# NURSES' ATTITUDES REGARDING THEIR COMPETENCY WHEN CARING FOR PATIENTS WITH CEREBROVASCULAR ACCIDENTS

## Wefaqq Mahdi Hadi<sup>1</sup>, Shatha Sadii Mohammed<sup>2</sup>

Adult Health Nursing, Babylon University nur.wafaq.mahdi@uobabylon.edu.iq. Adult Health Nursing, Babylon University shathasaadi64@gmail.com.

#### **Abstract**

Background: Because of better survival rates and a growing elderly population, caring for those suffering from stroke presents increasing obstacles. Developing the competency of healthcare providers in managing strokes is essential to guaranteeing high-standard care for patients.

Objective: Assess nurses' competency in caring for stroke patients in term Attitude's.

Materials and Procedures: A cross-sectional descriptive study was carried out from May 21st, 2023 to August 20th, 2023. The study sample consists of 140 nurses who were chosen using the non-probability sample selection technique. Professionals vetted the survey responses, plus an initial investigation confirmed its dependability. Self-reporting methods had been employed to gather information, and both inferential and descriptive statistical analysis were used to assess the results.

Results: The average age of participants ranged 25.29 years. The majority were females (58.6%), and held a nursing diploma (53.6%). Workplace distribution showed 36.4% in the emergency department, and 67.1% had less than 3 years of experience. Approximately 50% lacked specialized stroke care training. Nurses' competence in stroke care indicating that 47.1% had lower competency. Significant differences in knowledge were found across age, gender, education level, workplace, and training attendance (p< 0.05).

Conclusions: The nursing Awareness and attitudes regarding stroke patient care are affected by the education levels and It was found that there is a correlation between stroke care and their attitudes and behaviour towards stroke patients.

Key words: Nurses attitudes', Competency, cerebrovascular accident.

### **Introduction:**

Cerebrovascular accident (CVA) or "brain attack," also called a cerebrovascular insult (CVI) is a comprehensive term for many dangerous and life-threatening neurological disorders that affect brain activity and can lead to unexpected damage to the neurovascular system accompanied by a serious neurological deficit [1]. Stroke may be caused either by ischemic or hemorrhagic stroke. If patients are vulnerable to ischemic stroke, that means a high rate percentage of approximately 87%, and if patients are vulnerable to hemorrhagic stroke, that means approximately 13%, any condition affect brain function is described as dangerous because of a lack of blood tissue perfusion [2]. Competent nurses will work in specialized areas such as the neurological unit emergency department, medical unit, and CCU, which are considered critical nurses responsible for managing stroke patients [3]. Competency in nursing plays an important role for numerous nurses, because depending on how he or she is capable of providing good interventions for these cases, many factors affect their work, such as level of, attitude. Therefore, they should focus on education and training specialized nurses for caring for stroke patients [4]. Competent nurses considered professionals in their specialty because they handle high levels of caring patients suffering from stroke with higher knowledge, positive attitudes, and good practices [5].

Movement difficulties, cognitive impairment, self-care challenges, social and communication disabilities, depression, and personality changes are common among stroke survivors.

The long time it takes to recover from a stroke requires highquality nursing care, especially for older people who become more dependent on others as they get older [6]. Nurses play a critical role in attaining excellent outcomes for stroke patients by ensuring they are treated as quickly as possible. The nurse must be knowledgeable of the standard care periods for acute stroke, distinguish between ischemic and hemorrhagic stroke management, interact with other team members, and offer appropriate care. Quick and prompt action can save lives and reduce the risk of complications and long-term disability. Nurses must be competent, skilled, updated, and aware of novel methods of stroke management and evidence-based practices because they play an essential role in providing patient care, especially in acute situations. But evidence shows that nurses are not ready to do their jobs when caring for people who have just had a stroke [7]. Nurses are considered vital members of the multidisciplinary stroke team and spend a lot of time caring for patients; therefore, it seems reasonable to think that nursing interventions can help stroke patients in some ways [8].

