The Influence of Supervision of Heads of Rooms and Knowledge of Implementing Nurses on Patient Safety through the Quality of Nursing Services at the Regional Hospital

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Abstract
This study aims to find room head supervision and the nursing staff's knowledge on patient safety through the quality of nursing services at the West Sulawesi Provincial Hospital. In this study, the research design used was an analytical survey with a quantitative approach. The sample in this study were all nurses in the West Sulawesi Provincial Hospital's nursing room, which were taken using a non-probability sampling technique using a proportional random sampling technique. This study's population was 167 respondents, who were analyzed using path analysis with multiple linear regression tests. The results showed that: 1) the head of the room's supervision on the quality of nursing services in the West Sulawesi Provincial Hospital had a positive and significant effect. 2) The nurses' knowledge of the quality of nursing services in West Sulawesi Provincial Hospital has a positive and significant impact. 3) Supervision of the head of the room on patient safety has a positive and significant effect. 4) The nurse's knowledge of patient safety has a positive and significant impact. 5) The quality of nursing services on patient safety has a positive and significant impact. 6) Supervision of the head of the room on patient safety has a positive but insignificant relationship through the quality of nursing services at the West Sulawesi Provincial Hospital. And 7) the knowledge of the nurse administrators on patient safety is positively related but not significant through the quality of nursing services in the West Sulawesi Provincial Hospital.

Keywords:
Head Room Supervision, Nurse Knowledge, Service Quality, Patient Safety
1. Introduction

Currently, excellent nursing service is a significant element in hospitals and health units. Each hospital is expected to provide adequate and standard health services without seeing the status of the client itself. This is the accountability of another hospital today. To become a quality hospital, a strategy that has the potential to increase client visits is needed. With excellent service, it will make the public interest in using the hospital's services again because patient satisfaction can be assessed from the quality of service provided. Nursing services are services provided by nurses to patients by applicable standards. Besides, the quality of nursing services can be adequately realized if various hospital parties' management functions can be carried out properly, especially in nursing management, such as supervision of the head of the room. Supervision is one part of directing (moving/directing) in management so that everything that has been programmed can be carried out correctly. Direct supervision allows nursing managers to find various problems in implementing nursing care in the room by thoroughly assessing the factors causing errors and together with the nursing staff to solve these problems (Suarly et al., 2005).

The head of the room usually finds it difficult to maintain the quality of nursing care implementation without carrying out supervision activities. Not all the problems that occur in the nursing unit can be known only by the nursing staff's information. Apart from the supervision carried out by the room administrator, nurses also have a crucial role in improving the quality of nursing services, especially in the field of patient safety, so that patients and the community can experience adequate service and feel satisfied and comfortable with the services provided. In a book written by Nisya Rifiani and Hartanti Sulihandari (2013), it is argued that nurses have a crucial role in health services. One of the characteristics is a professional practice with a commitment to the interests of individuals, groups, especially in terms of physical, welfare in living a life of personal freedom in carrying out activities, so that in practice it always involves a meaningful relationship between the nurse and the patient and the patient's family.

Besides, nurses are health workers who serve wholeheartedly without distinguishing between the status and degree of the patients themselves. As nurses, we must have intellectual, interpersonal, technical, and moral competence in providing nursing care to patients, especially in improving patient safety, if the patient is in the hospital. The hospital patient safety program is a safety assurance program during medical treatment by preventing nursing services errors. Hospital patient safety is a system in which the hospital program provides safe nursing care to patients. The application of patient safety in hospitals is critical because, with patient safety, patients will avoid unexpected mistakes (KTD). Especially in the treatment room, it must be applied and must be considered regarding patient safety because, with it, the patient will feel comfortable while in the hospital.

Meanwhile, the initial survey results conducted by Noyumala, Ariyanti, and Burhanuddin Bahar at the Makassar City Regional General Hospital in 2012 found an unexpected incident where the nosocomial infection was ranked first around 538 cases. The incidence of phlebitis in the internal room year in 2012, there were about 300 cases in January-March 2013, while there were 3 cases of errors in administering drugs. The incidence of nosocomial infection and phlebitis incidence can reach seven (7) patients each week. In a month, it can get twenty-eight (28) cases, so that in a quarter, it can get 84 instances, while errors in administering drugs are only found once a month. From the results of research conducted by Maria Vonny H. Rumampuk at Gunung Maria Tomohon General Hospital in 2013, the researchers found that the supervision of the head of the room, both 95.2%, and 4.8% stated that the control of the head of the room was not reasonable. The application of patient safety was measured using an observational sheet, and it was found that all respondents had implemented patient safety procedures properly (100%). From the study results, it was found that there was a relationship between the head of the room supervising and the application of patient safety in the inpatient room of the Gunung Maria Tomohon Hospital.

