

Overview of Nurses' Knowledge Regarding the Implementation of Basic Life Assistance in the Emergency Installation of the Makassar

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Abstract

Emergency nursing nursing is a comprehensive nursing service provided to patients with acute injuries or life-threatening illnesses. Based on data obtained from RSU Sayang Rakyat Makassar , the number of patients requiring basic life support in 2013 was 60 patients, in 2014 there were 80 patients, and in 2015 there were 119 patients. Objective study is for get the picture knowledge nurse about implementation help life Basics in Installation Bad Emergency RSU Sayang Rakyat Makassar. Type study This is Observational research is descriptive. Population in study This are all nurses on duty at the installation Bad The emergency situation at the Sayang Rakyat Hospital in Makassar was 19 people. Sample amount 19 people use technique total sampling. Research was carried out starting date 13 to 18 April 2016. Data collected with using a questionnaire. The research results show that Most of the respondents had good knowledge about implementing basic life support, namely 18 people (94 , 7 %), and the majority of nurses carried out basic life support according to 2010 AHA provisions, namely 17 people (89.5%). Based on results study concluded that Most nurses have good knowledge about implementing basic life support, and most nurses carry out basic life support in accordance with the provisions of AHA 2010. It is recommended that hospital institutions need to increase the knowledge and skills of nurses regarding basic life support by holding seminars or continuous training. so that nurses are able to provide services to patients experiencing emergency conditions, as well as evaluating and monitoring nurses who have not and have undergone training.

Introduction

Emergency nursing is a comprehensive service provided to patients with acute injuries or life-threatening illnesses. This nursing care involves expertise in patient assessment, priority setting, crisis intervention, and public health education (Nizum et al., 2020; Sole et al., 2020). As specialists, emergency nurses apply their knowledge and skills to manage patients' responses to life-threatening emergencies such as resuscitation, shock, trauma, multisystem instability, poisoning, and other critical conditions (Said & Chiang, 2020).

Basic Life Support (BLS) is the initial intervention aimed at preserving life when an individual faces a life-threatening condition. BLS is a fundamental action to save a person from cardiac arrest and includes key aspects such as the activation of the emergency response system for coronary syndromes. The primary survey follows the "ABC" mnemonic, with "D" and "E" added to cover: Airway (A), Breathing (B), Circulation (C), Disability (D), and Exposure (E). These elements of the primary survey occur simultaneously with resuscitation efforts (Olasveengen et al., 2020). Cardiopulmonary resuscitation (CPR) is performed in the order of circulation, airway, and breathing, with the primary focus on handling circulation (Mitropoulou & Fitzsimmons, 2022). Knowledge of the primary survey is part of the nursing curriculum and is acquired by nurses through formal education (Chi et al., 2022; Oldland et al., 2023; Harley et al., 2021).

Research by Srivilaithon et al. (2020) indicates that a lack of knowledge regarding Basic Life Support (BLS) can negatively impact the care of patients requiring urgent attention. This underscores the importance of emergency training for nurses to enhance their skills. Ssewante et al. (2022) study, however, found no significant impact of BLS training on the implementation of the primary survey by emergency room nurses at Dr. Moewardi Hospital in Surakarta. Sultan et al. (2020) found that health workers, as the first responders to emergencies, can provide first aid, especially to individuals experiencing cardiac arrest or respiratory failure, which necessitates the application of BLS. Health education and training in BLS improve the knowledge and skills of healthcare providers in managing such emergencies (Rajesh, 2020).

Data from the Medical Records of RSU Sayang Rakyat Makassar show an increase in the number of patients requiring basic life support over the years. In 2013, 5,125 patients visited the emergency department, with 60 needing BLS. This number rose to 5,457 patients in 2014, with 80 requiring BLS, and further increased to 8,307 patients in 2015, with 119 needing BLS (Yantimala, 2023). The emergency department at RSU Sayang Rakyat Makassar had 19 nurses on staff in 2015 (Medical Records of RSU Sayang Rakyat Makassar, 2015).

Method

The research used quantitative descriptive observations to measure nurse understanding and actual implementation of Basic Life Support (BLS) at RSU Sayang Rakyat Makassar Emergency Installation. The researchers adopted a descriptive approach for objective measurement and description of the studied phenomena that centered around BLS procedures applied by nurses in their actual clinical environment. The observational methodology allowed researchers to record data through natural occurrences which accurately displayed nurse behaviors and skill levels throughout their actual workplace.

