



ORIGINAL ARTICLE

Relationship Between Nurses' Knowledge and Attitudes Toward Status Epilepticus Management and the Accuracy of Initial Emergency Treatment at Labuang Baji Regional Hospital, Makassar

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ABSTRACT

Introduction: Status epilepticus is a neurological emergency that requires immediate and appropriate treatment to prevent permanent brain damage, neurological deficits, and death. Nurses play an essential role in the implementation of early emergency management for patients with status epilepticus. **Objectives:** This study aimed to determine the relationship between nurses' knowledge and attitudes toward status epilepticus management and the accuracy of initial emergency treatment at Labuang Baji Regional Hospital, Makassar. **Methods:** This study employed a quantitative research design with a cross-sectional approach involving 30 nurses working in the Emergency Department and Intensive Care Unit who were selected using a total sampling technique. Data were collected using knowledge and attitude questionnaires and an observation sheet and were analyzed using the Spearman Rank test with a significance level of $p < 0.05$. **Results:** The results showed that most nurses had good knowledge and positive attitudes toward status epilepticus management. Statistical analysis revealed a significant relationship between nurses' knowledge and attitudes and the accuracy of initial emergency treatment ($r = 0.716$; $p = 0.001$). **Conclusions:** Nurses' knowledge and attitudes were significantly associated with the accuracy of initial emergency treatment for patients with status epilepticus. Continuous education and training programs are necessary to improve nurses' competencies and the quality of emergency nursing care

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1. Introduction

Status epilepticus is one of the most serious neurological emergencies characterized by prolonged or recurrent seizure activity without complete recovery of consciousness between seizures. If not treated promptly and appropriately, status epilepticus may result in permanent neurological damage, cognitive impairment, systemic complications, and even death. The condition requires immediate recognition and rapid intervention to improve patient outcomes and reduce morbidity and mortality rates [1].

Epilepsy affects millions of people worldwide and remains a major public health concern. Patients with status epilepticus frequently require emergency treatment and intensive



monitoring. Nurses are among the first healthcare professionals to identify patients' conditions and initiate emergency interventions. Therefore, adequate knowledge and positive attitudes among nurses are essential to ensure the implementation of accurate and timely emergency management [2].

Previous studies have reported varying levels of nurses' knowledge and attitudes regarding emergency management of neurological disorders. Several studies demonstrated that nurses with sufficient knowledge and positive attitudes tend to provide better clinical care and make more appropriate decisions in emergency situations. Conversely, inadequate knowledge and negative attitudes may contribute to delayed interventions and poor patient outcomes [3].

Despite the increasing number of studies concerning nurses' knowledge and attitudes, research specifically examining the relationship between nurses' knowledge and attitudes toward the accuracy of initial emergency treatment for status epilepticus remains limited, particularly in Indonesia. Most previous studies focused only on knowledge or attitudes separately and did not comprehensively assess their association with the accuracy of emergency nursing actions [3].

Improving nurses' competencies through education and training programs is considered an effective strategy to enhance the quality of emergency nursing care. Better knowledge and positive attitudes are expected to improve nurses' clinical performance and increase the accuracy of initial emergency management in patients with status epilepticus [4].

This study was motivated by the occurrence of status epilepticus cases at Labuang Baji Regional Hospital, Makassar, and the importance of nurses' roles in providing immediate emergency care. Variations in nurses' knowledge and attitudes regarding status epilepticus management indicate the need for further investigation. Therefore, this study aimed to determine the relationship between nurses' knowledge and attitudes toward status epilepticus management and the accuracy of initial emergency treatment at Labuang Baji Regional Hospital, Makassar.

The findings of this study are expected to contribute to the development of nursing science, particularly in emergency nursing, and provide evidence for hospitals to design continuing education and training programs to improve nurses' competencies and the quality of emergency care services.

2. Methods

This study employed a quantitative correlational design with a cross-sectional approach to determine the relationship between nurses' knowledge and attitudes toward status epilepticus management and the accuracy of initial emergency treatment. The study was conducted at Labuang Baji Regional Hospital, Makassar, from November to December 2025. The population consisted of all nurses working in the Emergency Department and Intensive Care Unit of Labuang Baji Regional Hospital, Makassar. The total population was 30 nurses, consisting of 17 nurses from the Emergency Department and 13 nurses from the Intensive Care Unit. A total sampling technique was applied, and all eligible nurses were included as respondents.