Yulianti, Rosyad, et al. (2011), in their research, is an observational non-experimental analytic study using a cross-sectional approach. The number of samples used was 34 nurses with a total sampling technique. The results obtained are 26 (76.4%) knowledge that results from tofu, which happens when someone has sensed a particular project. There were 27 (79.4%) whose handwashing experience was quite good, 29 (85.29%) who used PPE well. This shows a significant relationship between the Knowledge of Nurses and the Implementation of Universal Precautions for Nurses in the Inpatient Ward of PKU Muhammadiaiyah Hospital Yogjakarta. This is the same as the results obtained by Selleya Cintya Bawelle et al. (2013), where there is a relationship between knowledge nurses’ knowledge and attitudes and the implementation of patient safety in the Hospital inpatient room. This is indicated by the significant value obtained $p = 0.000 \ (a \leq 0.05)$. 

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The Regional General Hospital of West Sulawesi Province is a hospital-owned by the West Sulawesi Provincial Government, which still has type C status and has a bed capacity of 160 units out of 1,000,000 residents. This hospital was built to help the government improve the community's welfare, especially in health development. Therefore, this hospital is required to provide better service than other hospitals by delivering higher quality services. One of the services that need to be improved is the inpatient room because inpatient services are an inseparable part of the hospital service system. Customers' expectations for the services they receive can be shaped based on experience and information. If the service they get is below the expected result, they will lose interest in using it.

On the other hand, if the service they get meets or exceeds their expectations, customers will reuse the benefit. Therefore, the Regional General Hospital of West Sulawesi Province as the organizer of health efforts for the first and second levels, is required to realize quality services so that customers feel satisfied and can increase their interest in buying the same product service. From the observations made, some room heads have not carried out their roles, especially in providing direction to subordinates and the leader of the room who has not guided subordinates in carrying out nursing care, especially in using PPE in carrying out nursing actions. Apart from that, the room's head lacks supervising assistants when carrying out nursing actions, both direct and indirect supervision. Nurses at the Regional General Hospital of West Sulawesi Province also still have minimal knowledge about controlling hospital patients' safety. This is proven because many nurses ignore the use of PPE when in contact with patients, the accuracy in administering drugs), yet not appropriately judged. This affects the quality of service in the treatment room. There are still many patients who do not feel adequate service. This is indicated by the presence of patient families and patients who complain about services at the general hospital in West Sulawesi.

From the author's observations and information received from several visitors to the Regional General Hospital of West Sulawesi Province, there are still some / part nurses who ignore the procedures that have been set in implementing nursing care. There are always nurses who ignore proper handwashing procedures, use of personal protective equipment (PPE) when contacting patients, such as gloves. Implementing nurses also ignore correct scenarios in administering drugs, especially when administering medications, which happens a lot. In this situation, the head room's role is needed in providing direction and guidance to the nurse, in charge of the function and purpose of observing the use of procedures when in contact with patients.

2. Literature Review
The role can be defined as a series of normal behavior obtained because of a particular position or an office that is easily recognized. The emergence of a part because a person understands that he is not working alone, but many people around him like other colleagues. He has a place or community in interacting to have a different environment from his subordinates in realizing his work. Still, the roles that should be played are the same, both at the top, middle, and lower levels. There is only one thing that can distinguish each leader's roles: the environment in which he carries out his duties/jobs. An effective leader is a catalyst in facilitating effective interactions among workers, subordinates, and time. An effective leader is a leader who can raise the quality of the workforce with the various skills possessed by itself.

In general, supervision can be interpreted as an activity in observing subordinates directly and periodically for the work carried out by all their associates. If there are problems or obstacles, direct guidance will be given immediately to overcome them (S. Suarli and Yayan Bahtiar, 2005 Nuraini et al., 2019; Umanailo, 2020, 2019). Nursalam (2011) defines supervision in professional nursing practice as providing information and training in the needs of implementing nurses in completing tasks and responsibilities in the nursing field to achieve efficient and quality organizational goals.

