



## Nurses' Knowledge About Wound Management at Bhayangkara Hospital, Manado, North Sulawesi

A. Miftahul Khair<sup>1</sup>, Sitti Johri Nasela<sup>2</sup>, Sitti Nur Intang<sup>3</sup>, Djunaedi<sup>4</sup>, Sastrika Handayani Marpaung<sup>5</sup>

<sup>1</sup>Nursing Study Program, Poltekkes Kemenkes Maluku, Indonesia

<sup>2</sup>Nursing Study Program, Poltekkes Kemenkes Maluku, Indonesia

<sup>3</sup>Midwifery Study Program, STIKES Salewangan Maros, Indonesia

<sup>4</sup>Nutrition Study Program, STIKES Salewangan Maros, Indonesia

<sup>5</sup>Midwifery Study Program, Universitas Putra Abadi Langkat, Indonesia

### ABSTRACT

Problems and complications that arise due to injuries, if they do not receive proper and serious treatment, can result in lifelong disability and this causes lifelong suffering for the client. The aim of the research is to determine the description of nurses' knowledge of emergency management of injured patients at Bhayangkara Hospital, Manado, North Sulawesi. This research design uses a descriptive design, a research design that is structured in such a way that researchers can obtain answers to research questions. Research design refers to the type or kind of research chosen to achieve research objectives, and acts as a tool and guide to achieve these objectives. The research results show that a person's length of work in an organization or agency is not synonymous with high productivity. People with a long period of service do not mean they have a high level of proficiency. The longer someone works, the more skilled and experienced they are in their job.

**Keywords:** Nurse Knowledge, Wound Management, Hospital

Corresponden Author : A. Miftahul Khair

Email : [miftahulhair85@yahoo.com](mailto:miftahulhair85@yahoo.com)

### 1. Introduction

Along with the growth of the world population accompanied by progress in all fields, it also has an impact on human activities. The most obvious thing can be seen is





progress in the fields of transportation, technology, communication and also progress in the industrial sector (Brunner & Suddarth 2013).

The advances above have had an impact on the development of science and technology, such as the increasingly rapid pace of industry so that society's attraction to industry is also greater. Population growth is followed by an increase in vehicle users. However, on the other hand, it also has an impact on the accident rate for vehicle users due to negligence in driving a vehicle. Based on information, most traffic accidents end in injuries or broken bones (Brunner & Suddarth 2013).

Problems and complications that arise due to injuries, if they do not receive proper and serious treatment, can result in lifelong disability and this causes lifelong suffering for the client. In this case, appropriate and fast nursing care is expected to be able to overcome wound problems, speed up healing and avoid complications arising from the wound. Wound management is a process that involves caring for and treating damaged areas on the body. Therefore, nurses must understand and have better skills regarding appropriate handling of injured clients, so that they can provide maximum nursing care to clients so that the death rate or lifelong disability can be reduced.

According to the World Health Organization (WHO) in 2019, the incidence of fractures due to traffic accidents has increased. There are 15 million people recorded throughout the world with a prevalence rate of 3.2%. In 2020, the incidence of fractures will reach a prevalence rate of 2.7% or approximately 13 million people in the world. Based on Riskesdas data, in 2018 there were around 92,976 accidents with the number of people experiencing fractures being 5,122 people (Ministry of Health of the Republic of Indonesia. 2018) 2 (Permatasari & Sari, 2020). Riskesdas states that the place where the largest number of accidents occur is in the home environment at 44.7%, when compared to the highway at 31.4%, at work at 9.1% and at school at 6.5% (Hardianto et al., 2022).

According to data from the Central Statistics Agency, the number of deaths due to traffic accidents due to fractures in 2020 was 25,266 people (Central Statistics Agency, 2022). The most common fractures in Indonesia are lower extremity fractures. The part of the body that often experiences fractures is the lower extremities (Platiini et al., 2020).





Hardianto, Ayubbana and Inayati, (2022) stated that the parts of the body that frequently experience injuries include the upper extremities (32%) and lower extremities (67%). An extremity fracture is an injury that occurs in the area of the bones that form the upper extremities (including the arms, elbows, hands, wrists), lower extremities (including the lower legs, ankles, thighs, hips). According to (Kepel & Lengkong, 2020) there are 4 principles of treatment or often referred to as 4R, namely recognizing, reduction (reposition), retention (maintaining) and rehabilitation (rehabilitation). Recognizing (recognizing) is the initial stage, namely recognizing the shape of the fracture that is formed so that you are able to take treatment steps according to the fracture that occurs. Recognition consists of anamnesis, neurological examination and physical examination which is confirmed by radiographic examination.

