



**THE ROLE OF HEALTH WORKERS IN HANDLING CHOKING IN INFANTS IN
THE WORKING AREA OF THE KAYU LAUT HEALTH CENTER, SOUTH
PENYABUNGAN DISTRICT, MANDAILING NATAL REGENCY,
NORTH SUMATRA PROVINCE YEAR 2024**

Fitri Rizkiyah¹, Herna Rinayanti Manurung², Juliana Munthe³, Monica Situngkir⁴, Henny Rista⁵, Mutia Pratiwi⁶, Meniat Jaya⁷

1234567 Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan

2319201228@mitrahusada.ac.id, hernarinayanti@mitrahusada.ac.id,
julianamunthe@mitrahusada.ac.id, 2119201048@mitrahusada.ac.id,
henyrista@mitrahusada.ac.id, 2319201037@mitrahusada.ac.id, 2319201037@mitrahusada.ac.id

ABSTRACT

According to data released by the World Health Organization (WHO) in , there were 17,537 cases of children under five years old (1-3 years old) who experienced choking. The main causes of this occurrence were food (59.5%) and foreign objects (31.4%), while 9.1% of the causes were unknown. In addition, the death rate due to choking in the UK also showed an increase. The main cause of choking is food stuck in the throat. According to data from the Office for National Statistics, there were 289 choking deaths in 2016, which represents an increase of 17% compared to the previous year. In the United States, 34 children were admitted to the emergency room due to choking on food. An estimated 12,435 children under the age of 14 are being treated in hospitals in the United States. The cause is choking on food due to the choking of formula milk or breast milk, sweets, meat, bones, fruits and vegetables. This research method is observational/survey using questionnaires or questionnaires without intervention. The type of research is descriptive analytics with cross-sectional. : the majority of health workers with Bachelor's Education were 16 people (48%) each and the minority of Diploma education was 3 people (9.0%). The majority of health workers were over 35 years old, with a total of 20 people or 61.0%. Meanwhile, health workers under the age of 35 amounted to 13 people or 39.0%. the majority of health workers have worked > 1 year as many as 26 people (79.0%) and minorities < 1 year as many as 7 people (21.0%). the majority of 18 people (55.0%) had 1 < training history and 15 people (45.0%) had a good or sufficient level of knowledge. Meanwhile, a small percentage of respondents, namely 8 people or 24.0%, have a lack of knowledge.

Keywords: Baby, Choking, Role, Health Worker

Introduction

Choking is one of the life-threatening respiratory disorders, because if not treated immediately, the body will experience a lack of oxygen (hypoxia) which has the potential to cause death According to data released by the World Health Organization

(WHO) in 2022, there were 17,537 cases of children under the age of toddlers (1-3 years) who experienced choking. The main causes of this occurrence were food (59.5%) and foreign objects (31.4%), while 9.1% of the causes were unknown. In addition, the death rate due to choking in



the UK also showed an increase (World Health Organization, 2022).

The main cause of choking is food stuck in the throat. According to data from the Office for National Statistics, there were 289 choking deaths in 2021, which represents an increase of 17% compared to the previous year (Ryandini et al., 2021). In the United States, 34 children were admitted to the emergency room due to choking on food. An estimated 12,435 children under the age of 14 are being treated in hospitals in the United States. The cause is choking on food due to the choking of formula milk or breast milk, sweets, meat, bones, fruits and vegetables. (Suparmanto et al., 2023)

According to data from the Ministry of Health of the Republic of Indonesia, there were 12,400 cases of children under the age of 14 who experienced choking and received treatment at the Emergency Installation between 2022 and 2023. Based on data from the Centers for Disease Control and Prevention, every day there are 34 children who are taken to the Emergency Facility due to choking on foreign objects. Unfortunately, about 57 children die each year due to lack of proper handling when choking (Aty et al., 2021)

Research Methods

This research method is observational/survey, which is data collected from respondents using questionnaires or questionnaires without intervening with the research subject. The type of research is descriptive analytical with cross sectional, which is to study the correlation between risk factors and effects in the form of certain diseases or health statuses. (Amanah et al., 2021)