Data were collected using a structured questionnaire and an observation sheet. The research instruments consisted of a knowledge questionnaire regarding status epilepticus management, an attitude questionnaire regarding status epilepticus management, and an observation sheet used to assess the accuracy of initial emergency treatment. The knowledge questionnaire consisted of 13 questions, and the scoring system assigned two points for correct answers and zero points for incorrect answers or "do not know" responses. Knowledge levels were classified as good (80–100%), moderate (60–79%), and poor (<60%). The attitude questionnaire used a four-point Likert scale ranging from strongly agree to strongly disagree, and attitude levels were categorized as good (80–100%), moderate (60–79%), and poor (<60%) [5].

Prior to data collection, the validity and reliability of the research instruments were evaluated. The knowledge questionnaire was adapted from Abbas et al. [6] whereas The



attitude questionnaire was adapted from Assadec [5]. Item validity testing demonstrated that all knowledge questionnaire items correlation coefficients ranging from 0.373 to 0.842 (r -table = 0.361). Likewise, all attitude questionnaire items were valid, with Correlation coefficients ranging from 0.393 to 0.754 (r -table = 0.361) reliability testing Showed acceptable internal consistency, with cronbach's alpha values of 0.727 for the attitude questionnaire respondent were informed about the objectives of the objectives of the study and participated voluntarily after providing informed consent.

The collected data were analyzed using descriptive and inferential statistics. Descriptive statistics were used to describe the respondents' characteristics, knowledge, and attitudes. Inferential analysis was performed using the Spearman Rank test to determine the relationship between nurses' knowledge and attitudes toward the accuracy of initial emergency treatment, with a significance level of $p < 0.05$.

3. Results

3.1 Nurses' Knowledge Regarding the Management of Status Epilepticus

The results showed that more than half of the respondents had good knowledge regarding the management of status epilepticus (56.7%). Meanwhile, 33.3% had moderate knowledge and 10.0% had poor knowledge.

Table 1. Distribution of Nurses' Knowledge Regarding the Management of Status Epilepticus

Knowledge Level	n	%
Good	17	56.7
Moderate	10	33.3
Poor	3	10.0
Total	30	100

3.2 Nurses' Attitudes Toward the Management of Status Epilepticus

The majority of respondents demonstrated good attitudes toward the management of status epilepticus (53.3%), while 46.7% had moderate attitudes. No respondents were categorized as having poor attitudes.

Table 2. Distribution of Nurses' Attitude Level Regarding the Management of Status Epilepticus

Attitude Level	n	%
Good	16	53.3
Moderate	14	46.7
Poor	0	0
Total	30	100



3.3 Nurses' Knowledge of Status Epilepticus Management

Figure 3 presents the percentage of correct answers for each knowledge item. The highest proportion of correct answers was found in the statement "Anti-seizure drugs are the primary treatment" (100%), while the lowest was observed in the statement "Acupuncture can be used to treat epilepsy" (23.3%).

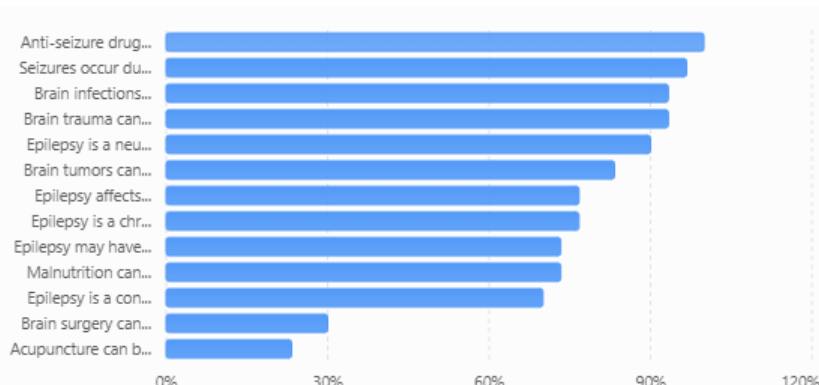


Figure 1. Percentage of Correct Answers on Knowledge Items Regarding the Management of Status Epilepticus

3.4 Relationship Between Nurses' Knowledge and Attitudes Toward the Management of Status Epilepticus.

Spearman's rank test revealed a significant relationship between nurses' knowledge and attitudes toward the management of status epilepticus ($r = 0.716$; $p = 0.001$). The findings indicate that higher knowledge scores were associated with better attitudes toward emergency management

Table 3. Relationship Between Nurses' Knowledge and Attitudes Toward the Management of Status Epilepticus

Knowledge	Moderate Attitude; n (%)	Good Attitude; n (%)	Total n (%)	p-value (r_s)
Poor	3 (100.0)	0 (0.0)	3 (10.0)	0.001 (0.716)
Moderate	9 (90.0)	1 (10.0)	10 (33.3)	
Good	2 (11.8)	15 (88.2)	17 (56.7)	
Total	14 (46.7)	16 (53.3)	30 (100)	

4. Discussion

This study found that most nurses had good knowledge regarding the management of status epilepticus. Adequate knowledge is essential because status epilepticus is a neurological emergency requiring immediate and appropriate treatment to prevent permanent neurological damage and mortality. The findings indicate that nurses working in the Emergency Department and Intensive Care Unit possess sufficient understanding of epilepsy and its emergency management [7].