## 2. Research Method

This research design uses a descriptive design, a research design that is structured in such a way that researchers can obtain answers to research questions. Research design refers to the type or kind of research chosen to achieve research objectives, and acts as a tool and guide to achieve these objectives. The population in this study were all nurses who worked at Bhayangkara Hospital, Manado, North Sulawesi, totaling 40 people. The sample is part of the population studied. The sample in this research uses a total sampling method where the population is the same as the sample size with a sample size of 40 people.

## 3. Results And Discussions

### a. Result

Respondent data was collected using a questionnaire, then processed and presented in table form, then the data was explained descriptively using a distributive table presented in narrative form.

#### 1) Respondent characteristics

##### a. Age





Table 4.1

Distribution of respondent characteristics based on age at Bhayangkara Hospital, Manado, North Sulawesi

No	Age	Frequency(N)	Percent(%)
1	26-30 Year	24	60.00
2	31-35 Year	12	30.00
3	>35 Year	4	10.00
<b>Total</b>		<b>40</b>	<b>100</b>

Source: Primary Data,

From table 4.1 above, it shows that there are 24 people aged 26-30 years (60.00%), followed by 12 people aged 31-25 years (30.00%) and 4 people aged >35 years (10.00%).

b. Gender

Table 4.2

Distribution of respondent characteristics based on gender at Bhayangkara Hospital, Manado, North Sulawesi

No	Gender	Frequency	Percent
1	Man	19	47.5
2	Woman	21	52.5
<b>Total</b>		<b>40</b>	<b>100</b>

Source: Primary Data,

From table 4.2 above, it can be seen that there were 40 respondents, 21 of whom were female (52.5%) while 19 of whom were male (47.5%).

2) Univariate Analysis

a) Knowledge

Table 4.3

Distribution of respondent characteristics based on knowledge at Bhayangkara Manado Hospital, North Sulawesi

No	Knowledge	Frequency(N)	Percent(%)
1	Good	38	95.0
2	Not enough	2	5.0
<b>Total</b>		<b>40</b>	<b>100</b>





Source: Primary Data,

From table 4.3 above, it shows that of the 40 respondents, 38 people had good knowledge (95.0%) and 2 people had poor knowledge (5.0%).

b) Level of education

Table 4.4

Distribution of respondent characteristics based on education level at Bhayangkara Hospital, Manado, North Sulawesi

No	Education.	Frequency(N)	Percent(%)
1	Tall	37	92.5
2	Low	3	7.5
<b>Total</b>		<b>40</b>	<b>100</b>

Source: Primary Data,

From table 4.4 above, it shows that of the 40 respondents, 37 people had higher education (92.5%) and 3 people had low education (7.5%)

c) Years of service

Table 4.5

Distribution of respondent characteristics based on length of service at Bhayangkara Hospital, Manado, North Sulawesi

No	Years of service	Frequency(N)	Percent(%)
1	Long	39	97.5
2	New	1	2.5
<b>Total</b>		<b>40</b>	<b>100</b>

Source: Primary Data,

From table 4.5 above, it shows that of the 40 respondents, 39 people had old work experience (97.5%) and 1 person (2.5%) had new work experience.

## b. Discussion

1. Description of the level of knowledge of nurses regarding wound management at Bhayangkara Hospital, Manado, North Sulawesi.

From table 4.3 above, it shows that of the 40 respondents, 38 people had good knowledge (95.0%) and 2 people had poor knowledge (5.0%).





Publish : Association of Indonesian Teachers and Lecturers

**International Journal of Health Sciences (IJHS)**Journal Homepage : <https://jurnal.agdosi.com/index.php/IJHS/index>

Volume 1 | Number 4 | Desember 2023 |



Roger's theory (1994) states that a person's behavior is based on knowledge and awareness so that their behavior can be long-lasting and according to Yusak (2019) in his research, he stated how important it is for a person's understanding to change a behavior. The more people know and understand something, the more motivated a person will be to do positive things for themselves.