This study was conducted to analyze the role of health workers in handling choking

Table 1. Frequency Distribution Based on Respondent Education

in infants in the work area of the Kayu Laut Public Health Center, South Panyabungan District, Mandailing Natal Regency, Prov. North Sumatra in 2024. The population of this study is 35 people in the Maternity Room Health Officer at Griya Medica Batam Hospital in 2024. The research sample is part of the population, the sample in this study is the entire population with a sample number of 35 people. The method of data collection is through primary and secondary data. The data processing process involves several important stages. Editing is carried out to ensure the validity of the data collected. (Sembiring et al., 2025) Coding converts category data into numerical code for easy analysis. Entry is the stage of entering data into a computer database. Finally, cleaning is carried out to detect and correct errors before and after data is entered. And data analysis using univariate tests. (Tarigan et al., 2021)

Result

The Kayu Laut Health Center is located in Kayu Laut South Panyabungan, Mandailing Natal, North Sumatra Province. The health center, which is located in Mandailing Natal Regency, provides a variety of comprehensive health services. (Sinaga, 2022) The public can use this facility for general health checks, obtain health certificates, and get referrals to higher health facilities. In addition, this health center also runs various public health programs, including routine health checkups, wound care such as stitching and changing bandages, tooth extraction, blood pressure measurement, pregnancy tests, child health checks, and various laboratory tests such as blood type, uric acid, and cholesterol tests. This health center also facilitates the creation of referral letters for patients registered with BPJS to receive follow-up treatment at the hospital.



No	Category	Sum	Percentage (%)
	Diploma	3	9,0
	Bachelor	16	48,0
	Magister/Profesis	14	43,0
Total		33	100

Based on table 1 above, the majority of health workers with bachelor's are 16 people (48%) each and the minority of Diploma education is 3 people (9.0%).

Table 2 Frequency distribution by respondent's age

No	Category	Sum	Percentage (%)
	<u>>35 Years</u>	20	61,0
	<u><35 Years</u>	13	39,0
Total		33	100

Based on table 4.2 above, it is known that the majority of health workers ≥ 35 years old are 20 people (61.0) and the minority age >35 years old is 13 people (39.0%).

Table 3 Frequency Distribution Based on Working Time

Category	Frequency	Percentage
<u>>1 year</u>	26	79,0
<u>< 1 year</u>	7	21,0
Total	33	100

Based on table 4.3 above, the majority of health workers worked for 1 year > 26 have people (79.0%) and minorities < 1 year as many as 7 people (21.0%).

Table 4 Frequency Distribution Based on Training History

Category	Frequency	Percentage
<u>≤ 1 time</u>	18	55,0
<u>>1 time</u>	15	45,0
Total	33	100

Based on table 4.4 above, the majority of health workers training history 1 time ≤ 18 have people (55.0%) and minorities > 1 time as many as 15 people (45.0%).

Table 5 Frequency Distribution Based on Knowledge

Category	Frequency	Percentage
<u>Good/Enough</u>	25	76,0
<u>Less</u>	7	24,0
Total	33	100

Based on the results of the analysis of table 4.5 above, there are 25 people (76.0%) who have a minority of knowledge and 8 people (24%) who have less knowledge.

Discussion

Based on the results of the analysis of table 4.1 above, the majority of health workers with Bachelor's Education are 16 people (48%) each and the minority of Diploma education is 3 people (9.0%). Based on the data analysis in table 4.2, the majority of health workers are over 35 years old, with a total of 20 people or 61.0%. Meanwhile, health workers under the age of 35 amounted to 13 people or 39.0%. Based on the results of the analysis of table 4.3 above, the majority of health workers have worked for 1 year > 26 people (79.0%) and minorities < 1 year as many as 7 people (21.0%). Based on the results of the analysis of table 4.4 above, the majority of 18 people (55.0%) < 1 training history and the minority 15 people (45.0%) have a training history. Based on the data analysis in table 4.5, the majority of respondents showed a good or sufficient level of knowledge, namely 25 people or 76.0%. Meanwhile, a small percentage of respondents, namely 8 people or 24.0%, have a lack of knowledge. (Abilowo et al., 2024)

