Knowledge, Attitude, and Practices Regarding Epilepsy among Nurses in Tertiary Care Hospitals

Karam Elahi1*, Humaira Saddique2, Syeda Sidra Tasneem3

1BSN (Generic) Student, Department of Nursing, The Superior University Lahore, Pakistan.
2Assistant Professor, Department of Nursing, The Superior University Lahore, Pakistan.
3Director Nursing, Department of Nursing, The Superior University Lahore, Pakistan.

*Corresponding Author: Karam Elahi, Student; Email: karamhuzaifa99@gmail.com

Conflict of Interest: None.


ABSTRACT

Background: Epilepsy is a prevalent neurological disorder marked by recurrent seizures, which can significantly impact quality of life. Understanding how epilepsy is managed in healthcare settings, particularly by nurses who play a critical role in direct patient care, is essential. However, knowledge gaps and varied practices exist among nurses, influencing their efficacy in managing epilepsy patients.

Objective: This study aimed to assess the knowledge, attitudes, and practices regarding epilepsy among nurses in a tertiary care setting, with a focus on identifying areas of strength and those needing improvement.

Methods: A descriptive cross-sectional study was conducted at Jinnah Hospital, Lahore. The sample comprised 138 registered and diploma nurses working in medical, surgical, and emergency units, excluding head nurses, student nurses, and those in outpatient departments. An adapted questionnaire was employed to evaluate knowledge about epilepsy, attitudes towards patients, and practical care approaches. Data analysis was performed using descriptive statistics in SPSS version 25, with checks for data normality and distribution.

Results: The age distribution of participants showed 50.0% (69 nurses) within the 31-35 age group, 73.2% (101 nurses) were females, and experience levels varied with 53.6% (74 nurses) having 1-5 years of experience. Knowledge assessments revealed that 60.9% correctly identified epilepsy as non-contagious, yet misconceptions about epilepsy being a mental disorder were evident in 29.7% of responses. Practice-related responses indicated proper seizure management actions were inconsistently recognized, with only 29.0% knowing to avoid inserting objects in the patient's mouth during a seizure.

Conclusion: The study identified critical gaps in the knowledge and practices of nurses regarding epilepsy care, emphasizing the need for targeted educational programs to enhance nursing competence in epilepsy management. Effective training could lead to better patient outcomes and reduce misconceptions associated with the condition.

Keywords: Epilepsy, Nurses' Knowledge, Nursing Practice, Attitude towards Epilepsy, Tertiary Care, Seizure Management, Healthcare Education, Neurological Disorders.

INTRODUCTION

Epilepsy, a chronic non-communicable brain disorder, affects individuals across all age groups globally and is characterized by recurrent seizures resulting from a disturbance in the brain's electrical activity (1, 3). Normally, the brain produces small electrical impulses that travel through neurons with the aid of neurotransmitters. In epilepsy, these electrical rhythms become imbalanced, leading to seizures that disrupt the normal electrical sequence in the brain (1-6). Epilepsy can result from various factors including fever, neurological injuries, and environmental conditions, and significantly impacts over 80% of affected individuals living in developing countries (7-9).

The social stigma associated with epilepsy in many developing regions, such as sub-Saharan Africa, leads to discrimination, causing individuals to hide their condition and seek treatment from traditional healers instead of modern medical facilities (10-12). This preference for traditional medicine over contemporary healthcare can result in inadequate management of the disease (10-14).
Moreover, cultural beliefs in these regions often restrict the social inclusion of individuals with epilepsy, prohibiting them from marrying or pursuing education, which further exacerbates the stigma and isolation associated with the disorder (13). Nurses play a pivotal role in the care of patients with epilepsy. They are tasked with protecting patients during seizures by removing sharp objects, using suction devices to clear secretions, ensuring the patient is never left alone, and positioning the patient to prevent aspiration. Post-seizure care often includes administering oxygen as prescribed by a physician and continuing to monitor the patient's condition (15). Beyond immediate care, nurses also provide education to patients and their families about epilepsy, its management, and treatment options, thereby playing a crucial role in promoting better health outcomes (16, 19-20).