## Methodology:

The cross-sectional descriptive study design technique is a methodological approach that entails surveying individuals within a specified study population. The primary aim of this design is to meticulously characterize observed phenomena by examining their nature and prevalence. In the context of the present study, the descriptive cross-sectional approach is specifically employed to investigate and understand the

attitude's levels of study participants regarding their competency in caring for stroke patients at Imam Sadiq Hospital. This study involves the participation of 140 nurses. By utilizing the descriptive cross-sectional design, researchers intend to gain a comprehensive insight into the attitude's base of nurses working at Imam Sadiq Hospital concerning stroke patient care. This method allows for the collection of data at a specific point in time, enabling the researchers to capture a snapshot of the participants' attitude's and competence levels. The focus is not only on identifying the extent of their understanding but also on mapping the prevalence of this attitude's within the larger nursing cohort at the hospital.

The survey instrument employed in this study is tailored to assess various dimensions of knowledge related to caring for stroke patients. It encompasses questions designed to probe the depth of understanding, familiarity with best practices, and awareness of the latest developments in stroke care. The data collected through this approach will contribute to a nuanced and detailed characterization of the participants' knowledge landscape, shedding light on areas of strength and potential gaps.

Validity and Reliability: The validity of the tool was confirmed in the current study by presenting it to a number of arbitrators who are specialists in the field of rehabilitation, and there was agreement among them on the validity and readability of the questionnaire, in light of the theoretical framework on which the tool was built on the basis of which the arbitrators' honesty was satisfied. The reliability of the tool was verified by examining the internal consistency of the items of the tool by calculating the Cronbach alpha coefficient on a sample of 10 nurses. The reliability value on the total score was (0.82), and thus the tool has a high degree of reliability.

**Procedures:** After conducting the study measurements and ensuring the validity and reliability of the tools, the sample members were interviewed and their verbal consent was taken to participate in the study at their workplace. The questionnaire was distributed to them and they were given sufficient time to express their opinions on the subject of the study without mentioning their names, in order to obtain frankness and seriousness in the answers.

**Statistical Methods:** The necessary statistical processing of the data was done, and descriptive statistics were used by extracting the numbers, percentages, arithmetic means, and standard deviations of the sample. Inferential statistical methods were used, which include Shapiro-Wilk test to test distribution of normally, Kruskal-Wallis H Test and Mann-Whitney U Test to determine the differences in nurses knowledge, statistical significance at 0.05.

**Ethical Approval:** The study was conducted in accordance with the ethical standards found in the Helsinki Declaration. Prior to collecting a sample, a patient's verbal and analytic permission had to be obtained. Based on the documentation number, a local ethical commission reviewed and authorized

the protocol for the study, in addition to the data on the subjects and the approval form number 740 (May 3rd 2023) to get this approval.

### **Results:**

Table (1) focused on the demographics and characteristics of nurses participating in a study. The mean age of participants was 25.29, with a standard deviation of 2.60. The largest age group was 25-29 years, constituting 49.3%. Female nurses dominated at 58.6%, surpassing males at 41.4%. In terms of education, 53.6% held a nursing diploma, overshadowing other qualifications. Workplace distribution showed 36.4% in the emergency department. Most nurses (67.1%) had less than 3 years of experience. About 50% had not undergone specialized stroke care training. In Table (2) Nurses' competence in caring for stroke patients varied, with scores ranging from 36 to 53 on the assessment scale. The collective average score was 39.12, indicating that almost half (47.1%) of the nurses had a lower level of competency in this area, as per the study's criteria (table 2). In Table 3, the findings reveal statistically significant differences in nurses' knowledge based on various factors, including age (p= 0.000), gender (p= 0.011), educational level (p= 0.000), workplace (p= 0.032), and number of training courses attended (p=0.000).