The quality of pregnant women's examination services is greatly influenced by the quality of work of health workers, especially midwives, who play an important role in maternal and newborn health services. If a woman can get through pregnancy, childbirth, and postpartum safely, then the chances of reducing maternal mortality (AKI) and infant mortality (AKB) will increase. From the results of the study, it was found that the age of midwives is not too much of a distinguishing factor in the quality of their work (Isyos Sari & Siti Nurmawan, 2024). The more prominent difference is in the length of time they work and the amount of experience they have accumulated. Through education, a person with limited

skills will get the right direction, such as mentorship, training, and counseling, to help them master their job. Training is a method of human resource development designed to improve individual competencies and skills in their work. (Made et al., 2025)

To improve the effectiveness of human resources in a company, work experience is essential. This aims to achieve optimal work results and increase employee productivity. As an employee's working life in a company increases, so does the level of experience they have. In order to examine the role of work experience in improving employee performance, an analysis will be carried out based on a literature review and findings from previous research. The longer the work experience an employee has, the more they will be able to work, be motivated to work, and get high performance. (Made et al., 2025)

The expertise of emergency room health workers in triage has a significant impact on their ability to recognize emergency conditions. In addition to improving the quality of service, this knowledge also helps minimize the risk of death and advanced disability (Simanjuntak & Manurung, 2024). The findings of this study are in accordance with the results of a study conducted by Lusiana at the Emergency Room of Puri Indah Hospital Jakarta, which shows that knowledge and attitudes have a significant influence on the effectiveness of triage implementation. The findings of the study also showed that there was a significant relationship between the attitude of emergency room nurses towards emergency measures. (Paninsari et al., 2024). The results showed a significant correlation between factors that affect the behavior of nursing workers in handling patients in the emergency



room, with a P-value = 0.014. This finding is supported by another study conducted by Gurnig et al., which obtained a P-value of 0.006, showing a relationship between the attitude of emergency room health workers and the actions taken. This attitude can be influenced by a variety of factors, including the influence of individuals who are considered important or respected, such as supervision from superiors in the work environment. Someone who has a positive attitude will. The results showed that there was a significant relationship between the level of knowledge of the respondents and their ability to handle emergency situations, with a P-value of 0.030. This indicates that the higher a person's level of knowledge, the more skilled they are in carrying out emergency measures. Increased knowledge can be caused by exposure to work, training and also information sources from various media available in the emergency room. According to research conducted by Salonen et al. there is a correlation between work experience and increased skills and knowledge, especially for health workers who have worked in the emergency room for more than five years. A study by Hicks et al. (Abilowo et al., 2024) indicated that years of experience significantly improved decision-making consistency in triage ($r = 0.42$, $p = 0.004$). This is in line with the observation that experienced nurses have superior triage skills.

Conclusion

1. Based on the results of the analysis of table 4.1 above, the majority of health workers with Bachelor's Education are 16 people (48%) each and the minority of Diploma education is 3 people (9.0%).
2. Based on the data analysis in table 4.2, the majority of health workers are over

35 years old, with a total of 20 people or 61.0%. Meanwhile, health workers under the age of 35 amounted to 13 people or 39.0%.

3. Based on the results of the analysis of table 4.3 above, the majority of health workers have worked for 1 year > 26 people (79.0%) and minorities < 1 year as many as 7 people (21.0%).
4. Based on the results of the analysis of table 4.4 above, the majority of 18 people (55.0%) had 1 $<$ training history and the minority had 15 training history (45.0%).
5. Based on the data analysis in table 4.5, the majority of respondents showed a good or sufficient level of knowledge, namely 25 people or 76.0%. Meanwhile, a small percentage of respondents, namely 8 people or 24.0%, have a lack of knowledge.

Suggestion

Research Place

The Kayulaut Puskesmas, South Panyabungan District, Mandailing Natal Regency, North Sumatra Province in 2024 can carry out craftsmanship with training institutions so that existing Human Resources skills can be further improved about handling choking.