Arwani and Heru Supriyatno (2006) explain that supervision is an activity integrated into two dimensions of actors, namely leaders and subordinates. From these two dimensions, although the administrative level is different in both groups and roles, both take part in quite important supervision activities. In supervision activities, everyone is involved not only as spectators or passive implementers, but all of them are partners who can carry out training. They have ideas, experiences, opinions that need to be heard, listened to together, valued, and included in the improvement and implementation process, especially in nursing care. From the definition above, it can conclude that supervision is an activity that involves superiors and subordinates in carrying out the improvement process, especially in nursing. Supervision is also a direct observation made by supervisors to assistants on activities and work carried out by nurses or subordinates. If problems are found, solutions or assistance will be given directly by the superiors.
People who carry out supervision with a good concept will get quite good benefits, and it can be seen that among them is the first, supervision can further increase work effectiveness. Improving the quality of work is closely related to enhancing the knowledge and skills of subordinates. As well as maintaining a good relationship between superiors and subordinates, supervision can further increase work efficiency. Secondly, improving work efficiency can reduce errors in subordinates' work so that the use of resources power such as energy, property, and facilities can be prevented.

According to Arwani et al. (2005), nursing supervisory actors have duties and abilities in: Give clear directions and instructions; Providing advice, advice, and assistance to staff and nurses lacking in carrying out activities; Provide motivation and morale to nursing staff and personnel; Able to provide guidance. Provide the necessary training for staff and executive nurses; Assessing the nurse's performance during nursing care; Carry out direct and indirect supervision so that the nursing care provided to patients is better.

Nurses are professionals who have completed education in nursing and have the ability, responsibility, and authority to carry out nursing care for patients. In fulfilling the needs of patient satisfaction while being treated in the hospital, it requires health workers who have good competence, high skill areas, and professionals who can improve quality health services. Besides, professional nurses have good skills and knowledge. Still, experienced nurses must also have a sense of concern and care for patients without looking at the strata, economic status, religion, and degree of the patients being treated.

Knowledge can be interpreted as the result of "KNOW," this can happen after someone has made observations on an object to be studied or who wants to know. In human life, knowledge is obtained from formal education results, such as by looking at school, college, or by carrying out specific courses. Knowledge can be obtained using the five senses that exist in humans, such as sight, hearing, smell, and touch. Because in human life, most of the knowledge can be obtained by seeing and hearing Notoatmojo (2006).

Meanwhile, according to the extensive Indonesian Dictionary (KBBI), knowledge is obtained by forging formal education or through a learning process in a particular field, such as by conducting education in a university or implementing courses in certain areas. However, it is different from what was stated by Notoadmojo (2007). He argued that knowledge and learning processes from a person could be obtained by predicting. And indicators of knowledge itself according to Noto Atmojo (2006), namely: Know, Comprehension, Application, Analysis, Synthesis, Evaluation.

In a book written by Nisya Rifiani and Hartanti Sulihandari (2013), it is revealed that nurses have an essential role in providing health services to patients and the community. In nursing services, nurses have the First Role as caregivers. Nurses perform this role by looking at the client's needs through health services. Services are usually carried out from the simple to the most complex. Second, as a client advocate. The role of the nurse as a client advocate is service-oriented. It helps clients interpret various information from the health services provided, especially in taking nursing actions to be provided. Besides, nurses are tasked with protecting patient rights, especially in quality service rights, the right to provide information about the illness, the right to freedom (privacy), the right to self-determination, and the right to receive compensation due to negligence that has occurred. Third, as a counselor, the nurse plays a role in listening to what the client tells, especially in the conditions he is experiencing. Fourth, as an educator (educator). Fifth, as a coordinator. The nurse directs, plans, and coordinates the health services of the health team so that the provision of health services can be carried out according to the client's needs. Sixth, as a collaborator. Nurses must be able to do teamwork among other medical personnel so that health services can be carried out optimally and well. And seventh, as a consultant. The nurse is the client's place to ask for all the information the client needs. Apart from the above components, nurses also need to pay attention that humans are unique creatures but have different basic needs such as psychological, biological, cultural, and spiritual conditions that need to be served.

Patient safety or safety for hospital patients is one of the avoidances, prevention, and self-improvement of unexpected events or overcoming injuries from the hospital's health service process. Patient safety is an operational system in maintenance services that can minimize the possibility of an adverse event/error and maximize handling if an error occurs. This system is a system that can prevent events such as enlightenment caused by inappropriate actions.

