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RESEARCH ARTICLE

The relationship between Nurses' Demographic Attributes and the Quality of Nursing Care Provided to Stroke Patients

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ABSTRACT

Background: *The quality of nursing care is a major concern in different countries around the globe, including Iraq. This paper shedding light upon the nursing care provided to stroke patients by exploring its roots and contributing factors that relates to the nurse's demographic data.*

Objective(s): *The aim of this study is to detect the relationship between nurses' demographic attributes and the quality of nursing care provided to stroke patients.*

Methodology: *Descriptive cross-sectional study design approach is done by observational the members of the study population, with the aim of describing the studied phenomenon in terms of its nature and degree of existence only. The descriptive cross-sectional approach is done by observation of the study participants about the quality of nursing care provided for stroke patients. The study was carried out in Anbar Province, at Fallujah Teaching Hospital. The non-probability (purposive) sample was selected to carry out the study which consists of (50) nurses who are deals with stroke is selected among nurses who working at emergency department, medical wards, and critical words.*

Results: *Findings demonstrated that there were significant differences in quality of nursing care with regard nurses who are male (M ±SD=1.93±0.640) and those who are female (M ±SD=1.05±0.224) (t=5.922; p=0.000. Furthermore, there were significant differences in quality of nursing care with regard nurses' education level (p=0.000). Nurses who are bachelor's significantly increased quality of nursing care.*

Conclusion: *There is an obvious association in quality of nursing care with respect to the nurses' years of experience. Years of experience that are more than ten increased the quality of nursing care.*

Recommendations: *Increasing the number of nurses, with a bachelor's degree in nursing profession, to work in the (emergency unit, internal unit, intensive care unit) because of the information and scientific background they have.*

Keywords: *Nurses, Demographic Attributes, Quality of Nursing Care, Stroke Patients.*

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INTRODUCTION

Stroke is a clinical syndrome characterized by fast onset of functional incapacity, and it is the leading cause of mortality globally (Timby B et al., 2015). According to the World Health Organization, between 20% and 50% of persons who suffer from a stroke are at risk of dying, depending on the severity of the stroke. depending on the severity of the stroke, the patient's age, and other factors management effectiveness (WHO, 2017).

Stroke is the major cause of long-term functional disability, with 50% to 70% of survivors functionally independent and 15% to 30% living with lifelong disability (Aslani Z et al., 2016). Additionally, 32% will use home healthcare services, while 26% will require long-term care (Summers D et al., 2009).

The World Health Organization defines a stroke, sometimes known as a "brain attack," as a "neurological impairment of cerebrovascular etiology that lasts longer than 24 hours or is interrupted by death within 24 hours" (Luker et al., 2017). Ischemic strokes account for more than three-quarters of all strokes, while hemorrhagic strokes account for the remaining 20% (Due to rupture of a blood vessel) (Sacco et al., 2013; Sims et al., 2010).

Stroke is caused by the following risk factors: being overweight, being elderly, and having a family history of stroke. 55 years of age or older, a personal history of stroke, a sedentary lifestyle, and a proclivity to drink and smoke (Moreau et al., 2016; Naess et al., 2012).

The following are some of the symptoms of a stroke: limb weakness, sensory deficits, aphasia, dysphagia, visual field deficit, coordination issues, and cognitive impairment (Miller et al., 2010). Depression and decreased physical activity are also typical complaints among stroke survivors (Lincoln et al., 2013). Treatment must begin as soon as a stroke is diagnosed, because prompt medical attention is critical in reducing disability and the risk of mortality (Jakel et al., 2012).

METHOD

Design

This paper is the published part of a larger study which used the descriptive cross-sectional study design approach is done by observational the members of the study population, with the aim of describing the studied phenomenon in terms of its nature and degree of existence only. The descriptive cross-sectional approach is done by observation of the study participants about the quality of nursing care provided for stroke patients. Since the problem of the study is related to the present, and that its study will be done through three observational checklist, as well as the aim of this study is to stop at the limit of description of the study variables (quality of nursing care), and therefore the appropriate approach is the cross sectional designs, which depends on the study of the phenomenon and the statement of its characteristics and size, as well as the collection and interpretation of information.