RSU Sayang Rakyat Makassar serves as the research site because it functions as a regional public hospital offering emergency care services together with other diverse medical treatments to patients. The emergency unit at RSU Sayang Rakyat Makassar served as the research site because it handles critical life-threatening cases and nurses in this unit need updated life support knowledge and readiness skills. Data collection occurred between April 13 and April 18, 2016 over six days as hospital authorities matched researchers with nurses to describe the study objectives followed by distribution of the data collection instrument.

Every nurse employed in the hospital emergency department for the study duration made up the target population. The total number of emergency nurses reached nineteen workers so the study employed total sampling to evaluate the entire group. Total sampling methodology enabled researchers to include all potential participants from the target population without any size restrictions which led to a detailed analysis of the research phenomenon. The researchers employed total sampling as an approach to eliminate selection bias enabling them to observe all aspects relating to BLS knowledge and practice within the emergency nursing team at the hospital.

Researchers used their designed structured questionnaire to collect data for this study's purposes. The assessment tool contained two main sections to determine both nurses' theoretical comprehension of Basic Life Support knowledge and their hands-on BLS performance during hospital situations. The knowledge questions required respondents to demonstrate their comprehension of BLS principles from the American Heart Association (AHA) 2010 guidelines including BLS definition and uses alongside situation-based application rules and equipment setup and precise BLS procedures. The implementation evaluation section of the questionnaire determined whether nurses performed BLS in medical practice and evaluated the adherence to established protocols for these instances.

Professionals from the clinical field examined the questionnaire before it reached participants to confirm its content validity and relevance. Staff members crafted the items while maintaining precise phrases which enabled participants to report accurately. Research personnel stayed accessible to give explanations, if necessary, yet maintained that each participant fill out the questionnaire personally under normal circumstances with no time constraints which protected response integrity.

A univariate analysis process handled the processed questionnaires. The analysis method focused on individual variable examination to create statistical representations of participant responses regarding BLS knowledge and implementation distribution patterns. The results showed how frequent problems occurred and what percentages revealed when studying nurses' BLS knowledge levels and implementation performance based on descriptive statistics. The analysis was performed and visualized through the Statistical Package for the Social Sciences (SPSS) software. The SPSS software provided precision and consistent outcomes which resulted in well-organized findings presentation throughout tables as well as written text.

Result and Discussion

This study aimed to provide an overview of the knowledge possessed by nurses regarding the implementation of Basic Life Support (BLS) at the Emergency Installation of RSU Sayang Rakyat Makassar. Given the critical role that emergency nurses play in saving lives, particularly through timely and correct application of BLS procedures, assessing their understanding and actual implementation is vital. Understanding both the level of knowledge and practical application of BLS among these nurses provides valuable insights into the quality of emergency care and highlights areas that may require further training or support. The following section outlines the findings derived from questionnaire responses and presents a discussion in light of relevant literature.

Nursing Knowledge

Table 1. Distribution Respondent Based on Nursing Knowledge in Installation Bad Emergency RSU Sayang Rakyat Makassar

Nursing Knowledge	n	%
Not enough	1	5, 3
Good	18	94, 7
Amount	19	100.0

Source: Primary Data

Table 2 shows that Most of the respondents had good knowledge about implementing basic life support, namely 18 people (94, 7 %), and only 1 person (5.3%) had poor knowledge.

Implementation of Basic Life Support (BHD)

Table 2. Distribution Respondent Based on Implementation of Basic Life Support in Installations Bad Emergency RSU Sayang Rakyat Makassar

Implementation of BHD	n	%
Are not done	2	10, 5
Done	17	89, 5
Amount	19	100.0

Source: Primary Data

Table 3 shows that Most of the nurses carried out basic life support according to the 2010 AHA provisions, namely 17 people (89.5%), and those who did not carried it out were 2 people (10.5%).

Description of Nurses' Knowledge About Implementation Help Life Base in Installation Bad Emergency RSU Sayang Rakyat Makassar

One of elements necessary to achieve this do something is have knowledge the good and if somebody want something can done with Keep going continuously so required positive knowledge about what was done.

The research results show that Most of the respondents had good knowledge about the implementation of basic life support, namely 18 people (94,7 %). Knowledge both researchers mean is respondents who understand and comprehend about the purpose of implementing basic life support, when it should be carried out, what preparations must be made before carrying out basic life support, and what are the procedures for implementing it. The results of the research conducted show that the level of knowledge of nurses regarding the implementation of basic life support is influenced by several factors, one of which is the source of information obtained and by attending education or training so as to increase their knowledge in implementing basic life support to patients.

