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ORIGINAL ARTICLE

Knowledge of primary survey on lowering consciousness among Pasar Petisah citizens

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Abstract

Lowered consciousness is a life-threatening condition that necessitates prompt assessment and first aid. One crucial method for addressing such emergencies is the primary survey, which aims to identify and treat life-threatening conditions quickly. Pasar Petisah, one of the largest and busiest markets in Medan, is a high-risk location for such emergencies due to its crowded nature. Therefore, the community at Pasar Petisah needs to have a strong understanding of the primary survey procedure. This study is a descriptive cross-sectional analysis that uses primary data collected through questionnaires. The sample size consists of 97 subjects, selected using non-probability sampling techniques. The results indicate that among the 97 participants, only 3 (3.1%) demonstrated a good level of knowledge about the primary survey, 41 (42.3%) had a sufficient level of knowledge, and 53 (54.6%) had a lacking level of knowledge. Regarding readiness to perform the primary survey, 61 individuals (62.9%) reported feeling prepared, 23 individuals (23.7%) were doubtful, and 13 individuals (13.4%) felt unprepared. Overall, while the community at Pasar Petisah generally lacks adequate knowledge about conducting a primary survey in cases of lowered consciousness, a majority still express readiness to perform the primary survey in emergency situations.

Keywords: lowering consciousness; primary survey; knowledge; first aid

Introduction

Lowered consciousness is a condition characterized by brain dysfunction, manifesting as disturbances in the brain's ability to maintain wakefulness and alertness.[1,2] This condition is primarily caused by stroke (6–54%), followed by injury (3–42%), intoxication (1–39%), and metabolic disturbances (1–29%).[3] Lowered consciousness is a life-threatening condition, necessitating an initial assessment known as a primary survey.[4,5] The primary survey follows the ABCDE principle, with each letter representing a critical aspect of patient assessment in life-threatening situations.[6,7] 'A' stands for airway assessment, 'B' for breathing assessment, 'C' for circulation or bleeding control, 'D' for disability assessment including consciousness and neurological response, and 'E' for exposure and environment control, assessing for other injuries and ensuring a supportive environment for the patient.[8,9]

Markets are public places frequently visited by large numbers of people. In Medan, there are numerous traditional markets, with the Petisah market being the second largest and hosting a vast number of sellers.[10] Consequently, the Petisah market is a popular destination for the city's residents. Crowded places are associated with a higher likelihood of various emergency incidents.[11] Therefore, it is crucial for the citizens of the Petisah market to master the primary survey. Mastery of the primary survey is directly influenced by the citizens' level of knowledge. The main objective of this research is to determine the level of knowledge among the Petisah market citizens regarding the primary survey for incidents involving lowered consciousness in the market.

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Method

This study employs a descriptive research method with a cross-sectional design. The sampling technique used is non-probability sampling due to the unknown population size. The number of respondents was determined using the Cochran formula, resulting in a sample size of 97 respondents. Participants in this study met specific inclusion and exclusion criteria. Inclusion criteria encompassed citizens present at the market during the research, including sellers, visitors, and market officers, who were willing to participate. Exclusion criteria included citizens under 18 years or over 70 years of age and those with disabilities.

The study was conducted at the Petisah market, located in the Medan Petisah District of Medan City, North Sumatra Province. The research period spanned from August 2023 to October 2023. Data were collected through interviews and questionnaires administered to selected respondents. The questionnaire used in this study had undergone validity and reliability testing in May 2023.

Collected data were analyzed using the univariate method, chosen to describe respondent characteristics such as age, gender, education level, and information sources. Additionally, this analysis categorized respondents' knowledge levels and their willingness to perform primary surveys. Results from the univariate analysis are presented in frequency tables. This research received ethical approval from the Ethics Commission of the Faculty of Medicine at Universitas Sumatera Utara.

