

Perception and Attitude of Nurses toward their Role in Scientific Research

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1.ABSTRACT

Background: Nursing is the backbone of the healthcare sector. Perception and attitude of nurses toward scientific research are key needs for healthcare services globally and significantly essential to provide safe and quality care. **Aim:** This study aims to assess perception and attitude of nurses toward their role in scientific research at Main Mansoura University Hospital. **Methods:** Descriptive correlational design was used and a convenient sample of (189) nurses working at Main Mansoura University hospital by using two tools: Questionnaire Nursing Staff and Research Activities Scale and Boothe Attitudes on Nursing Research Scale. **Results:** Two third of nurses (60.3%) at Main Mansoura University Hospital had high level of perception toward research and more than three quarters of them (79.4%) had positive attitude level toward research, and the total perception level affect highly statistical significant relation with total attitude among the studied nurses. **Conclusion:** There was highly statistically significant positive correlations were found between total perception and total attitude scores about nursing research. **Recommendation:** Establish obvious research guidance and research norms that are clearly announced within health care organization. Provide training courses and orientation programs for nurses working in hospitals about the importance of scientific research to raise their clinical practice.

Keywords: Attitudes, Nurses, Perception, Research.

2.Introduction

In conformity with ethical and regulatory guidelines, scientific research is carried out with utmost care. Both the improvement of health services and the standard of patient care depend heavily on it. Research in the nursing field is conducted systematically in order to produce reliable data on important topics. The term "nursing research" is used in the restricted meaning to describe "a scientific process that confirms and improves existing information and develops new knowledge that directly and indirectly informs clinical nursing practise ((Kovačević, Prlić & Matijašević, 2017).

The development and upkeep of good standards for medical treatment depend heavily on research. The primary barriers to conducting research are a lack of time, a lack of enthusiasm and motivation, a lack of knowledge of the literature that has been produced, a lack of authority to change practices, a lack of peer support, a lack of understanding of the research process, and a lack of awareness of the available research literature. (Oommen, & Upasani, 2022).

A positive or negative arrangement of feelings, assessments, and responses to an item is called an attitude. Attitudes can be learned, generally persistent, and stable. To accurately measure the adoption of changes in nursing practice and the delivery of evidence-based healthcare, future studies should link those findings to other crucial characteristics, with nurses' attitudes towards research serving just as the initial step. (Bicalho, Silva, Cunha, Teixeira, & Proença, 2019).

Family involvement in patient care has also been cited as being hindered by healthcare workers' perceptions and attitudes that aim to safeguard patient autonomy. (Mackie, Mitchell & Marshall, 2019).

In the rapidly changing health environment, research is crucial. Delivering patients with high-quality, effective care is a need. Also, research plays a vital role in the professional responsibilities and roles that modern nurses have in relation to the ideas of effectiveness, efficiency, and quality improvement when providing patient care. Out of solid foundations based on research, nurses create

their own body of professional knowledge, so the study aimed to assess perception and attitude of nurses toward their role in scientific research (Lingcon, 2020).

Aim of the study:

This study aims to assessing perception and attitude of nurses toward their role in scientific research.

3.Subjects and method:

3.1Study design:

A descriptive research design was used in this study.

3.2Setting:

The study was conducted at medical and surgical departments at Main Mansoura University Hospital

3.3Study sample:

It's convenient at the time of data collection, 189 nurses with more than a year of work experience were selected as a sample.

In this investigation, data were gathered using two different tools.

Tool (I): Questionnaire Nursing Staff and Research Activities Scale:

This tool developed by (Abd-Elhameed, 2016) It consists of 57 items which is dividing into (six section), Perceived value of nursing research were measured with (5-item) sub-scale, Perceived role of nursing staff in nursing research were measured with (10-item) sub-scale, Interest in research were measured with (8-item) sub-scale, Research experience were measured with (10-item) sub-scale, Perception of personnel in your unit about research were measured with (9-item) sub-scale, Perception of the research ethical considerations in your unit were measured with (15-item) sub-scale. Rspponses of the Studied Nurses likert-type scale ranged from (1, no; 2, to some extent; 3, yes)

Tool (II): Boothe Attitudes on Nursing Research Scale:

The scale contains three sub-scales. Section A- Interest and environmental support to ascertain views regarding nursing research, Hofmeister (2007) employed a measure created by Boothe in 1981, which had previously been used by Bostrom and colleagues in 1989 and by Boothe and his coworkers in 1981. There are 46 questions in the original questionnaire.ere measured with (21-item) sub-scale, Section B- Payoff and benefits were measured with (17-item) subs-cale, Section C- Barriers to conducting Research were measured

with (8-item) sub-scale. The strongly disagree"1" to strongly agree"5" order of the instrument item responses was changed for the current study.

