of the ethics committee, an official permission was obtained from Director and Head of each department at Minia university hospital, and informed consent was obtained from each participant. The significant and purpose of the study was explained to the nurses. Confidentiality of any obtained information was ensured to them.

Statistical Design:

All data of the study were fed into an IBM-compatible personal computer. SPSS-15 (statistical software) was used for statistical analysis. Comparison between groups of variables was done by Chi-square (for non-parametric data). P value was considered significant when P <0.05.

Results:

Table (1): Presents distribution of nurses according to their demographic characteristics. It was found that (57.6%) of nurses were in the age group 19-29 years. Regarding the sex, it was found that the highest percentages of the nurses were (71.2 %) females. Concerning qualification, (71.2 %) of the nurses had Diploma. Regarding years of experiences, it was found that highest percentages among study samples who have experience less than or equal to five years represented (49.1%) while the lowest percentages (8.5%) have twenty five years of experiences.

Figure (1) & (2): Displays distribution of Nurses′ Knowledge Towards Patient's Health Assessment According To Their Sex & Qualifications .Regarding nurses' sex, it was found that higher nurses' knowledge percent were fair among females nurses (50 %).Results indicating the higher knowledge percent toward patient's health assessment were good among nurses with Bachelor than diploma nurses (76.5).

Figure (3) & (4): Shows nurses' attitude toward patient health assessment according to their sex & qualifications. Regarding the sex, it was found that the highest percent of female nurses have positive attitude (45. 2 %) while decline to (41.2 %) in male nurses, and also the results found that (70.6 %) among Bachelor have positive attitude towards applying patient health assessment while diploma nurses were (35.7 %).

Table (2): Presents relation between nurses' demographic characteristics and their attitude about Patient Health Assessment. The results revealed that there were statistical significance relation between nurses' attitude and their demographic characteristics with (P= 0.9).

Figure (5) & (6): Shows nurses' practices toward patient health assessment according to their sex & qualifications. The results revealed that higher practice percent were fair among nurses with Bachelor (11.8 %) than diploma nurses (4.8 %). The results indicating higher practice percent were fair among male nurses (11.8%) while decline to (4.8%) among female nurses.

Table (3): Demonstrates relation between nurses' demographic characteristics and their practice. The results revealed that a statistical significant relation was found between nurses' practice and their qualifications with (P= 0.3) and their sex with (P= 0.2).

Table (4): The results revealed that a statistical significant relation was found between nurses' practice and their age .Concerning the years of experience, the table shows that there was a statistical significant relation between nurses' practice and their years of experience.

Figure (7): Displays level of knowledge and attitude among nurses. The findings showed that the nurses with good level of knowledge have a positive attitude were (64.3%) while attitude decline to (27.6%) among nurses with fair level knowledge.

Table (5): Shows the relation between knowledge and attitude among nurses, the results revealed that a statistical significant relation was found between nurses' knowledge and their attitude with (P= 0.009).

Table (6): presents the relation between knowledge and practice among nurses. The results revealed that a statistical significant relation was found between the level of knowledge and level of practices with (P= 0.09).The finding showed that the nurses with good level of knowledge have fair practices were (14.3%)

Table (7): Describes the relation between the level of practices and attitude among nurses, the results revealed that a statistical significant relation was found between nurses' practices and their attitude (P= 0.1). The findings showed that the nurses with poor level of practices have a positive attitude were (41.8%) while nurses with fair level of practices have a positive attitude were (75.0%).

Discussion:

The findings of the current study revealed that, the highest knowledge percent toward patient's health assessment were good among nurses with bachelor than diploma nurse. These findings might be related to that bachelor nurses were learned it in their theoretical and practical courses and had more information about the importance of patient's health assessment during delivery of health care .The present study findings go in same line with study done in Canada [3] which revealed that baccalaureate nursing had knowledge more diploma nursing also this is supported by Zakari [12] who mentioned that diploma nurses knowledge related patient's health assessment was very low & insufficient practice because the diploma nurses had taken insufficient theory and practical courses related to health assessment.