In carrying out nursing care measures in the hospital, several things need to be considered to maintain patient safety (patient safety). Patient safety can be classified into several parts, including Nosocomial infection, patient falls, decubitus, the occurrence of phlebitis, errors in drug administration, unexpected events (KTD).
A hospital is one of the health service infrastructures that many people visit with physical or mental disorders or physical weakness (illness). One of the hospital's main goals is to receive services/care to return to health without experiencing other disturbances. This is the hospital's responsibility to maintain and improve the quality of service so that patients or people who visit or receive health services feel safe and comfortable without experiencing any light or unexpected events. Hospital is a hospital by implementing a patient safety culture system and creating a patient safety culture in the hospital. Increasing the accountability of hospital services to patients and the community reduces KTD (unexpected events) in hospitals and implements prevention programs so that KTD does not occur.

3. Methods
3.1. Design and Research Approach
The design used in this study is to use a survey that aims to see the facts and data that support the information needed in discussing this research and solve the problems that have been proposed. The supervision of the head of the room and the nursing staff's knowledge on patient safety through quality. Nursing services at the West Sulawesi Provincial Hospital. The research approach used is to use a quantitative approach method to test specific theories by looking at the relationship between variables.

3.2. Research Location
This research was conducted at the Regional General Hospital of Sulawesi Province, which is located at Martadinata street 03, Simboro District, Mamuju Regency, West Sulawesi Province. The reason for choosing this research location is that the West Sulawesi Provincial Hospital is quite representative to represent research on the supervision of the head of the room and the knowledge of the nursing staff on the application of patient safety through the quality of nursing services. And the time needed in this study is at least two (2) months, namely August to September 2019.

3.3. Population and Sample
All the nurses who served in the inpatient room of the West Sulawesi Provincial Hospital were 293 nurses. The sample in this study were all nurses in the nursing room of the West Sulawesi Provincial Hospital with 167 nurses. The sample was taken with probability sampling using a proportional random sampling technique. The model was accepted by taking subjects from each stratum or region determined to be equal to the number of topics from each start.

4. Discussion
The head of the room's role is to protect and provide guidance to subordinates in carrying out their duties and responsibilities in the nursing field. Apart from that, the head of the room also can guide subordinates in carrying out nursing care to patients. Patients always feel comfortable and safe while undergoing treatment at the hospital. From the results of research that has been carried out for approximately several months, it is found that the role of supervision carried out by the head of the upper room (nurse executing) at the West Sulawesi Provincial Hospital is quite good. This can be proven by the results of hypothesis testing using the coefficient path analysis model I. It is found that there is a very significant and positive relationship between the variable "head of room supervision" on "quality of nursing services" in the West Sulawesi Provincial Hospital. This is obtained from the results of the multiple linear regression test with a model I, the value of $\beta \times 1 = 0.518$ is brought with the probability level (sig) of supervision of the head of the room 0.000 ($p <0.05$). This gives the meaning that the researcher's hypothesis regarding the effect of the director of the room's supervision on the quality of nursing services in the West Sulawesi Provincial Hospital has a positive and significant impact.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<td></td>
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Table 1. Output of Regression Results of the Effect of Supervision and Knowledge through Safety Patient

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Based on table 1, the results of the answers obtained from the questionnaire are pretty good. This answers the hypothesis put forward by the author regarding the nurse's knowledge in charge of a positive and significant effect quality of nursing services in West Sulawesi Provincial Hospital. This is evidenced from hypothesis testing results using multiple linear regression tests with the model I's path coefficient. The value of $β \times 2 = 0.127$ is obtained with a probability level (Sig) of 0.001 ($p < 0.05$). The correlation number that shows positive and significant indicates that the higher the competence (knowledge) of a nurse, it will improve the quality of work and provide good quality service. Therefore, from the above analysis, the researcher's hypothesis regarding "The knowledge of implementing nurses has a positive and significant effect on the quality of nursing services at the Regional General Hospital of West Sulawesi Province" is proven or accepted. From the research results, the headroom supervisor with the quality of nursing services in the West Sulawesi Provincial Hospital had a real and positive effect. The quality of nursing services performed by executing nurses in the treatment room depended on how a leader gave directions. And guidance to subordinates in carrying out tasks, especially in service to patients.

The results of the answers obtained from the questionnaire are pretty good. This answers the hypothesis put forward by the author regarding the nurse's knowledge in charge of a positive and significant effect quality of nursing services in West Sulawesi Provincial Hospital. This is evidenced from hypothesis testing results using multiple linear regression tests with the model I's path coefficient. The value of $β \times 2 = 0.221$ is obtained with a probability level (Sig) of 0.001 ($p < 0.05$). The correlation number that shows positive and significant indicates that the higher the competence (knowledge) of a nurse, it will improve the quality of work and provide good quality service. Therefore, from the above analysis, the researcher's hypothesis regarding "The knowledge of implementing nurses has a positive and significant effect on the quality of nursing services at the Regional General Hospital of West Sulawesi Province" is proven or accepted.