The attitudes of medical staff, particularly nurses, towards patients with epilepsy can significantly influence public perceptions of the condition. Nurses' regular interaction with patients and their role in community education are essential in fostering a positive environment and reducing stigma associated with epilepsy (17, 18). By enhancing nurses' knowledge and attitudes towards epilepsy, they can become more effective in their care roles and advocacy, thereby improving the quality of life for these patients.

Despite the global prevalence of epilepsy, which affects more than 60 million people worldwide, the disease continues to pose a significant challenge, especially in countries with limited resources like Pakistan. The mortality risk for individuals with epilepsy is notably higher than that of the general population, emphasizing the urgent need for effective management strategies and the crucial role of nurses in bridging the treatment gap in resource-poor settings (23-25).

The study aims to assess the knowledge, attitudes, and practices of nurses dealing with epilepsy patients, with the ultimate goal of improving management and treatment protocols to prevent further complications. This research is important as it highlights the critical role of nurses in addressing this preventable issue and improving patient care standards across various cultural and resource contexts (26). Understanding these aspects can significantly contribute to the overall management of epilepsy and help reduce the burden of this disease on patients and healthcare systems alike.

**MATERIAL AND METHODS**

This study employed a descriptive cross-sectional methodology to evaluate the knowledge, attitudes, and practices regarding epilepsy among nurses in a tertiary care setting. Conducted at Jinnah Hospital in Lahore, Pakistan, the research focused on diploma nurses and registered nurses actively working in intensive care, surgical, medical, and emergency units. Participants were selected using a convenience sampling technique, with inclusion criteria set for registered nurses with over a year of experience. Exclusions applied to head nurses, student nurses, those in outpatient departments, and newly appointed nurses. The final sample size of 138 participants was determined using Slovin's formula (N=218, e=0.05), resulting in a necessary sample for accurate representation and manageable data collection(1).

The study utilized an adapted questionnaire to gather data on the nurses’ knowledge about epilepsy, as well as their attitudes and practices in managing the condition. Permission for the study was obtained from the ethics committee of the Nursing Department at Superior University and the administration of Jinnah Hospital. Prior to data collection, participants were informed about the study’s purpose and procedures, ensuring voluntary participation and confidentiality in line with the ethical standards of the Helsinki Declaration. Consent was obtained from all participants, who were assured of their privacy and the non-compulsory nature of their involvement in the research.

Data were collected via the questionnaire, which included items on a nominal scale to assess knowledge and practices. Knowledge was evaluated through five items, with correct responses scored as one mark each, leading to a maximum score of five. Scores above 80% indicated good knowledge, while those between 60% and 80% suggested moderate knowledge, and scores below 60% were considered indicative of poor knowledge. Practices were similarly assessed using a seven-item questionnaire, with scoring paralleled to that of the knowledge assessment. Attitudes were assessed through a five-item questionnaire, where scores above 80% were deemed to reflect a good attitude towards epilepsy care, and scores below 60% indicated a poor attitude.

Data analysis was performed using SPSS version 25. Descriptive statistics were applied to summarize the data, and normality checks were conducted to validate the distribution of responses. Frequency distributions and percentages were calculated to describe the population characteristics and the distribution of responses across knowledge, attitudes, and practices scales. The study's methodology was rigorously designed to ensure reliability and validity, providing comprehensive insights into the nursing practices in the context of epilepsy care at Jinnah Hospital.

**RESULTS**

The study encompassed a diverse group of nursing professionals at Jinnah Hospital, Lahore, with a notable concentration of participants in the 31-35 age group, which constituted half of the sample at 50% (69 nurses). This demographic was followed by the
In terms of gender distribution, the majority of the participants were female, comprising 73.20% of the sample (101 nurses), which highlights a significant female predominance in the nursing staff at the facility. Conversely, male nurses represented 26.79% of the sample (37 nurses) [Table 1].

The qualifications of the nurses varied, with a slight majority holding a General Nursing qualification, which accounted for 36.20% of the participants (50 nurses). Close behind were those with a Post RN qualification, making up 33.30% of the sample (46 nurses), and those with a Generic BSN, who constituted 30.40% of the participants (42 nurses) [Table 1].