Therefore, with a good level of knowledge possessed by a nurse, the greater the awareness and motivation to do positive things, especially at work, both for patients and for themselves, especially in wound care management.

For nurses who have sufficient knowledge but their role cannot be explained according to Gagne (1996) that learning is only under certain conditions, namely internal conditions which involve a person's readiness and what has been learned previously as well as internal conditions which are learning situations and the presentation of stimuli that are deliberately arranged.

This means that if a nurse has good knowledge of certain internal conditions, for example being busy or having a large number of patients being treated, wound management is often neglected.

This result is supported by the opinion expressed by Azwar (2010) who said that individuals will be aware, know and understand and carry out recommendations related to health if they have good knowledge and are expected to have good actions too. This is in accordance with research conducted by Niwatan S (2016) which stated that there is a significant relationship between knowledge and efforts to prevent nosocomial infections at the Alo Sabu Hospital, Gorontalo.

The results of this research are also supported by Notoatmodjo (2019) who revealed that knowledge can change behavior in the desired direction. Apart from that, as stated by Didin (2018), quoted from Notoatmodjo (2019), it is stated how important a person's knowledge is to change behavior. Knowing something means it will be easier for someone to be motivated to do positive things for themselves.





From the opinions and results of previous research, it can be said that with good knowledge, nurses can understand wound management efforts correctly so that they have the ability to carry them out.

2. Description of the level of education of nurses regarding wound management at Bhayangkara Hospital, Manado, North Sulawesi.

From table 4.4 above, it shows that of the 20 respondents, 13 (92.86%) had higher education and 1 person (7.40%) had lower education. This shows that of the 40 respondents, 37 people had higher education (92.5%) and low education as many as 3 people (7.5%). The distribution of respondents based on the level of nurse education found a positive (unidirectional) relationship between the level of education and the role of implementing nurses in wound management efforts. The role of implementing nurses is good in preventing surgical wound infections because they have a high level of education (100%) compared to a low level of education (0%). Based on the results of research conducted by Hasnah (2018), there is a relationship between education and nurses' efforts to prevent nosocomial infections in hospital inpatient rooms.

The results of this research are in line with the function of education as stated by Notoatmodjo (2019) that education functions to develop abilities and improve the quality of human personality. In the learning process there will be changes towards a better and more mature individual. Through education a person will be able to think objectively to change behavior for the better. In this way, it is hoped that the individual's work motivation or enthusiasm will be higher in utilizing the knowledge and skills they have.

Gibson's (1994) theory states that a higher level of education generally causes a person to be better able to analyze. Meanwhile, according to Siagian (2019), the higher a person's education, the greater his desire to utilize his knowledge and skills. From this theory we can conclude that a nurse with a fairly high level of education has a better ability to analyze positive behavior or roles that can be applied to each task they carry out, especially in terms of wound





management.

3. Description of the nurse's work period regarding wound management at Bhayangkara Hospital, Manado, North Sulawesi.

From table 4.5 above, it shows that of the 40 respondents, 39 people had old work experience (97.5%) and 1 person (2.5%) had new work experience.

According to Siagian (2019), the longer someone works in an organization or job, the higher their productivity. What is explained is that there is a difference between the level of work that is still new and the level of work that has been working for a long time, that is, the longer a person's work period, the more experienced they are and the higher their productivity. However, on the contrary, Robin (1995) said that there is no convincing reason that people who have been in a job for a long time will be more productive and motivated than those with lower seniority.

The length of time a person has worked in an organization or agency is not synonymous with high productivity either. People with a long period of service do not mean they have a high level of proficiency. The longer someone works, the more skilled and experienced they are in their job.

#### 4. Conclusion

Based on the results of research regarding the description of nurses' knowledge regarding wound management at Bhayangkara Hospital, Manado, North Sulawesi, the following conclusions can be drawn:

1. The description of the level of knowledge of nurses regarding emergency management of injured patients at Bhayangkara Hospital, Manado, North Sulawesi is good (95.0%).
2. Description of the level of education of nurses in emergency care for injured patients at Bhayangkara Hospital, Manado, North Sulawesi, is high education (92.5%).
3. The description of the length of work experience of nurses in emergency care for injured patients at Bhayangkara Hospital, Manado, North Sulawesi, is that 39 people (97.5%) have long work experience.