The findings of the present study showed that, the highest percent of nurses' with experience less than or equal five years were had fair practice regarding patient's health assessment .While nurses' with experience equal to twenty-five years had poor, practice regards to patient's health assessment .This result was disagree with study done in Saudi Arabia which found that there was an improvement in the level of performance with the increase in years of experience. [13] Similarly,

another study done in Jordan found that nurses with longer years of experience had better practice of health assessment for patients. [14]

The current study findings indicated that, nurses with good level of knowledge have fair practices this might be due to positive relationship between knowledge and practices. These findings were in same line with study done in Saudi Arabia which reported that nurses were interested with working and more practice for patients when they were more knowledgeable.

In the current study the highest practice percent were fair among male nurses than female nurses; this finding is in harmony with Alsenany [13] who mentioned that the lowest practice percent were among female

The findings showed that the majority of nurses with poor level of practice had a positive attitude; this result may be due to ratio between nurses and patients numbers. While minority among nurses in the present study with fair level of knowledge this might be due to lack of in- service training programs about health assessment. This result was in agreement with study done in USA which reported that favorable attitude among nursing staff toward patient's health assessment increase with practice and knowledge. [15]

Conclusion:
The study findings highlight several important issues: First, there is higher knowledge percent towards patient's health assessment were among nurses with bachelor than diploma nurses are. Second, the results revealed that most of participant nurses had good level of knowledge and positive attitude related patient's health assessment. While the findings showed that, the nurses with poor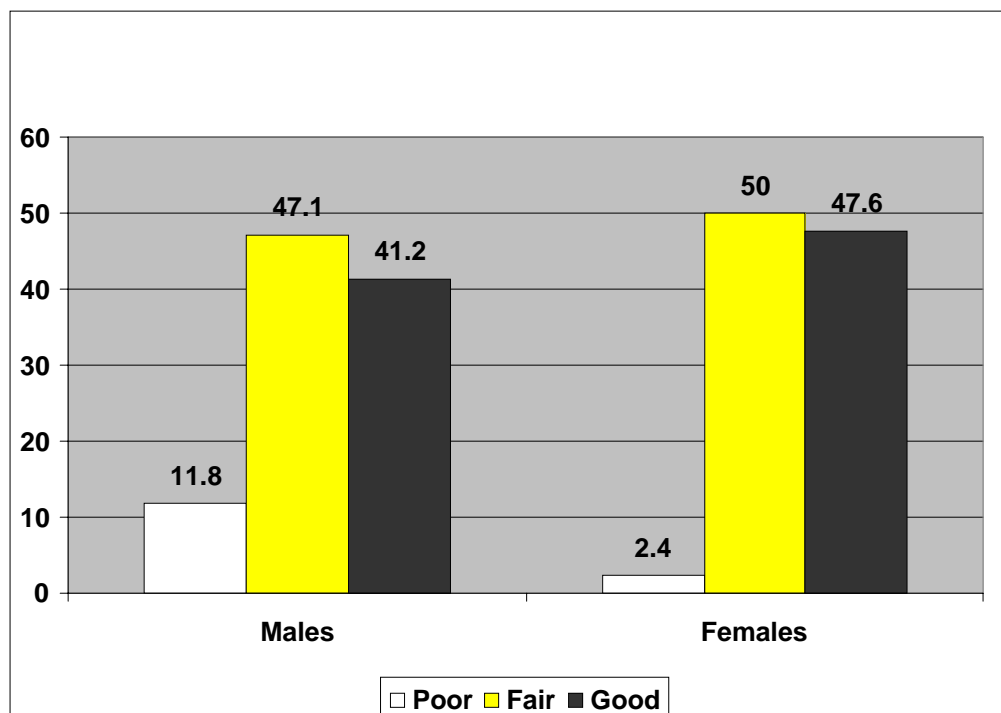 level of practices have a positive attitude. In addition, most of participant nurses with fair level of practices have a positive attitude. Third, study represented a statistically significant differences were found between nurses' performance and their years of experience. Finally, the current study results revealed that statistically significant differences were found between the level of knowledge and level of practices.