Experience levels among the nurses also varied, with the largest group having 1-5 years of experience, representing 53.60% of the sample (74 nurses). Those with 6-10 years of experience formed another substantial group at 42.80% (59 nurses), while nurses with 11-15 years of experience were the smallest group, making up only 3.60% of the sample (5 nurses) [Table 1].

Regarding the departments in which these nurses worked, the majority were stationed in the medical ward, accounting for 55.10% of the participants (76 nurses). This was significantly higher compared to those in the surgical ward and other departments, which accounted for 16.70% (23 nurses) and 28.30% (39 nurses), respectively [Table 1].

### DISCUSSION

The study set out to examine the knowledge, attitudes, and practices regarding epilepsy among nurses in a tertiary care setting. Utilizing a descriptive cross-sectional design, the research assessed the understanding and behaviors related to epilepsy care among nursing staff at Jinnah Hospital in Lahore. The distribution of participant demographics showed a significant representation across different age groups, qualifications, and departments, providing a broad perspective on the subject within the hospital setting.

The findings revealed that while most of the nurses recognized that epilepsy is not a contagious disease (60.9% responding ‘No’), misconceptions still persist among a notable portion, with 21.0% considering it contagious and 18.1% uncertain. This indicates a gap in knowledge that could impact the quality of care provided to patients with epilepsy. Similarly, responses to whether epilepsy is a mental disorder showed that a significant number of nurses (46.4%) either believed it was or were unsure, highlighting further educational needs (14).

The universal agreement among participants that epilepsy is treatable with modern drugs (100% responding ‘Yes’) suggests a good understanding of the general treatment approach. However, mixed responses to alternative treatments, such as faith healing and...
ayurvedic medicine, point to cultural influences on healthcare perceptions, which may complicate standardized care protocols. These findings align with global studies indicating varying levels of awareness and acceptance of scientific treatments over traditional ones in different cultural contexts (18-23).

In attitudes towards social inclusion, most nurses supported the idea that individuals with epilepsy can attend school and have children, reflecting progressive views on the social capabilities of patients with epilepsy. Yet, the less supportive responses to questions about traveling alone and working alongside someone with epilepsy indicate lingering reservations about the independence and safety of individuals with epilepsy (24, 26).

Practical knowledge was also varied, with only a fraction correctly identifying all appropriate actions to take during a seizure, such as not putting metallic objects in the patient’s hand and moving the patient away from dangerous places. This suggests a need for improved practical training and standardized protocols to ensure safety and proper care during seizures.

The study's limitations include its cross-sectional design and focus on a single hospital, which may not provide a generalizable picture across different healthcare settings. The sample size, while adequate for statistical analysis, still represents a relatively small fraction of the nursing population, potentially limiting the broader applicability of the findings (26).

The research underscores a critical need for enhanced educational programs and training sessions to address the identified gaps in knowledge and practice among nurses regarding epilepsy. By improving education on epilepsy, particularly concerning its non-infectious nature and effective management strategies during seizures, healthcare facilities can enhance the quality of care and patient safety. Furthermore, integrating these educational programs into regular training for nursing staff could help standardize care approaches across various healthcare settings, potentially reducing disparities in treatment and improving overall health outcomes for patients with epilepsy.

Recommendations for future research include conducting experimental studies to test the effectiveness of targeted educational interventions on improving nurses’ knowledge, attitudes, and practices. Additionally, expanding the study to include multiple hospitals and a larger sample size would help to confirm the findings and refine educational strategies accordingly. These efforts should aim to foster a more informed and responsive nursing workforce capable of delivering high-quality care to individuals with epilepsy.

CONCLUSION

The study highlights significant gaps in knowledge, attitudes, and practices regarding epilepsy among nurses, underscoring the urgent need for targeted educational interventions to enhance understanding and improve care delivery. By addressing these gaps through comprehensive training programs, healthcare facilities can not only improve patient safety and treatment outcomes but also foster a more inclusive and supportive environment for individuals with epilepsy. This initiative is crucial for elevating the standard of healthcare and ensuring that nurses are well-equipped to manage epilepsy effectively, ultimately contributing to better patient management and reduced healthcare disparities.

REFERENCES