Table 1. Respondent characteristics (n=97)

Characteristics	f	%
Age		
Early adulthood (18-40 years)	53	54.6
Middle adulthood (41-65 years)	43	44.3
Late adulthood (> 66 years)	1	1
Gender		
Male	48	49.5
Female	49	50.5
Latest education		
Uneducated	9	9.3
Primary education	24	24.7
Further education	64	66

Table 2. Respondent's information sources (n=97)

Source of Information	f	%
Newspaper	7	10.6
Electronic media	30	45.5
Book	9	13.6
Poster	2	3
Health worker	6	9.1
Family	12	18.2

Table 3. Respondent's knowledge level (n=97)

Level of knowledge	f	%
Good	3	3.1
Fair	41	42.3
Poor	53	54.6

Results

The majority of the respondents (54.6%) are in early adulthood (18-40 years old), followed by middle adulthood (41-65 years old) at 44.3%, and only 1% are in late adulthood (> 66 years old). There is almost an equal split between males (49.5%) and females (50.5%) among the respondents. Most of the respondent (66%) have further education, whereas 24.7% have primary education and only 9.3% are uneducated (Table 1). Table 2 shows the distribution of respondents' information sources. Electronic media (45.5%) is the most common source of information, followed by family (18.2%) and books (13.6%). Newspapers (10.6%), health workers (9.1%), and posters (3%) are less frequently cited sources of information. Table 3 shows that most respondents (54.6%) had poor knowledge, while 42.3% had sufficient knowledge and only 3.1% had good knowledge.

In Table 4, the distribution of knowledge level is fairly even across all age groups, with around 33% of respondents in each category (good, fair, and poor) for early and middle adulthood. There is no significant difference in knowledge level between males and females. Those with further education have the highest percentage (33%) of respondents with good knowledge, while those with uneducated or primary education have a higher proportion (around 33%) in the fair category.

Table 5 presents the frequency distribution of respondents' willingness to conduct primary surveys when encountering life-threatening conditions. The majority of respondents in this study indicated their willingness to perform such surveys.

Table 4. Distribution of knowledge level based on respondent characteristics (n=97)

Characteristic	Level of knowledge			Total
	Good	Fair	Poor	
Age				
Early adulthood (18-40 years)	3	28	22	53
Middle adulthood (41-65 years)	0	13	30	43
Late adulthood (> 66 years)	0	0	1	1
Gender				
Male	1	17	30	48
Female	2	24	23	49
Latest education				
Uneducated	0	0	9	9
Primary education	0	8	16	24
Further education	3	33	28	64

Tabel 5. Distribution of respondents willingness (n=97)

Willingness	f	%
Willing	61	62.9
Doubtful	23	23.7
Unwilling	13	13.4

Discussion

Respondent characteristics

The characteristics of respondents in this study align with the findings of a study conducted by Erawati[12], which revealed that the majority of research respondents were female, totaling 139 individuals (56.5%). Similarly, the largest age group in both studies falls within early adulthood, comprising 186 people (75.6%). In this study, respondents' characteristics were also grouped based on different levels of education, including without schooling, elementary school/equivalent, middle school/equivalent, high school/equivalent, and university. The results showed a similar pattern, with the majority of respondents having completed high school/equivalent education, totaling 136 individuals (55.3%), followed by the university-educated group with 43 individuals (17.5%). Additionally, the junior high school/equivalent group comprised 39 individuals (15.95%), the elementary school/equivalent group included 27 individuals (11%), and the smallest group consisted of those who did not attend school, with only 1 person (0.4%).

The findings of this study align with research conducted by Ayuningtias & Widyaningtyas[13], which indicates that the majority of respondents fell within the early adulthood age group (18-40 years), totaling 50 individuals (60.2%). Regarding education level, most respondents were from the high school education group, comprising 40 individuals (48.2%). This was followed by the junior high school group with 36 individuals (43.4%), the elementary school group with 5 individuals (6%), and the group that did not attend school, which included 2 individuals (2.4%).