Recommendations:
1. Providing in-services training program should be provided to new nurses about clinical health assessment role in nursing practice
2. Adding a clinical health assessment form has recorded by a nurse and it is documented in patient's file.
3. An increase nurses' awareness of their role about the health assessment through continuing nursing education.
4. Encouraging collaboration between nurses and physician in conducting clinical health assessment.

Table (1): Distribution of demographic Characteristics of Nurses Study Sample (N=59)

Demographic Characteristics N = (59)	No.	%
Age :		
• 19-Years	34	57.6
• 30-Years	20	33.9
• 40-Years	5	8.5
Sex :		
• Males	17	28.8
• Females	42	71.2
Qualifications :	42	71.2
• Diploma		
• Baccalaureate degree.	17	28.8
Years of Experiences :		
• ≤ 5 Years	29	49.1
• ≤ 10 Years	5	8.5
• ≤ 15 Years	7	11.9
• ≤ 20 Years	13	22
• ≤25 Years	5	8.5

Figure (1): Distribution of Nurses' Knowledge towards Patient's Health Assessment According To Their Sex
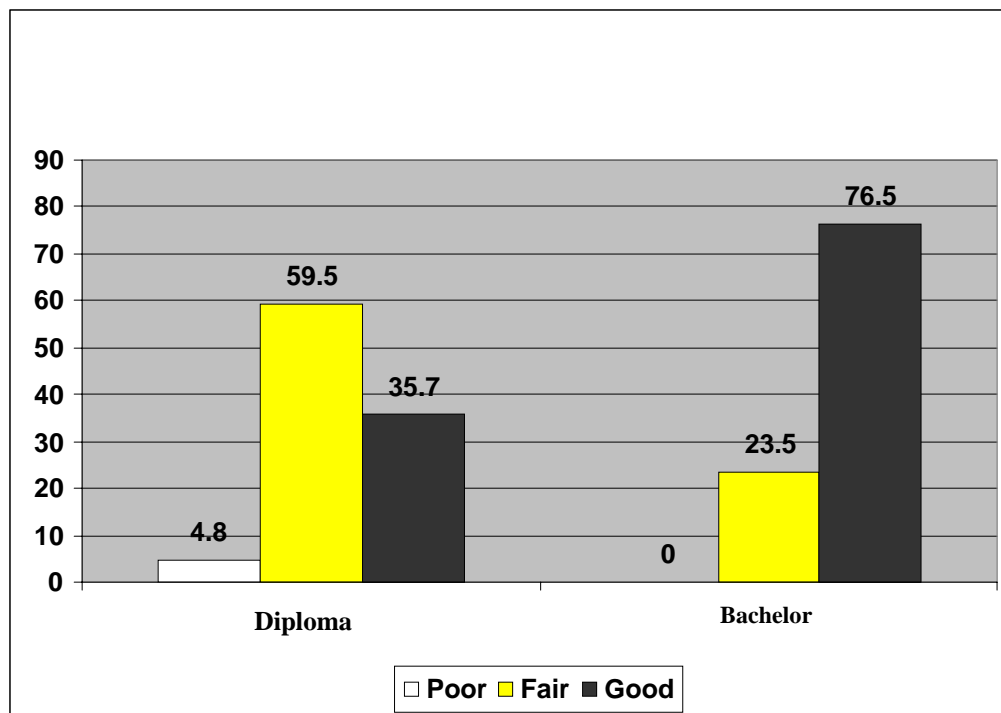
Figure (2): Distribution of Nurses' Knowledge towards Patient's Health Assessment According To Their Qualifications.
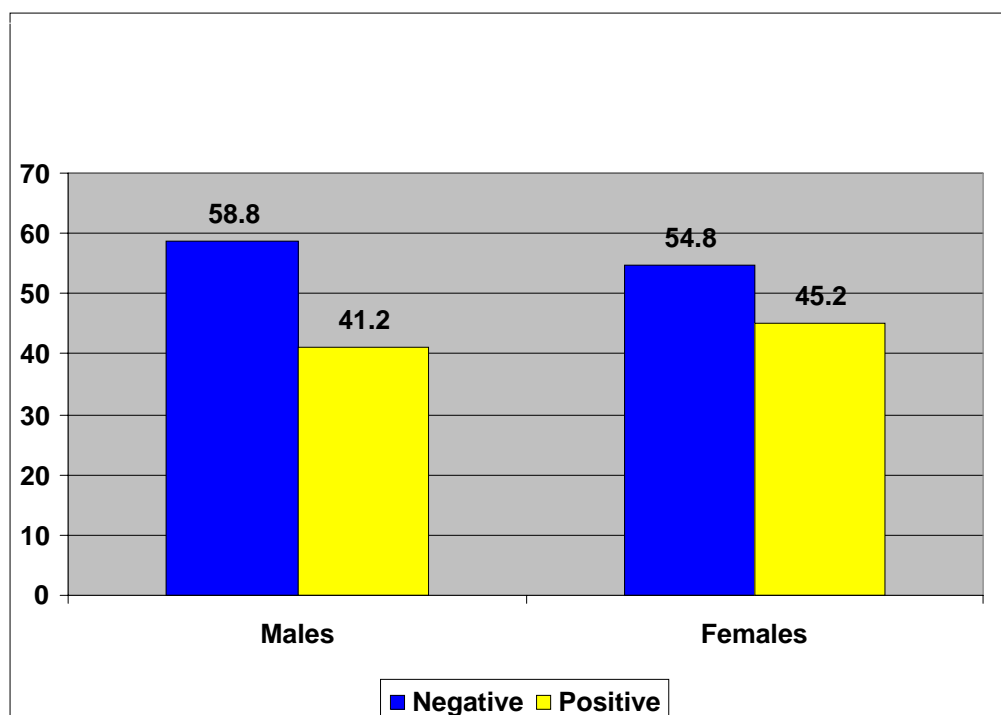