## Compliance with ethical standards

## Acknowledgements

The author expresses his thanks and highest respect to all parties who have assisted in this research. The Principal of the School who has provided facilities related to conducting research. Hopefully it can be useful for schools and society.

## Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

## Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

## References

- Anto, S., Andi Latif, S., Pannyiwi, R., Ratu, M., & Werdyaningsih, E. (2022). Workload Analysis and Nurse Performance in Implementing Nursing Care. *Barongko: Journal of Health Sciences*, 1(1), 41–46. <https://doi.org/10.59585/bajik.v1i1.38>
- B, M., Indrayadi, I., Susanti, R., Fredy Saputra, M., Yuniarti, E., Haedir, H., Yermi, Y., & Israeli, I. (2023). Environmental Sanitation with the Incidence of Helmothermal Disease. *International Journal of Health Sciences*, 1(2), 111–118. <https://doi.org/10.59585/ijhs.v1i2.60>
- Hidayat Alimul Aziz. 2016. *Introduction to Basic Human Needs*. Salemba Medica, Jakarta.
- Luhulima, J, W. 2040. *Education in Nursing*. FK UH. Makassar.
- Majid, 2018. The relationship between nurses' skills in providing wound care to patients and patient satisfaction in hospital inpatient rooms. General of the city of Semarang.
- Mustofa, 2010. The relationship between nurse competency in providing wound care to patients on the satisfaction of inpatients at the Semarang City Regional Hospital.
- Morison, Moya I, 2013. *Wound Management*, EGC, Jakarta 2003.
- Notoatmodjo, Soekidjo. 2019. *Public Health Science*. PT. Rineka Cipta, Jakarta.
- Nursalam. 2019. *Concept and Application of Nursing Research Methodology*. Salemba Medika, Jakarta.





- Tandi Palette. 2018. Relationship between education level, length of service, amount of training and level of knowledge regarding physical assessment in internal and surgical ward nurses at RSUP. Dr. Wahidin Sudirohusodo, unpublished thesis. Makassar. PSIK UNHAS Makassar.
- Potter and Perry. 2015. Basic Skills and Procedures. Edition 5. EGC, Jakarta.
- Resti Wijayanti, F. E., HB, E., Ratu, M., Arfah, A., Hartati, A., & Werdyaningsih, E. (2022). Factor Analysis of the Implementation of Nursing Care Standards in Community Health Center Inpatient Rooms. Barongko: Journal of Health Sciences, 1(1), 47–49. <https://doi.org/10.59585/bajik.v1i1.39>
- Schaffer, S. D., Garzon, L. S., Heroux, D. L., and Korniewicz, D. M. 2017. Infection Prevention and Safe Practices. Translation: Setiawan. EGC, Jakarta.
- Artist. 2018. Factors Associated with Nurse Behavior in Preventing Nosocomial Infections in the Lontara III Nursing Room, RSUP. Dr. Wahidin Sudirohusodo. The thesis is not published. Makassar. PSIK UNHAS Makassar.
- Siagian. 2017. Leadership Theory and Practice. Edition IV. PT. Rineka Cipta, Jakarta.
- Smeltzer, Suzanne C. 2001. Textbook of Medical Surgical Nursing. Edition 8. Vol. EGC, Jakarta.
- Somantri, Irman. 2017. Understanding Wounds and the Wound Healing Process.
- Susanti, R., Imran, A., Briliannita, A., Akbar, A., Yermi, Y., B, M., Pannyiwi, R., & Rasyid, D. (2023). Penyuluhan Perilaku Hidup Bersih dan Sehat di Kecamatan Minasatene Kabupaten Pangkajene Kepulauan. Sahabat Sosial: Jurnal Pengabdian Masyarakat, 1(3), 92–98. <https://doi.org/10.59585/sosisabdimas.v1i3.70>
- Tietjen, L., Bossemeyer, B., and Mc Intos, N. 2004. Infection Prevention Guide for Health Service Facilities with Limited Resources, Bina Pustaka Foundation, Jakarta.
- Wahidah, W. (). The Effect of Environmental Therapy on the Level of Dependence in Depressed Elderly at BSLU Meci Angi Bima. Barongko: Journal of Health Sciences, 1(2), 107–115. <https://doi.org/10.59585/bajik.v1i2.124>
- Main Wahtudhy, Harry. 2016. Nosocomial Infections.