In the research results, it was also found that respondents with less knowledge, although only 1 person (5.3%). This is due to differences in opportunities to obtain information either through training or seminars regarding the implementation of basic life support so that the experience they have in implementing basic life support is still lacking. In the research results, nurses with less knowledge had never attended emergency training, which resulted in these nurses not knowing enough about implementing basic life support. Knowledge nurse about handling patient terrible emergency very important for mastered Because No Possible somebody can give fast action precise and accurate if No control his knowledge. Lateness in a minute alone greatly affects a person's prognosis Because failure system brain and heart for 4-6 minutes can cause death biology temporary death clinical can happen afterwards.

Research result This in line with results research conducted by Purba et al. (2023), about "Knowledge Overview Nurse Executor in Handling Patient Bad Emergency in the ER Room at BLU RSUP. Prof. Dr. R. D Kandou Manado", with research results showing that from 31 the nurses studied were obtained knowledge respondents in handling patient terrible emergency in category Enough ie as many as 19 respondents (61.3%), good as many as 9 respondents (29%), and less as many as 3 respondents (9.7%).

According Tombokan et al. (2022), stated that knowledge is results from known and this happen after people do sensing to something object certain. Sensing happens through the five senses humans and most of them knowledge man obtained through eyes and ears.

Emergency events usually occur quickly and suddenly so it is difficult to predict when they will occur (Merz et al., 2020). An emergency is a life-threatening situation that requires quick, precise, careful and accurate help which can result in disability and even death. One of the causes of the high rate of disability and death due to emergencies is the lack of knowledge of nurses regarding their role in handling emergency patients who are not properly implementing the principles of help (Qi & Hu, 2020).

Good knowledge greatly influences a person's skills and ability to carry out an action. In the Emergency Room (IGD), nurses' knowledge and skills are needed, especially in clinical decision making, where skills are very important in the initial assessment, nurses must

prioritize patient care and safety on the basis of correct decision making, but to support this, adequate knowledge and skills are needed. good at carrying out nursing procedures.

Based on discussion that has been explained above, researcher conclude that knowledge plays an important role in implementing basic life support because without good knowledge and experience, nurses will not be able to carry out nursing care services for patients in emergency conditions.

Implementation Overview Help Life Basics by Nurses at the Installation Bad Emergency RSU Sayang Rakyat Makassar

Help life Basics are one of the efforts that must be carried out immediately by someone if they find a victim who needs it.

The research results show that Most of the nurses had implemented basic life support according to Zhou et al. (2020) provisions, namely 17 people (89.5%). This cannot be separated from the existence of education and emergency training activities that nurses have participated in, so that nurses are able to provide emergency services well.

The research results also found that 2 people (10.5%) did not carry out basic life support. This is due to the lack of experience of nurses in carrying out assistance life basic, so that the nurse has not been able to provide assistance life basis to the patient independently. This lack of experience is due to the fact that the nurse has never attended emergency training and the nurse's working period has not been more than 2 years, so the nurse must be accompanied by a more experienced nurse every time she carries out basic life support on a patient.

A nurse must have good knowledge, skills and experience in providing the actions needed by patients. Nurses who work in the Emergency Room (IGD) must have professional skills and special skills (competencies) which can be obtained through education or training regarding emergencies so that nurses will be better able to provide services, especially regarding emergency problems .

Research result This in line with results research conducted by Alkhaqani (2023), about “Knowledge Level Overview Nurse About *Basic Life Support* (BLS) at Soedirman Mangun Sumarso Regional Hospital Regency Wonogiri”, results research involving 20 nurses show that 18 people (90%) said skilled in implementation *primary survey*, and only found 2 people (10%) with implementation *primary survey* No skilled. According to researcher Skills somebody in do it action influenced by behavior and experience individual That Alone (Rahayu & Suprayogi, 2023).

Basic life support is something that is immediately carried out by the nurse if an early assessment finds one of the problems, including; blocked airway, no breathing, and no signs of a pulse (Panchal et al., 2020). As is known, one of the goals of BHD is to save the lives of survivors from death. emphasizes the focus of basic life support on four things, namely: first, immediate recognition of cardiac arrest. Second, activate the emergency response system. Third, cardiopulmonary resuscitation (CPR) as early as possible. Fourth, carry out defibrillation immediately if there is an indication (Soar et al., 2021).