Figure (3): Distribution of Nurses' Attitude towards Patient's Health Assessment According To Their Sex.

Figure (4): Nurses' Attitude according to their qualifications towards Patient's Health Assessment

Table (2): Relation between Nurses' Demographic Characteristics and their Attitude towards Patient Health Assessment

Socio-demographic Characteristics N = (59)	Attitude Level				Total	
	Negative		Positive			
	No.	%	No.	%	No.	%
Sex						
• Males	10	58.8	7	41.2	17	100
• Females	23	54.8	19	45.2	42	100
Total	33	55.9	26	44.1	59	100
$Chi^2=0.001$ DF=1 P= 0.9						
Qualifications						
• Diploma	28	66.7	14	33.3	42	100
• Baccalaureate B.Sc.	5	29.4	12	70.6	17	100
Total	33	55.9	26	44.1	59	100
$Chi^2=0.001$ DF=1 P= 0.009						

Figure (5): Nurses' Practices towards Patient's Health Assessment according To their Sex

Figure (6): Nurses' Practices towards Patient's Health Assessment and according to their qualifications.

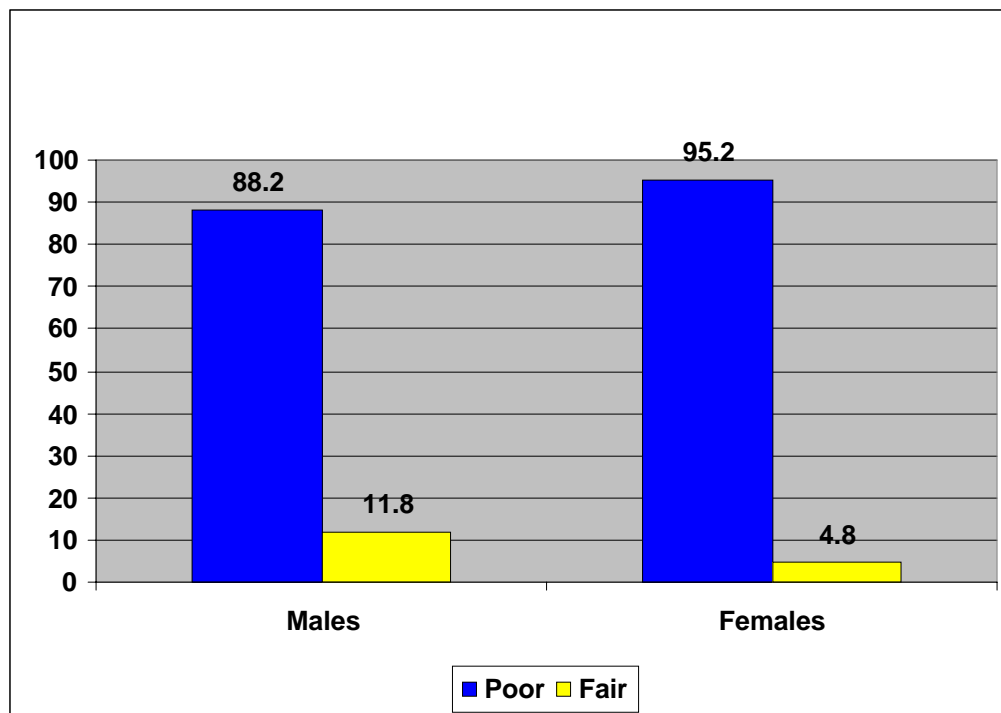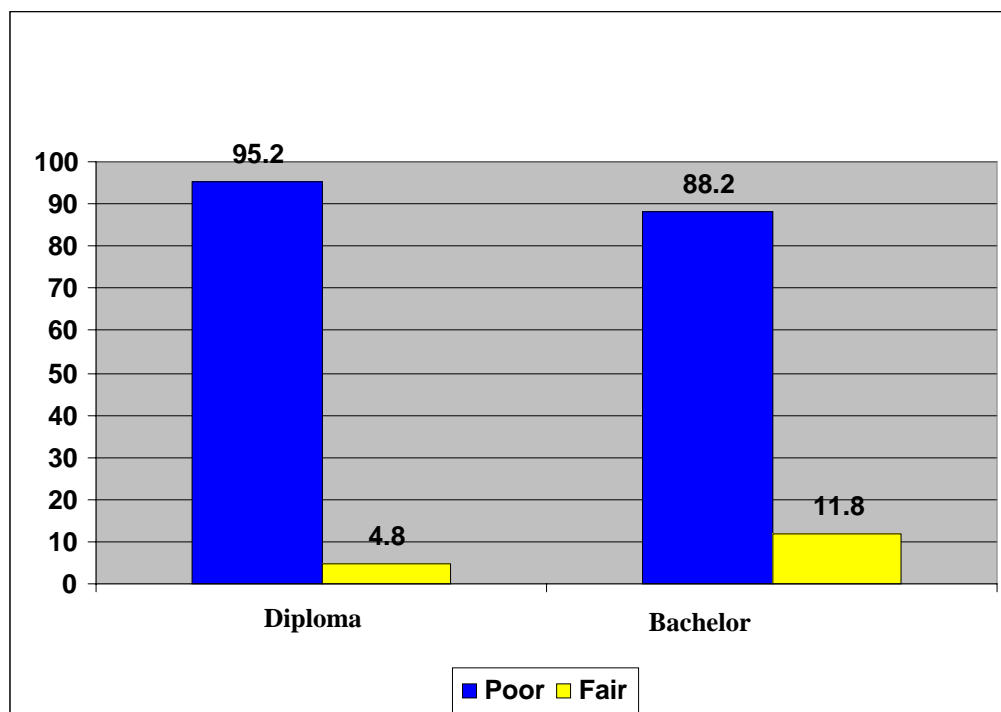**Table (3): Relation between Nurses' Demographic Characteristics and Their Practice about Patient's Health Assessment**

Socio-demographic Characteristics N = (59)	Practice Level				Total	
	Poor		Fair			
	No.	%	No.	%	No.	%
Sex						
• Males	15	88.2	2	11.8	17	100
• Females	40	95.2	2	4.8	42	100
Total	55	93.2	4	6.8	59	100
Fisher exact= 1.1		*DF= 1*		*P= 0.2*		
Qualifications						
• Diploma	40	95.2	2	4.8	42	100
• Baccalaureate B.Sc.	15	88.2	2	11.8	17	100
Total	55	93.2	4	6.8	59	100
Fisher exact= 0.9		*DF= 1*		*P= 0.3*		