Table 4-1. Distribution of Studied Sample related to their Socio-demographic Data

Socio-demographic Data									
Socio-demographic data	Classification	No.	%						
	20-24 years	50	35.7						
A co/record	25-29 years	69	49.3						
Age/years	30 and more 21 15.								
	20-24 years 50 25-29 years 69	.60							
Gender	Male	58	41.4						
Gender	Female	82	58.6						
	School Nursing	23	16.4						
Education level	Diploma Nursing	75	53.6						
Education level	BSc. Nursing	38	27.1						
	Post-graduated	4	2.9						
	Emergency	51	36.4						
Warknlaga	Neurology	35	25.0						
Workplace	CCU	43	30.7						
	30 and more 21   Mean age ± SD= 25.29 ±   Male 58   Female 82   School Nursing 23   Diploma Nursing 75   BSc. Nursing 38   Post-graduated 4   Emergency 51   Neurology 35   CCU 43   Medical wards 11   < 3 yrs.		7.9						
Years of	< 3 yrs.	94	67.1						
Employment 01	3-6 yrs.	38	27.1						
Employment	>6 yrs.	8	5.7						
	Not once	70	50.0						
Training courses	Once	31	22.1						
Training courses	Twice	20	14.3						
	More than twice	19	13.6						

No. Number; %= Percentage

Table 4-2. Nurses attitudes towards caring for stroke patients

NO	Nurses Attitudes Items	Responses	No.	%	M.s	Ass.
1 I find would	I find working with survivors of strokes to be worthwhile.	Disagree	44	31.4		Positive
1	i find working with survivors of strokes to be worthwhile.	Neutral	26	18.6		

		Agree	70	50.0		
2 I love collaborating alongside senio		Disagree	52	37.1	1.99	
	I love collaborating alongside senior citizens.	Neutral	37	26.4		Negative
		Agree	51	36.4		
3 A stroke the individual's trust		Disagree	57	40.7	5.0 2.14	Positive
	A stroke the individual's trust is bolstered when they complete a task independently.	Neutral	7	5.0		
		Agree	76	54.3		
4 O	Oftentimes, those with strokes aren't communicative	Disagree	50	35.7		
		Neutral	24	17.1	2.11	Positive
		Agree	66	47.1		
	Individuals suffering ischemic strokes aren't as fascinating as those suffering artery disease, for example.	Disagree	70	50.0		
		Neutral	32	22.9	1.77	Negative
		Agree	38	27.1		
6 I		Disagree	67	47.9		
	I have a strong desire to find employment in care for the elderly.	Neutral	25	17.9		Negative
		Agree	48	34.3		l
	A crucial component of the nursing profession is client being activated, in which all kinds of healthcare professionals ought to play role.	Disagree	45	32.1		
		Neutral	6	4.3	2.31	Positive
		Agree	89	63.6	1.01	
	Without extra workers, it is not feasible to spend additional hours with those recovering from strokes.	Disagree	52	37.1		
8		Neutral	37	26.4	1.99	Negative
		Agree	51	36.4		
	Physiotherapists and occupational health professionals are responsible for engagement; hospital employees shouldn't feel burdened with this extra responsibility.	Disagree	46	32.9		
9		Neutral	59	42.1	- 1	Negative
		Agree	35	25.0		
		Disagree	59	42.1		
	As your understand additional information, your desire to engage in patient	Neutral	25	17.9	-1 1	Negative
	engagement grows.	Agree	56	40.0		
		Disagree	64	45.7		
11	Several patient categories get little attention while those with strokes require an	Neutral	43	30.7	Ι. 78	Negative
excessive amount of	excessive amount of care from nurses.	Agree	33	23.6		
		Disagree	49	35.0		
12 Individuals	ndividuals with unconscious strokes ought to undergo more catheter.	Neutral	12	8.6	2.21	Positive
		Agree	79	56.4		
	Although those suffering from strokes remain in the hospital ward, family members ought to take involved in their engagement.	Disagree	56	40.0		
		Neutral	28	20.0	2.00	Negative
		Agree	56	40.0	1	
	The stimulation and regeneration should not be performed in a normal medical facility	Disagree	41	29.3		
		Neutral	12	8.6	2.33	Positive
	for older patients.	Agree	87	62.1	1	
	1.04		•	•		

Level of Assessment (Negative=1-2; Positive=2.1-3)