3.4Ethical considerations:

Ethical approval was obtained from the Research Ethical Committee of Faculty of Nursing, Mansoura University Ref.No.0428. The hospital's accountable administrator provided official approval for the study to be carried out. The nursing staff was told of the study's nature and purpose before they agreed to participate, and they gave their informed consent. It was made clear to all participants that participation in the study was completely voluntary and that they might leave at any time. The confidentiality of the information gathered was guaranteed to all participants, and the study sample's privacy was protected at all times.

3.5 Statistical analysis:

With the use of the SPSS programme, the gathered data were arranged, tabulated, and statistically examined (Statistical Package for the Social Sciences, version 22, SPSS Inc. Chicago, IL, USA). Range, mean, and standard deviation calculations were made for quantitative data. Chi-square test (2) was used to compare two groups and more for qualitative data, which categorize a set of data into sets according to frequency, percentage.

4.Results:

Table (1) Showed demographic characteristics of the studied nurses. The majority of them (89.9%) were female, Regarding to age about two third of them (66.1%) were in age group 25-35 years old. Regarding to years of experience about half (50.3%) of nurses had (1-10) years of professional experience with mean score (10.24±4.09).The majority (82.0%) of nurses married, Finally (46.0%) of them had technical institute of nursing.

Table (2) Showed mean score and rank perception toward research among the studied nurses at Main Mansoura University. According to the mean perception of the research ethical considerations in you unit was found the highest mean (36.09±5.53). While the lowest nursing staff and research activities (12.12±1.74). According to ranking nursing research helps nursing practice was found the highest rank, while the lowest nursing research experience.

Table (3) Showed the total highest level of perception toward research (60.3%) while the lowest level of perception toward research (15.3%)

Table (4) Showed mean score and rank attitude toward research. According to the table

interest and environmental support was found the highest mean (72.90±11.56), while barriers to conducting research was the lowest mean (24.69±4.53). According to ranking payoff and benefits were found the highest rank, while the lowest barriers to conducting research.

Table (5) Total attitude and subitems related to research. The highest (79.4%) of studied sample

had positive attitude toward research. While, the lowest (20.6%) of them had negative attitude toward research.

Table (6) The table showed that total perception level affect highly statistical significant relation with total attitude among the studied nurses.*Significant (P <0.05)

Table (1): Demographic Characteristics of the Studied Nurses at Main Mansoura University Hospital (n=189).

Demographic data	The studied nurses (n=189)	
	N	%
Sex:		
Male	19	10.1
Female	170	89.9
Age years:		
18-<25	38	20.1
25-35	125	66.1
>35	26	13.8
Mean±SD	29.87±8.14	
Experience years:		
1-<10	95	50.3
10-15	69	36.5
>15	25	13.2
Mean±SD	10.24±4.09	
Marital status:		
Single	32	16.9
Married	155	82.0
Divorced	1	0.5
Widowed	1	0.5
Education qualification:		
Nursing school	62	32.8
Technical Institute of nursing	87	46.0
Bachelor degree	40	21.2

Table (2): Mean Scores and rank of perception toward research among the Studied Nurses at Main Mansoura University Hospital (n=189).

Perception sub items toward research (Each item was scored 1-3)	No. of questions (Scores)	The studied nurses(n=189)			
		Range Mean±SD	Range Mean±SD/ No. of questions	Percent	Rank
A-Nursing staff and research activities	5 (5-15)	5-15 12.12±1.74	1-3 2.42±0.35	58.7%	4
B-Nursing research helps nursing ractice	10 (10-30)	10-30 26.06±3.05	1-3 2.61±0.31	70.9%	1
C-Interest in Nursing Research	8 (8-24)	8-24 20.68±2.62	1-3 2.58±0.33	66.7%	2
D-Nursing Research Experience	10 (10-30)	10-30 21.37±3.38	1-3 2.14±0.34	16.4%	6
E-Perception of personnel in your unit	9	9-26	1-3	58.7%	3

about research	(9-27)	22.24±3.71	2.47±0.41		
F-Perception of the research ethical considerations in you unit	15 (15-45)	15-43 36.09±5.53	1-3 2.41±0.37	50.8%	5
Total perception scores	57 (57-171)	61-157 138.56±15.03			

Table (3): Total perception level toward research among the studied nurses (n=189).

Perception subitems level toward research		The studied nurses(n=189)	
		n	%
Total perception level			
Low perception	(57-125)	29	15.3
Moderate perception	(126-142)	46	24.3
High perception	(143-171)	114	60.3

Table (4): Total attitude mean score and rank related to research among the studied nurses (n=189).