These findings are consistent with previous studies reporting that nurses working in critical care settings generally have adequate knowledge regarding epilepsy management because of their frequent exposure to emergency cases and continuous professional education. Nurses with higher educational levels and longer clinical experience tend to demonstrate better knowledge regarding seizure management and emergency interventions [3].

However, this study also identified misconceptions regarding advanced treatment modalities, such as epilepsy surgery and alternative therapies. Similar findings have been reported in previous studies, suggesting that healthcare professionals often have limited knowledge about specialized treatment options because these interventions are usually managed by neurologists and epilepsy specialists [8]

The findings suggest that continuous education and regular training programs are needed to improve nurses' understanding of evidence-based management of status epilepticus. Furthermore, this study found a significant positive relationship between nurses knowledge and attitudes toward the management of status epilepticus ($p=0.001$; $r=0.716$). this finding Indicates that better knowledge is associated with more positive attitudes toward emergency Management. Therefore, continuous education and training are essential to improve nurses' knowledge and foster positive attitudes in managing patients with status epilepticus

This study demonstrated a significant relationship between nurses' knowledge and attitudes toward the management of status epilepticus. Nurses with better knowledge tended to have more positive attitudes toward emergency management. This finding supports the research hypothesis that knowledge plays an important role in shaping nurses' attitudes in providing emergency care for patients with status epilepticus [3]

The results are consistent with previous studies showing that knowledge is one of the most important determinants of attitude and professional behavior. Adequate knowledge enables nurses to understand the importance of immediate intervention, recognize complications, and make appropriate clinical decisions during emergencies. Consequently, knowledgeable nurses are more likely to develop positive attitudes and greater confidence in managing patients with status epilepticus [1]

The findings can also be explained by behavioral theory, which states that knowledge serves as the foundation for the development of attitudes and behaviors. Individuals who possess sufficient information and understanding are more likely to demonstrate favorable attitudes and perform appropriate actions in clinical situations [4]

The findings of this study have important implications for nursing practice. Healthcare institutions should provide regular educational programs, simulation-based training, and continuing professional development activities related to epilepsy and status epilepticus management. Improving nurses' knowledge may contribute to better attitudes and ultimately improve the quality of emergency care provided to patients with status epilepticus [7].

Furthermore, this study contributes to the advancement of nursing science by emphasizing the importance of educational interventions in improving both cognitive and affective competencies among nurses. Future studies are recommended to



investigate other factors that may influence nurses' attitudes and practices, including clinical experience, self-efficacy, organizational support, and participation in emergency training programs.

Future studies are recommended to involve larger sample sizes and multiple healthcare settings to improve the generalizability of the findings. Further research should also investigate other factors that may influence nurses' attitudes and practices, including clinical experience, self-efficacy, organizational support, and participation in emergency training programs.

5. Conclusion

This study concluded that most nurses had good knowledge and positive attitudes toward the management of status epilepticus. A significant positive relationship was found between nurses' knowledge and attitudes, indicating that nurses with better knowledge tend to have more positive attitudes toward emergency management of status epilepticus. These findings highlight the importance of improving nurses' knowledge through continuous education and training programs to enhance the quality of emergency nursing care for patients with status epilepticus.

Author's Contribution Statement:

Ilhamsyah contributed to the study conception and design, interpretation of finding and approving, Linda; data collection, Ardian Adhiwijaya: data analysis, interpretation of findings, and manuscript preparation. Eva Yulistiawati And Andi Budi Adi Putra ; Review & Editing

Conflicts of Interest:

The author declares that there are no conflicts of interest regarding the publication of this article. The author has no financial or personal relationships that could have influenced the work reported in this study.

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This study was approved by the Health Research Ethics Committee of Universitas Islam Negeri Alauddin Makassar with Ethical Clearance Number C.154/KEPK/FKIK/X/2025, issued on October 29, 2025. Written informed consent was obtained from all participants prior to data collection. Participation in this study was voluntary, and the confidentiality and anonymity of all respondents were maintained throughout the research process.



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