Based on discussion that has been explained above, researcher conclude that the implementation of basic life support carried out by nurses can be influenced by the knowledge and skills of nurses in carrying out emergency services (Dawadi et al., 2021).

Conclusion

Based on results study about description knowledge nurse about implementation help life Basics in Installation Bad Emergency at RSU Sayang Rakyat Makassar, concluded that; (1)

Most of the nurses had good knowledge about implementing basic life support, namely 18 people (94, 7 %); (2) The majority of nurses carried out basic life support according to AHA 2010 provisions, namely 17 people (89.5%).

References

- Alkhaqani, A. L. (2023). Exploring Nurses' Knowledge and Attitudes Concerning Basic Life Support: A Questionnaire Survey Study. *Al-Rafidain Journal of Medical Sciences (ISSN 2789-3219)*, 5, 40-47. <https://doi.org/10.54133/ajms.v5i.145>
- Chi, S. Y., Soh, K. L., Raman, R. A., Ong, S. L., & Soh, K. G. (2022). Nurses' knowledge of heart failure self-care education: A systematic review. *Nursing in critical care*, 27(2), 172-186. <https://doi.org/10.1111/nicc.12758>
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, 2(2), 25-36. <https://doi.org/10.46809/jpse.v2i2.20>
- Harley, A., Massey, D., Ullman, A. J., Reid-Searl, K., Schlapbach, L. J., Takashima, M., ... & Johnston, A. N. (2021). Final year nursing student's exposure to education and knowledge about sepsis: a multi-university study. *Nurse Education Today*, 97, 104703. <https://doi.org/10.1016/j.nedt.2020.104703>
- Merz, B., Kuhlicke, C., Kunz, M., Pittore, M., Babeyko, A., Bresch, D. N., ... & Wurpts, A. (2020). Impact forecasting to support emergency management of natural hazards. *Reviews of Geophysics*, 58(4), e2020RG000704. <https://doi.org/10.1029/2020RG000704>
- Mitropoulou, P., & Fitzsimmons, S. (2022). Cardiopulmonary resuscitation. *Medicine*, 50(9), 599-606. <https://doi.org/10.1016/j.mpmed.2022.06.007>
- Nizum, N., Yoon, R., Ferreira-Legere, L., Poole, N., & Lulat, Z. (2020). Nursing interventions for adults following a mental health crisis: A systematic review guided by trauma-informed principles. *International Journal of Mental Health Nursing*, 29(3), 348-363. <https://doi.org/10.1111/inm.12691>
- Olasveengen, T. M., Mancini, M. E., Perkins, G. D., Avis, S., Brooks, S., Castrén, M., ... & Morley, P. T. (2020). Adult basic life support: 2020 international consensus on cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations. *Circulation*, 142(16_suppl_1), S41-S91. <https://doi.org/10.1161/CIR.0000000000000892>
- Oldland, E., Redley, B., Botti, M., & Hutchinson, A. M. (2023). Nurses' motivations and desired learning outcomes of postgraduate critical care studies: A descriptive exploratory study. *Australian Critical Care*, 36(4), 586-594. <https://doi.org/10.1016/j.aucc.2022.05.004>
- Panchal, A. R., Bartos, J. A., Cabañas, J. G., Donnino, M. W., Drennan, I. R., Hirsch, K. G., ... & Berg, K. M. (2020). Part 3: adult basic and advanced life support: 2020 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*, 142(16_Suppl_2), S366-S468. <https://doi.org/10.1161/CIR.0000000000000916>
- Purba, D. A., Nasution, S. W., & Ginting, C. N. (2023). Analysis of Nurse Ability in Preventing Nosocomial Infections on the 6b Floor Using the Nvivo Method. *Jurnal Penelitian Pendidikan IPA*, 9(SpecialIssue), 344-349. <https://doi.org/10.29303/jppipa.v9iSpecialIssue.4888>