Table 4-3. Overall nurses attitudes towards caring for stroke patients

Scale	Min.	Max.	M	SD	Score	No.	%
Nurses Attitudes (14 Q)			28.85	9.33	Negative (14-28)	63	45.0
	18	39			Positive (28.1-42)	77	55.0
					Total	140	100.0

Min.: Minimum; Max.: Maximum, M: Mean for total score, SD=Standard Deviation for total score

## **Discussion:**

# 5.1 Distribution of Studied Sample related to their Sociodemographic Data

The investigation focused on the age distribution of show participants, revealing a mean age of 25.29 with a standard deviation of 2.60. Notably, the age range of 25-29 years constituted the largest proportion at 49.3%. Regarding gender demographics, female nurses accounted for a significant majority at 58.6%, surpassing their male counterparts at 41.4%.

Turning to educational attainment, the majority of participants held a diploma in nursing (53.6%), which overshadowed the percentages of those with a background in school nursing, BSc. nursing, and postgraduate degrees combined. In the context of workplace distribution, the study observed that 36.4% of the sampled nurses worked in the emergency department, surpassing the percentages of those working in neurology, CCU, and medical wards. Analysing the years of experience in the nursing field, a substantial 67.1% of nurses reported having

less than 3 years of experience, while the remaining respondents represented various levels of experience. Regarding familiarity with stroke care, a significant 65.7% of nurses reported one year of experience in caring for stroke patients. Investigating participation in training courses related to stroke care, half of the nurses (50%) reported not having undergone any specialized training, while the others reported having completed one or more such courses. Lastly, with respect to work shifts, an interesting symmetry emerged, with an equal distribution of nurses between the morning (70%) and evening (70%) shifts.

## 5.2. Nurses Attitudes in Context Care of Patients with

The data presented in the statement above show that inter investments ranging from very high to very low among nursing staff regarding stroke care. These different approaches towards the nuances that exist in relations to the community's perceptions of age are depicted from scores that were obtained by nurse scorers which varied from 18 to 39 on the measuring tool. With the overall average score of 28.85 and a standard deviation of, an impressive amelioration was achieved, providing relative consensus within attitudes with significant change in variation among different participants.

These results are in line with the current literature regarding operational attitudes toward stroke patients by health care provider. Similar to nursing, each healthcare provider could have attitudes within the range and sure factors are necessary for them as nurses where they make an impact on their views: education; work experience; personal beliefs and values applied in a specific situation.

The positive (favourable) attitude and the negative attitude toward nursing categorization in nurses is very revealing of the study. Based on the study's criteria of categorization, 55.0% of the nurses were classified as positive attitude group towards caring for stroke patients while 45.0 % of them belonged to negative attitude group toward medical care for stroke victims. However, this branch shows that a major share of nurses will need to receive selective interventions or more training in order to improve their attitudes towards treating stroke patients.

However, the fact that about 30 percent of nurses possess negative attitudes towards medical procedures is something to be concerned about. People's negative perceptions can leave footprints on the outcomes of the patient and their quality of care. It has been observed that healthcare providers' attitude could impact patient satisfaction, commitment to a given form of medication and hence recovery. Thus removing negative attitude towards the process of patients treatment among healthcare professionals and including nurses is an important point in improving care for stroke patients.

To support these points, let's look at some relevant research:

## **5.2.1. Positive Attitudes:**

The encouraging finding of the study indicates that 55.0% of nurses had positive attitude towards caregivers of patients who had suffered a stroke illness. Positive attitudes of the health care providers is an important factor that contributes significantly to delivering quality care. One of the results of a positive attitude is improved success with achieving better outcomes and patient satisfaction as well as collaboration among team members (Hanson, 2014).

### **5.2.2. Potential for Improvement:**

Despite the positive attitudes of the nurses concerning caring for stroke patients, which could be seen as at least 55% of those dissatisfied with caring for stroke patients, that is still seems problematic. This foregrounds the need of specific intervention and training plan in order to change attitudes of these nurses toward their clients. It has been found by researchers that attitude enhancement interventions are feasible in healthcare settings (Oluma & Abadiga, 2020).