Attitude subitems related to nursing research (Each item was scored 1-5)	No. of questions (Score)	The studied nurses (n=189)			
		Range Mean±SD	Range Mean ±SD/ No. of questions	Percent	Rank
A-Interest and environmental support	21 (21-105)	21-96 72.90±11.56	1-4 3.47±0.55	3.47%	2
B-Payoff and benefits	17 (17-85)	17-85 64.19±10.67	1-5 3.77±0.63	3.77%	1
C-Barriers to conducting research	8 (8-40)	8-40 24.69±4.53	1-5 3.09±0.57	3.09%	3
Total attitude scores	46 (46-230)	46-212 161.78±23.60			

Total attitude and subitems toward research		Attitude among the studied nurses	
		n	%
Total attitude grades:			
Negative attitude	(46-156)	39	20.6
Positive attitude	(157-230)	150	79.4

Table (5): Total attitude levels to research among the studied subitems related to research (n=189).

Table (6): Relationship between total perception level and total attitude among the Studied Nurses (n=189).

Total attitude grades	Total perception level among the studied nurses (n=189)						χ ² test P value
	Low perception level (n=29)		Moderate perception level (n=46)		High perception level (n=114)		
	N	%	N	%	N	%	
Negative attitude	19	65.5	14	30.4	6	5.3	54.817 0.0001*
Positive attitude	10	34.5	32	69.6	108	94.7	
R	0.602						
P	0.0001*						

*Significant (P <0.05)

r=Correlation Coefficient

5. Discussion:

In order to evaluate nurses' attitudes and perceptions of their participation in scientific research, the current study was done. Two thirds of the analyzed sample had a high level of perception towards research, according to the results of the current study. This can be as a result of how helpful it is for their nursing practice. Using nursing research in nursing practice is generally known to center on four main themes: professionalism, accountability, quality of care, and cost-effectiveness. Participants agreed that they saw research as being beneficial to their careers, that it is essential to their professional development, and that they use scientific methods in their nursing practice. These findings provide significant evidence in favour of the idea that applying nursing research to clinical practice can advance the nursing profession.

This is consistent with **Brown, Johnson, & Appling, (2011)** who asserted that nurses' perception toward nursing research are one of the most important factors that affect utilization of research.

The majority of the studied nurses had high levels of positive attitude towards research, according to the study's findings regarding attitudes towards all sub-items related to research. This may be because health services research has highlighted the significance of nursing services and the ways in which such services are created to guarantee patient safety and high standards of care. Clinical studies that have shown the effectiveness of particular nursing approaches to enhance health outcomes, progress in understanding of the molecular mechanisms behind nursing treatments due to basic science research understanding of how people and populations react to health issues has grown thanks to epidemiological studies, qualitative study that has improved knowledge of how people perceive and react to health and sickness, as well as the aspects of care that are crucial to the best possible results

The study finding confirmed by **Uysal Toraman et al.,(2017)** who performed research in Turkey found that nursing students who authored master's theses based on scientific research had better attitudes towards research and were more knowledgeable about the conduct and reading of scientific research.

In the present study the finding revealed that the total perception level affect highly statistical significant relation with total attitude among the

studied nurses about nursing research. This may be due to nursing perception toward research is considered the basises to use research finding in nursing practice, nurses' attitudes toward nursing research are one of the most important factors that affect utilization of research in nursing practice. So there are a significant relation between total perception and total attitude.

This finding confirmed by **Squires, et al., (2015)** who conducted study about Positive attitudes towards research. Evidence suggests that nurses' attitudes play a significant role in how effectively study findings are applied in practice. Research use was positively impacted by positive views towards research, confirming the positive correlation between these two variables.

The enhancement of nursing care, the credibility of the nursing profession, nursing practice accountability, and the documenting of nursing care's cost effectiveness are all a result of nurses who have a high perception of the value of undertaking research. which, based on research findings, positively affects their attitudes in nursing practice. Engagement in research provides a number of advantages, including knowledge creation, sporadic cost savings (for example, a healthier workforce), improved decision-making, and the improvement of both individual and group research abilities. This has caused the majority of nurses to see research with great positivity. (**Vijayalakshmi, Pashupu, Thimmaiah, & Math, 2014**).

This result was agreed with **Al Jarrah (2013)** in Jordan study who demonstrated that associate nursing students have generally positive attitudes and perspectives about the use of nursing research in clinical practice.

6. Conclusion:

According to the study's findings, there were strong statistically significant positive relationships between respondents' overall perception and attitude scores for nursing research.

7. Recommendations:

Establish obvious research guidance and research norms that are clearly announced within health care organization. Provide training courses and orientation programs for nurses working in hospitals about the importance of scientific research to raise their clinical practice.

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