Administrative Arrangements

The official permissions were obtained from relevant authorities before collecting the study data as follow: Approval from the University of Baghdad/ College of Nursing Council for the study. Official permissions from Ministry of Planning (CSO) 'Central Statistical Organization'. Official permissions were also obtained from the Anbar Health Directorate (Training and Development Division) to formally access the hospital. Official permission has been obtained from Fallujah Teaching Hospital.

Setting of the Study

The study was carried out in Anbar Province, at Fallujah Teaching Hospital. This hospital belongs to the Anbar Health Department and has an area of 80,000 square meters. There are four buildings: the main building, the doctor's residence, the services building, and the information building. It includes diagnostic departments, outpatient clinics and consultations (15 special departments), emergency department (20 beds + 2 operating rooms + 6 examination rooms + side laboratories), imaging departments (computed tomography + magnetic resonance + x-rays + ultrasound + mammography), Laboratories: (bacteria laboratories + autopsy + biochemistry + urine analysis + blood bank + hormone + sterility) and pharmacy.

Sample of the Study

The non-probability (purposive) sample was selected to carry out the study which consists of (50) nurses who are deals with stroke is selected among nurses who working at emergency department, medical wards, and critical words.

Study Instruments

The questionnaire is one of the means to help collect data that contribute to achieving the results expected by the study, so the researcher designed this questionnaire, which aims to clarify the study objectives and significance by obtaining answers to the study's questions.

Ethical Considerations

Ethical obligations are one of the most important things that the researcher must follow and abide it when doing the study. Before the starting of collect the data from the community that has been identified for the study, the researcher should no clarify the main purpose and desired goal of conducting this study for the sample to be including in the study, as well as adhere to the strict confidentiality of the data taken from the study sample and pledge to use it for scientific purposes related to the study only. Before the starting of gathering the data from the sample who are participating in the study, the researcher collected socio-demographic information from the nurses without informing them about the purpose of conducting the research because the topic requires it.

Methods of Data Collection

The data have been collected by constructed questionnaire (checklist) observation tool. The researcher has gathered the objective's responses through an application of direct observation as mean of data collection. Nurses were observed while they are working in the cases of stroke patients. The researcher observed each nurse three observations and among each observation (10) days' time period.

Methods of Statistics Data Analysis

In order to statistically analyze the data collected from the study sample to arrive at the results, the researcher used the SPSS-20 and Microsoft Excel (2010) program to analyze this data and deal with it statistically, to find the relationships between the variables, and obtain the final results of the research based on a set of statistical tests.

RESULTS

Table 1: Statistical Differences in Quality of Nursing Care with regards Nurses Age (*n=50*)

Age Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	*p≤ 0.05*
Quality of Nursing Care	Between Groups	.282	4	.071	.266	.898
	Within Groups	11.910	45	.265		
	Total	12.192	49			

d.f: Degree of freedom, F: F-statistic.

Findings demonstrated that there were no-significant differences in quality of nursing care with regard nurses age groups *(p=0.898*).

Table 2: Statistical Differences in Quality of Nursing Care with regards Nurses Gender (*n=50*)

	Gender	Mean	SD	t-value	d.f	*p≤ 0.05*
Quality of Nursing Care	Male	1.93	.640	5.922	48	*0.000*
	Female	1.05	.224			

SD: Standard deviation, t: t-test, d.f: Degree of freedom, p: Probability value.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses who are male (*M ±SD=1.93±0.640*) and those who are female (*M ±SD=1.05±0.224*) (*t=5.922; p=0.000*).