# 5.3.3. Impact of Healthcare Providers' Attitudes on Patient

However, evidence from a countrywide study by Zikusooka et al. (2022) also found in Turkey provides that the attitude of nurses and other healthcare providers was highly significant towards determining the satisfaction of patients with treatment adherence. The more positive attitude the greater patient's outcome was recorded.

Based on the study's results while discussing nurses' attitudes regarding patient caring for stroke at least tan diverse respondences in the view of nurses can be evidenced. Nurses are categorized according to their attitudes towards the condition, which points out to the necessity of interventions and strategies in dealing with negative outlooks for quality patient care. Nurses' attitude ascribing to the complexity of such nature, requires a proper understanding in order for suitable interventions that will enable an improved quality of care on stroke patients.

### **Conclusions**

The study highlights considerable variations in nurses' competence in caring for stroke patients, with almost half of the participants demonstrating a lower level of competency. Further underscores statistically significant differences in nurses' attitudes, influenced by factors such as age, gender, education level, workplace, number of training courses attended, and work-shift. To address these disparities, it is crucial for healthcare institutions to implement targeted training programs, considering these identified factors, to enhance nurses' competence in stroke care and ultimately improve patient outcomes. Additionally, ongoing monitoring and tailored interventions can help bridge the knowledge gaps and ensure a higher standard of care across all nursing staff.

## Limitation

It must be remembered to keep in mind that the current study has certain limitations. Data was gathered using just nurses' samples and measures that nurses themselves reported.

## Acknowledgment

The Babylon Health Department Directorate provided support in collecting the data for this research, for which the authors are eternally grateful.

Financial support and sponsorship

Conflict of interest

There are no conflicts of interest.

### References

- 1. Lau, G. K., Pendlebury, S. T., & Rothwell, P. M. (2018). Transient Ischemic Attack and Stroke: Diagnosis, Investigation, and Treatment. Cambridge University Press.
- 2. GBD 2015 Mortality and Causes of Death Collaborators (October 2016). "Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015". Lancet. 388 (10053): 1459–1544.
- 3. Jenkins, C., Ovbiagele, B., Arulogun, O., Singh, A., Calys-Tagoe, B., Akinyemi, R.,& Owolabi, M. (2018). Knowledge, Attitudes and Practices Related to Stroke in Ghana and Nigeria. 13(11), 1124-1228.
- 4. Zumstein-Shaha M, Grace PJ. Competency Frameworks, nursing perspectives, and interdisciplinary collaborations for good patient care: delineating boundaries. Nurs Philos 2023;24:e12402. 10.1111/nup.12402..
- 5. Allsassmah, E. A. A. (2020). Measuring Knowledge of Jordanian Nurses Working in Critical Care Units toward Stroke Patients. World Science, 8 (60).

- 6. Cheng M, Cheng C, Tian Y, Fan X. Student nurses' motivation to choose gerontological nursing as a career in China: A survey study. Nurse Education Today. 2015;35(7):843–8.
- 7. Zidan, S., Youssef, W. A. R. D. A., Abd-Allah, F. O. A. D., & El-Feky, H. A. (2017). Impact of a Designed Acute Stroke Nursing Management Protocol on Nurse's Knowledge and Practices. Impact Journals, 5(10), 23-40.
- 8. Jaromin J., Tomaszewska A., Waluś A., Pelan M., Śleziona M., Graf L. Nurses' Opinion on Nursing Problems in the Care of Patients after Stroke. J. Neurol. Neurosurg. Nurs. 2017;6:73–80. doi: 10.15225/PNN.2017.6.2.4.
- 9. Hanson, R. M. (2014). 'Is elderly care affected by nurse attitudes?' A systematic review. British Journal of Nursing, 23(4), 225-229.
- 10. Zikusooka, M., Hanna, R., Malaj, A., Ertem, M., & Elci, O. C. (2022). Factors affecting patient satisfaction in refugee health centers in Turkey. Plos one, 17(9), e0274316.