Educational Institutions

STIKes Mitra Husada Medan is a campus with a PACER culture, *professionals* in carrying out care can be involved by lecturers and students to collaborate or *collaborate* with local health workers, because there is a sense of *empathy* about handling choking, *reliability* in taking actions and *Acuntabel* to report all care or activities carried out innovatively.

Community

Adding information for health workers about the Initial Handling of Choking in Pregnant Women during



Disasters in the Work Area of the Kayulaut Health Center, South Panyabungan District, Mandailing Natal Regency, North Sumatra Province in 2024.

References

Abilowo, A., Yulia, A., Lubis, S., & Aini, S. N. (2024). ANAK TERSEDAK DI TANJUNGPANDAN. 8, 807–810.

Amanah, J. K., Sanggilalung, A., Suranata, F. M., Dewi, S., Riu, M., Sasuit, J., No, T., & Utara, S. (2021). Pengaruh Edukasi Terhadap Keterampilan Keluarga Dalam Penanganan Tersedak (Choking) Pada Anak di Lingkungan IV Kelurahan Bailang Kecamatan Bunaken Kota Manado. 5(1).

Aty, Y. M. V. B., Deran, M. K., Nursing, B., Vol, J., Mei, N., Maria, Y., Ca, V. B. A., & Deran, M. K. (2021). Literatur Review : Edukasi Penanganan Tersedak pada Anak. 2(2), 82–89.

Isyos Sari, S., & Siti Nurmawan, S. (2024). Mutu Layanan Kebidanan dan Kebijakan Kesehatan. AA Rizky.

Made, N., Lidya, D., Luh, N., Intan, G., Studi, P., Program, K., Pengetahuan, T., & Tua, O. (2025). GAMBARAN TINGKAT PENGETAHUAN ORANG TUA TENTANG PENANGANAN TERSEDAK (CHOKING) PADA BALITA I Gusti Ayu Putu Satya Laksmi. 9(1), 79–85.

Paninsari, D., Oktaviani, S., Merianti, S., Keperawatan, F., & Indonesia, U. P. (2024). HUBUNGAN METODE BABY LED WEANING DENGAN KEJADIAN TERSEDAK (CHOKING) PADA BAYI USIA 6-12 BULAN. 7(1), 1–10.

Ryandini, T. P., Pitaloka, D., & Faqih, M. U. (2021). Implementation of Chocking Handling Towards The Ability of Mother In Helping Children at Adzikri Merakurak Early Childhood Education Programs , Tuban District. 13(01), 131–139.

Simanjuntak, E., & Manurung, H. R. (2024). Factors Related to the Utilization of Health Services at the Sinunukan Health Center, Mandailing Natal District, in 2023. Mitra Husada Health Internasional Conference (MiHHICo), 4(1), 535–541.

Suparmanto, G., Kurniawan, S. T., Kusuma, U., & Surakarta, H. (2023). The Effect of Education on the Heimlich Maneuver Technique on Mothers' Knowledge Levels in Managing Choking in Children in Ketro Village, Pacitan. 14(1), 51–57.

Tarigan, E. F., Dewi, E. R., Sinaga, S. N., Silvia, C., & Sitepu, B. (2021). *Home Care Baby Spa and Baby Gym for Optimizing Infant Growth and Development* 4, 456–460.

World Health Organization. (2022). World health statistics 2022: monitoring health for the SDGs. World Health Organization. <https://www.who.int/publications/item/9789240051157>

Sembiring, I. S., Manurung, B., Manurung, H. R., Sinuhaji, L. N., Ginting, P., Laura, G., Pane, F., Zebua, O., & Pakpahan, J. F. (2025). Original Article Effectiveness of Health Belief Model – Based Psychoeducation in Enhancing Adolescent Mental Health Accessibility Implications for Practice: Adolescent mental health has become a widely used behavioral theory for. 7(3), 750–761.

Sinaga, S. N. (2022). *Factors influencing knowledge of postpartum mothers about baby blues in Desmawati Clinic Pancur Batu District, District Deli Serdang year 2020. Science Midwifery*, 10(5), 3958–3963.