![Table 2](image)

Based on table 2, the results of multiple linear regression tests, the researcher can conclude that the quality of nursing services has a significant effect on patient safety in the West Sulawesi Provincial Hospital. This is evidenced by the multiple linear statistical test model II results where the coefficient value is obtained $p = 0.000$, which indicates that the coefficient value is $<α 0.05$, so this provides evidence that the hypothesis proposed by the author is accepted or proven to have a relationship. Positive and significant.

The researchers in this study assume that the nurses' service quality at the West Sulawesi Provincial Hospital is quite good, especially in creating a culture of patient safety while in the treatment room. This is evidenced by the potential of nurses who can overcome the risks that will occur, such as obsolete patients, errors in drug administration, and the risk of nosocomial infections.

Based on the results of multiple linear regression tests using the path coefficient of model II, the results show that the direct effect is 0.166 and the indirect impact is 0.078, where the value of the indirect effect is smaller than the value of the immediate impact. To test this hypothesis, a test using the Sobel test guided by the t-table is 4.111 and obtained a $t$-count from the Sobel test of 4.111. This shows that $t$-count $<t$-table, Supervision of the Head of the Room Has a Positive and Significant Effect on Nursing Services. The Quality of Nursing Services at the Regional General Hospital of West Sulawesi Province" negatively affects.
5. Discussion

The head of the room plays a role in supervising. Still, the head of the room must also provide direction and education to his subordinates in carrying out their duties and responsibilities, especially in helping nurses who are having difficulties in carrying out their duties. From the results of the path analysis carried out, it can be concluded that the adequate supervision of the head of the room has a positive effect on patient safety at the West Sulawesi Provincial Hospital. This can be proven by the results of the multiple linear regression test model II, where the products are obtained a probability value (sig) 0.0.004 (p <0.05). Therefore, the author's third hypothesis fulfills the requirements and is stated to have a positive and significant effect. This shows that if the head of the room can carry out his role optimally and well, it will affect his subordinates' performance, the better, and vice versa.

One of the goals carried out by the head of the room in supervising his subordinates is to improve the quality of work, especially in encouraging the nurse to build good relationships with the patient and the patient's family members. However, if the supervision carried out by the head of the room is good, but the quality of service has not been running optimally, then the head of the room needs to see and evaluate the constraints and causes. From the results of this study, we can see that it turns out that the nurses at the Regional General Hospital of West Sulawesi Province are still primarily volunteers. From this, we can conclude that one of the reasons why the head room's supervision has no relationship to patient safety is voluntary employment status. This can make the nurse in charge not carry out their duties properly because the wages received, and their performance is not balanced.

Based on the multiple linear regression test results using the path coefficient of model II, the direct effect value is 0.316, and the indirect effect is 0.033, where the value of the indirect effect is smaller than the value of the immediate impact. To test this hypothesis, a test using the Sobel test guided by the t-table is as large as 1.654. And the t-count obtained from the Sobel test is 0.537. This shows that t-count <table table, so, this hypothesis proposed by the researcher about "Knowledge of Implementing Nurses Has a Positive and Significant Effect on Nursing Services through the Quality of Nursing Services at the Regional General Hospital of West Sulawesi Province" is rejected or not proven. This research is in line with the theory that if the nurse's knowledge is good, then the resulting performance will be good. Vice versa that if the experience is lacking, the commission will also decrease (Davis, 2005; Mu’adi et al., 2020; Nawawi et al., 2020). Apart from that, Sulihandari (2013) also reveals that Professionals in work must have good orientation in the field of service and have practice standards and code of ethics to protect the community, especially patients.

6. Conclusion

From the research hypothesis, there is no positive relationship due to the respondent's voluntary employment status. Still, it turns out that staffing can also affect the quality of the performance of a nurse in charge. From the research carried out by nurses at the West Sulawesi Provincial Hospital, there are still many who have D3 Nursing education. Apart from that, nursing nurses are also rarely and never given training on patient safety. One of the advantages of someone having a good knowledge is to improve the quality of the performance that is being carried out because that person will apply the knowledge they have in the current field of work. In wrestling, but several factors make a person feel discouraged in carrying out the task at hand. Among them is because the leader lacks motivation and encouragement. Likely, the results that subordinates have obtained are not considered by the boss or the people around him. Apart from that, what can affect minimum wages can also affect employees who are reluctant to carry out their duties properly, so that from this, the quality of the service can decrease or not be carried out well at all.

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