Table 3: Statistical Differences in Quality of Nursing Care with regards Nurses Education Level (*n=50*)

Education Level Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	*p≤ 0.05*
Quality of Nursing Care	Between Groups	3.798	2	1.899	10.635	.000
	Within Groups	8.393	47	.179		
	Total	12.192	49			

d.f: Degree of freedom, F: F-statistic.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses' education level *(p=0.000*). Nurses who are bachelor's significantly increased quality of nursing care.

Table 4: Statistical Differences in Quality of Nursing Care with regards Nurses Years of Experience (*n=50*)

Years of Experience	Source of variance	Sum of Squares	d.f	Mean Square	F	*p≤ 0.05*
Quality of Nursing Care	Between Groups	5.842	2	2.921	21.624	.000
	Within Groups	6.349	47	.135		
	Total	12.192	49			

d.f: Degree of freedom, F: F-statistic.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses' years of experience *(p=0.000*). More years of experience (>10) significantly increased quality of nursing care.

Table 5: Statistical Differences in Quality of Nursing Care with regards Nurses Number of Training Courses (*n=50*)

No. training	Source of variance	Sum of Squares	d.f	Mean Square	F	*p≤ 0.05*
Quality of Nursing Care	Between Groups	3.941	2	1.970	11.223	.000
	Within Groups	8.251	47	.176		
	Total	12.192	49			

d.f: Degree of freedom, F: F-statistic.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses' number of training *(p=0.000*). More training (>2) significantly increased quality of nursing care.

DISCUSSION

Findings demonstrated that there were no-significant differences in quality of nursing care with regard nurses age groups (p=0.898) This result is consistent with several studies that found this such as Abul-Azem and Al-Hayy (2019) who reported that there is no significant association between nurses' pretest practice and age variable.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses who are male (M ±SD=1.93±0.640) and those who are female (M ±SD=1.05±0.224) (t=5.922; p=0.000).

This result is inconsistent with several studies, for example: Abu Al-Alaizm and Al-Hayy (2019) who showed that there is no statistically significant relationship between the practice of the preliminary test for nurses and the sex variable.

The researcher's opinion was taken due to the nature of the nursing profession, as the nursing profession is a difficult profession, in addition to the fact that the care of stroke patients requires high effort, and this may be one of the reasons for the lack of patient care by the nursing staff of women, and this may be due to the hard work at home Or may be Women who are infants or pregnant and this hinders the work of female nurses.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses' education level (p=0.000). Nurses who are bachelor's significantly increased quality of nursing care.

This result is inconsistent with a number of studies, for example: Hamzah Abdul Rahman, Mu'taman Jarrar & Mohammad Sobri (2015). Nurses with higher education were not significantly associated with both quality of care and patient.

Findings demonstrated that there were significant differences in quality of nursing care with regard nurses' years of experience (p=0.000). More years of experience (>10) significantly increased quality of nursing care the researcher's opinion through these results is that the more years of experience, the higher the quality of nursing care, and this is due to the acquisition of sufficient experience in dealing with nurses with patients during the years of nursing service, unlike nurses who have few years of experience in nursing. Findings demonstrated that there were significant differences in quality of nursing care with regard nurses' number of training (p=0.000). More training (>2) significantly increased quality of nursing care.

CONCLUSION

There is an obvious association in quality of nursing care with respect to the nurses' years of experience. Years of experience that are more than ten increased the quality of nursing care. Also, the quality of nursing care associated with the number of trained nurses. More training led to a significant increase in the quality of nursing care, so that the higher the number of courses, the higher the quality of nursing care.

RECOMMENDATIONS

Increasing the number of nurses, with a bachelor's degree in nursing profession, to work in the (emergency unit, internal unit, intensive care unit) because of the information and scientific background they have. The workers in the stroke care units must have long years of experience in nursing, due to the practical experience they have throughout the years in their work and their frequent dealings with residing patients, especially stroke patients.

ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

This study was completed following obtaining consent from the University of Baghdad.

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AUTHOR'S CONTRIBUTIONS

Study concept, Writing, Reviewing the final edition by all authors.

DISCLOSURE STATEMENT:

The authors report no conflict of interest.

REFERENCES

Aboalizm, S. E., & Elhy, A. H. A. (2019). Effect of Educational Intervention On Nurses' Knowledge And Practices Regarding Endotracheal Tube Suctioning. SSRG International Jurnal of Nursing and Health Science, 5(3).

Aslani Z, Alimohammadi N, Taleghani F, et al. Nurses' Empowerment in Self-Care Education to Stroke Patients: An Action Research Study. Int. J. Community Based Nurs. Midwifery. 2016; 4(4): 329- 338.

Gebruers N, Vanroy C, Truijen S, et al. Monitoring of physical activity after stroke: a systematic review of accelerometry-based measures. Arch. Phys. Med. Rehabil. 2010; 91(2): 288-297. PMid: 20159136. https://doi.org/10.1016/j.apmr.2009.10.025

Jakel A, Plested M, Chapman A. Management of patients with transient ischemic attack: insight from real-life clinical practice in Europe and the United States, Curr. Med. Res. Opin. 2012; 28: 429. PMid: 22185430. https://doi.org/10.1185/03007995.2011.652257

Lincoln N, Brinkmann N, Cunningham S. Anxiety and depression after stroke: a 5 year follow-up. Disabil Rehabil. 2013; 35(2): 140-145. PMid: 22725629. https://doi.org/10.3109/09638288.2012.691939

Luker J, Bernhardt J, Graham J, et al. Interventions for the uptake of evidence-based recommendations in acute stroke settings, Cochrane Effective Practice and Organisation of Care Group. 2017; 5: 6. https://doi.org/10.1002/14651858.CD012520

Miller E, Murray L, Richards L. American Heart Association Councilon Cardiovascular Nursing and the Stroke Council. Comprehensive overview of nursing and interdisciplinary rehabilitation care of the stroke patient: a scientific statement from the American Heart Association. Stroke. 2010; 41(10): 2402-2448. PMid: 20813995. https://doi.org/10.1161/STR.0b013e3181e7512b

Moreau F, Yang R, Nambiar V, et al. Near-infrared measurements of brain oxygenation in stroke. Neurophotonics, 2016; 3(3): 031403- 031403. PMid: 26958577. https://doi.org/10.1117/1.NPh. 3.3.031403

Naess H, Lunde L, Brogger J. The triad of pain, fatigue, and depression in ischemic stroke patients: the Bergen Stroke Study. Cerebrovasc Dis. 2012; 33: 461. PMid: 22488041. https://doi.org/10.1159/000336760

Sacco R, Kasner S, Broderick J, et al. An updated definition of stroke for the 21st century: a statement for healthcare professionals from the American Heart Association/American Stroke Association. 2013; 44(7): 2064-89.

Sims N, Muyderman H, Mitochondria A. Oxidative metabolism and cell death in stroke. Biochimica et Biophysica Acta. 2010; 1802(1): 80-91. PMid: 19751827. https://doi.org/10.1016/j.bbadis.2009.09.003

Summers D, Leonard A, Wentworth D, et al. Comprehensive overview of nursing and interdisciplinary care of to the acute ischemic stroke patient. Stroke. 2009; 40(8): 2911-44. PMid: 19478222. https://doi.org/10.1161/STROKEAHA.109.192362

Timby B, Smith N. Introductory Medical Surgical Nursing, 10th ed. Wolters Kluwer Health, Lippincott, Williams & Wilkins, J. B. Lippincott Company; 2010. 594 p. PMid: 21190418.

World Health Organization. Global Burden of Disease (GBD). Accessed 20 Dec 2017. Available from: www.who.int.access.library.unisa.edu.au/healthinfo/bod/en/index.html