Table (4): Relation between Nurses' Practice Score Level and Age and Years of Experience

Item N = (59)	Practice Level		P-value
	Poor	Fair	
Age	28.8±7.4	22.2±3.8	0.04
Years of experience	9.7±7.7	3.3±3.2	0.06

Table (5): Relation between Nurses' Knowledge and their Attitude towards Patient's Health Assessment

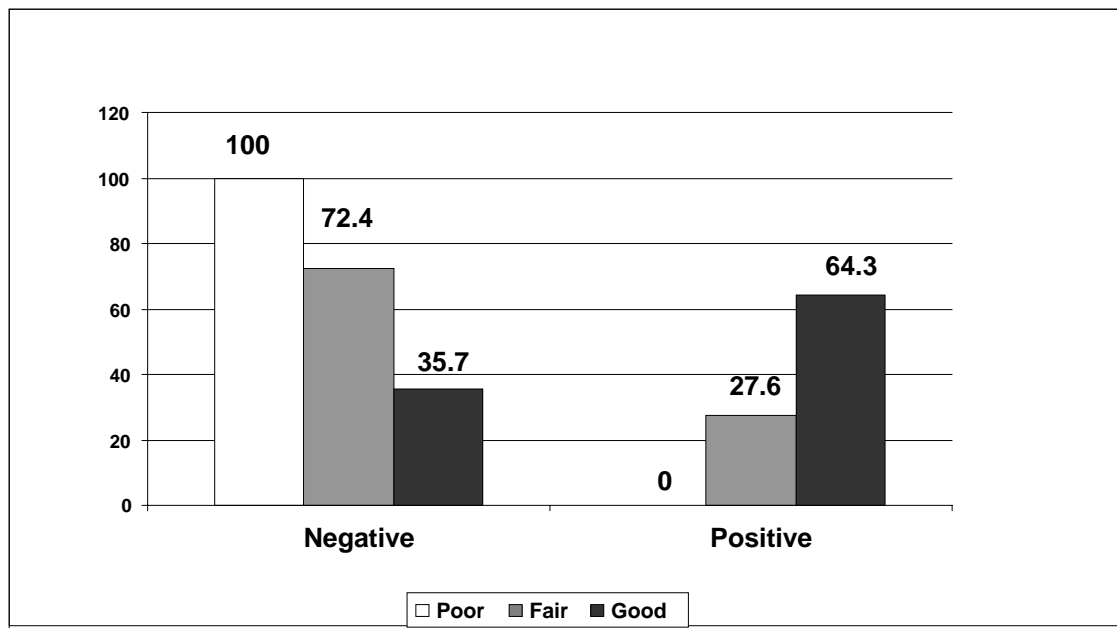| Knowledge Level	Attitude Level				Total	
	Negative		Positive			
	No.	%	No.	%	No.	%
• Poor	2	100	0	0.0	2	100
• Fair	21	72.4	8	27.6	29	100
• Good	10	35.7	18	64.3	28	100
Total	33	55.9	26	44.1	59	100
Fisher exact= 9.4		DF= 2		P= 0.009		

Figure (7): Level of Nurses' Knowledge and Their Attitude towards Patient's Health Assessment

Table (6): Relation between Nurses Knowledge and their Practice

| Knowledge Level | Practice Level | | | | Total | |
| | Negative | | Positive | | | |
	No.	%	No.	%	No.	%
• Poor	2	100	0	0.0	2	100
• Fair	29	100	0	0.0	29	100
• Good	24	85.7	4	14.3	28	100
Total	55	93.2	4	6.8	59	100
	Fisher exact=4.7		DF= 2		P= 0.09	

Table (7): Relation between Nurses Practices and their Attitude

| Practice Level | Attitude | | | | Total | |
| | Negative | | Positive | | | |
	No.	%	No.	%	No.	%
• Poor	32	58.2	23	41.8	55	100
• Fair	1	25.0	3	75.0	4	100
Total	33	55.9	26	44.1	59	100
	Fisher exact= 1.6		*DF= 1*		*P= 0.1*	

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