- Qi, F., & Hu, L. (2020). Including people with disability in the COVID-19 outbreak emergency preparedness and response in China. *Disability & Society*, 35(5), 848-853. <https://doi.org/10.1080/09687599.2020.1752622>
- Rahayu, P., & Suprayogi, S. (2023). the Portrayal of Persona and Shadow in Normal People by Sally Rooney: an Archetypes Study. *Linguistics and Literature Journal*, 4(1), 50-57. <https://doi.org/10.33365/lj.v4i1.2590>
- Rajesh, D. (2020). Evaluation of Basic Life Support Knowledge and Skills of Healthcare and Non-healthcare Providers. *INTERNATIONAL JOURNAL OF SCIENTIFIC STUDY*, 8(1), 67-71.
- Said, N. B., & Chiang, V. C. (2020). The knowledge, skill competencies, and psychological preparedness of nurses for disasters: A systematic review. *International emergency nursing*, 48, 100806. <https://doi.org/10.1016/j.ienj.2019.100806>
- Scapigliati, A., Zace, D., Matsuyama, T., Pisapia, L., Saviani, M., Semeraro, F., ... & International Liaison Committee on Resuscitation Education, Implementation and Teams Task Force. (2021). Community initiatives to promote basic life support implementation—a scoping review. *Journal of clinical medicine*, 10(24), 5719. <https://doi.org/10.3390/jcm10245719>
- Schroeder, D. C., Semeraro, F., Greif, R., Bray, J., Morley, P., Parr, M., ... & International Liaison Committee on Resuscitation. (2023). KIDS SAVE LIVES: basic life support education for schoolchildren: a narrative review and scientific statement from the International Liaison Committee on Resuscitation. *Circulation*, 147(24), 1854-1868. <https://doi.org/10.1161/CIR.0000000000001128>
- Soar, J., Becker, L. B., Berg, K. M., Einav, S., Ma, Q., Olasveengen, T. M., ... & Parr, M. J. (2021). Cardiopulmonary resuscitation in special circumstances. *The Lancet*, 398(10307), 1257-1268. <https://doi.org/10.22192/crls.2023>
- Sole, M. L., Klein, D. G., & Moseley, M. J. (2020). *Introduction to Critical Care Nursing E-Book: Introduction to Critical Care Nursing E-Book*. Elsevier Health Sciences.
- Srivilaithon, W., Amnuaypattanapon, K., Limjindaporn, C., Diskumpon, N., Dasanadeba, I., & Daorattanachai, K. (2020). Retention of basic-life-support knowledge and skills in second-year medical students. *Open Access Emergency Medicine*, 211-217.
- Ssewante, N., Wekha, G., Iradukunda, A., Musoke, P., Kanyike, A. M., Nabukeera, G., ... & Tagg, A. (2022). Basic life support, a necessary inclusion in the medical curriculum: a cross-sectional survey of knowledge and attitude in Uganda. *BMC Medical Education*, 22(1), 140. <https://doi.org/10.1186/s12909-022-03206-z>
- Sultan, M. A. S., Løwe Sørensen, J., Carlström, E., Mortelmans, L., & Khorram-Manesh, A. (2020, October). Emergency healthcare providers' perceptions of preparedness and willingness to work during disasters and public health emergencies. In *Healthcare* (Vol. 8, No. 4, p. 442). MDPI.
- Tombokan, M., Aminah, S., Laubo, N., & Baharuddin, K. (2022). Application of Discharge Planning Model in an Effort to Improve Families' Capacity to Care for Patients with Violent Behavior at Dadi Regional Special Hospital in South Sulawesi Province. *NeuroQuantology*, 20(17), 1310. <https://doi.org/10.48047/NQ.2022.20.17.NQ880165>
- Wyckoff, M. H., Singletary, E. M., Soar, J., Olasveengen, T. M., Greif, R., Liley, H. G., ... & Berg, K. M. (2022). 2021 international consensus on cardiopulmonary resuscitation

and emergency cardiovascular care science with treatment recommendations: summary from the basic life support; advanced life support; neonatal life support; education, implementation, and teams; first aid task forces; and the COVID-19 working group. *Circulation*, 145(9), e645-e721.
<https://doi.org/10.1161/CIR.0000000000001017>

- Yantimala, Y. (2023). The Relationship Between Stress and Dyspepsia Incidents in the Labuang Baji Hospital. *Journal of Asian-african Focus in Health*, 1(3), 71-76.
- Zhou, T., Huang, S., Cheng, J., & Xiao, Y. (2020). The distance teaching practice of combined mode of massive open online course micro-video for interns in emergency department during the COVID-19 epidemic period. *Telemedicine and e-Health*, 26(5), 584-588.
<https://doi.org/10.1089/tmj.2020.0079>