Information sources

Information nowadays can be easily and quickly accessed with electronic media, especially those related to the internet. Information sources available on the internet, including social media and electronic media, serve various purposes such as health education.[14] The results of this study align with similar research conducted by Erawati[12], which indicates that the most common source of information about Basic Life Support is electronic media, accounting for 120 individuals (48.8%). Other sources include information from other individuals, totaling 72 individuals (29.3%), books utilized by 34 individuals (13.8%), and newspapers referenced by 20 individuals (8.1%).

Knowledge level

The findings of this study were also found in the study conducted by Maria et al.[15], which revealed that the level of family knowledge in first aid for emergency conditions was as follows: 13.1% had good knowledge, 33.6% had fair knowledge, and 53.3% had poor knowledge. The key aspects covered in this research included the definition of first aid, principles of first aid, stages of first aid, and management of first aid for victims.

However, the results of this study differ from those of the study conducted by Erawati[12]. In this study, the majority of the public demonstrated good knowledge about basic life support (52.8%), followed by fair knowledge (7.6%), and poor knowledge (19.5%). This notable difference is primarily attributed to the information obtained by respondents. It was found that all 246 respondents in this study had prior information about Basic Life Support, which likely influenced their level of knowledge.[16] This finding aligns with the study conducted by Torano & Parante[17], which reported that 91% of respondents had never received information related to first aid in traffic accidents, impacting their level of knowledge. In this study, 83% of respondents demonstrated a poor level of knowledge.

Knowledge level based on respondent characteristics

The distribution of knowledge levels based on respondents' characteristics table suggests that the level of knowledge among respondents is not correlated with their latest education attainment. Despite the higher number of respondents in the further education group, this group also comprises the majority of respondents with a poor level of knowledge. This could be attributed to the lack of education about primary surveys across various educational levels in Indonesia.[13] Education on primary surveys should be provided early. This notion is supported by a study conducted by Petric et al.[18] which found that implementing Basic Life Support education for elementary school students resulted in positive outcomes. The education was observed to enhance students' self-confidence, increase their concern for their peers, improve their ability to handle emergencies, and reduce engagement in risky behaviors.

Willingness

The findings of this study align with a study by Torano & Parante[17] where 57% of respondents exhibited a good attitude, 43% showed a fair attitude, and no respondents displayed a poor attitude. This is also consistent with a study by Teshale & Alemu[19] in Addis Ababa, Ethiopia, involving 785 taxi drivers, where 80.4% of respondents had a positive attitude towards providing first aid. Willingness to perform a primary survey reflects a positive attitude.[20] Attitude encompasses a person's thoughts, feelings, attention, opinions, and emotions in response to a stimulus.[17] Therefore, in this study, 61 respondents (62.9%) demonstrated high levels of empathy, leading to a positive attitude when faced with life-threatening conditions.

However, the study's two main components, knowledge level, and citizens' willingness were not congruent. Despite the majority of the Petisah market citizens having a poor level of knowledge, most were still willing to perform a primary survey during emergencies. This can be attributed to the social nature of the research location, a traditional market with frequent interactions between sellers and buyers, fostering increased social awareness and responsibility for others' well-being.[21]

Nevertheless, 36 respondents (37.1%) expressed doubt and reluctance to perform primary surveys during emergencies. Doubt and reluctance indicate negative attitudes, possibly due to inadequate training and perceived insufficient knowledge among respondents. Thus, enhancing information dissemination regarding primary surveys and providing training to citizens is crucial.

Conclusion

Based on the data collected from the research questionnaire, it was determined that the majority of the Petisah Market citizens still possessed a poor understanding of primary surveys related to incidents of lowered consciousness. Most respondents from the Petisah market were in the early adulthood age bracket (18-40 years), predominantly female, and had completed further education, typically high school or college. Electronic media emerged as the primary source of information regarding primary surveys for the Petisah market citizens. Despite the limited knowledge about primary surveys concerning incidents of lowered consciousness, a significant number of respondents expressed willingness to conduct primary surveys in emergencies.

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