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# **Evaluation of Handover Quality Using Fishbone Diagram Approach in Internal Disease Room of Cirebon City Hospital: Qualitative Study**

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## **ABSTRACT**

Handover in nursing refers to the systematic transfer of patient information, responsibility, and accountability from one nurse to another, which usually occurs during shift changes, but in its implementation, often experiences weaknesses that can lead to a suboptimal handover process and can disrupt the continuity of care and hinder collaborative efforts that are important in promoting patient safety. This study aims to identify the causes of the suboptimal quality of the implementation of handover between nurse shifts with the SBAR method in the internal medicine room of a hospital in Cirebon City using a qualitative method with a situation analysis approach using fishbone analysis, which has components of man, money, method, material and machine. The results of the fishbone analysis obtained five causes of the suboptimal handover process, namely nurses' knowledge of handover with SBAR is still lacking, the components in the SBAR format are not optimal in documentation, there is no definitive evaluation team, there is no monitoring instrument and the handover evaluation is not optimally monitored periodically. Therefore, the author recommends solving the problem, namely providing education or training on handover using the SBAR method for nurses, compiling instruments or checklist forms that are easier for nurses to use in handover between shifts, re-socializing the handover SOP to nurses. compiling a monitoring schedule by the head of the room or team head, forming an evaluation team and compiling a periodic evaluation schedule.



#### INTRODUCTION

The term "handover" in nursing refers to the systematic transfer of patient information. responsibility, accountability from one nurse to another, which typically occurs during a shift change (AlAmrani, 2022). This process is critical to ensuring continuity of care and maintaining patient safety, as it allows the incoming nurse to receive important information about the patient's condition, care plan, and any changes that may have occurred during the previous shift (Egbert et al., 2022). In general, the quality of the handover has a significant impact on patient outcomes, and implementing standardized practices during the handover ensures that critical information flows smoothly between nursing professionals, improving communication and continuity of patient care (Kim et al., 2020). However, the implementation of the handover process often suffers from weaknesses that can lead to significant challenges in the hospital setting. These challenges can manifest as adverse events, medical errors, suboptimal patient outcomes (Abraham et al., 2021). therefore handover becomes a critical process that leads to significant challenges in maintaining a culture of patient safety (Quintero-Ríos & Morales-Gualdrón, 2020).

Liu et al. (2022) emphasized that a substantial percentage of patient safety issues arise from inappropriate behaviors among healthcare staff, especially during the handover process. Another dimension that is affected is teamwork collaboration, where adverse including medication errors and patient falls are often caused by human factors related to communication and teamwork among nurses (Wang et al., 2022). Poor handover practices can disrupt continuity of care and hinder collaborative efforts that are essential in promoting patient safety (Kornwachs et al., 2024). Soleha and Hutahaean (2021) stated that there is a significant relationship between handover practices and patient safety incidents, specifically 44.4% of patient safety incidents have occurred and been reported with a p-value of 0.005 indicating that effective handover is very important in reducing patient safety incidents.

Patient safety targets are stated in PMK No. 1691/MENKES/PER/VIII/2011 compiled with reference to nine solutions or patient safety achievements by WHO which encourage more specific improvements in patient safety, where handover activities are included in the second target, namely increasing effective communication. Effective communication in handover can be done using the SBAR (Situation, Background, Assessment, Recommendation) method where this method significantly improves the quality of the handover process in the health service environment (Handoyo et al., 2022). Likewise, Rahmatulloh et al. (2022) emphasized that the SBAR method can significantly increase the effectiveness of communication during handover, thereby improving patient safety. Yetti et al. (2021) emphasized that although nurses Indonesia have adopted the SBAR method, the lack of updated guidelines or standard operating procedures can hinder the effective implementation of the handover process. Therefore, this study identifies the causes of the suboptimal quality of the implementation of handover between nurse shifts using the SBAR method in the internal medicine ward of a hospital in Cirebon City. The author uses fishbone diagram analysis as an approach to find out the root cause of the suboptimal implementation of handover, this study is in line with broader efforts by hospitals and health organizations to prioritize patient safety and quality of care for patients.

#### **METHOD**

The method used in this study is qualitative with a situation analysis approach Using fishbone analysis which has components of man, money, method, material and machine to obtain the causes



of the suboptimal implementation of handover, This study has obtained permission with the number B-029A / UNIVYPIB / DRPM-MJL / III / 2024. The data collection technique was carried out by observing the implementation of handover each shift and interviewing 17 nurses who work in the internal medicine room using the handover procedure guidelines which contain three parts, namely preparation for handover, implementation of handover and posthandover.

#### RESULTS AND DISCUSSION

Based on observations conducted on January 6-19, 2024 and interviews with nurses working in the internal medicine room, the following results were obtained:

#### 1. Interview

The results of the interview showed that nurses had used the SBAR method in carrying out handovers, but when viewed from the preparation, implementation and post-handover components, nurses did not understand that there were three phases in carrying out handovers that must be carried out properly, nurses knew that the SOP was available but the time needed for handovers was still lacking considering that the number of nurses on duty in the internal medicine room did not match the needs of the room, based on the calculation results using the Gillies method which can be seen from the room profile data, the number of nurses needed in the room was 23 people, but the number of nurses working in the

internal medicine room is currently only 17 people. The head of the room stated that in the handover process, nurses still perceived that handovers were routine activities that took up a lot of time. Rewards for nurses have been adjusted to the Cirebon regional government regulations and regulations set by the hospital.

#### 2. Observation

Based on the observation of the handover process for each shift in the internal medicine room, the data obtained is that the implementation is still not optimal, especially in the implementation post-handover process. implementation section, nurses have not conveyed five aspects to patients, namely current medical conditions, evaluation of food and drink needs, mobility ability, patient independence in toileting and asking about the most dominant complaints currently felt. In the post-handover section, there is still an incomplete documentation process covering the SBAR points in detail. In the implementation of handover, there are 6% nurses with a master's degree, 47% nurses with a bachelor's degree and 47% nurses with a diploma. There is no definitive evaluation monitoring team in handover and the hospital does not yet have an evaluation monitoring instrument that can be used as a form of documentation for implementation handover the of evaluation..



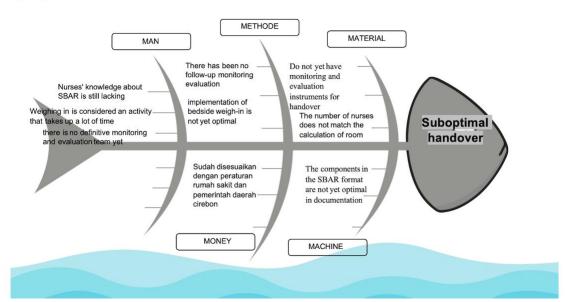


FIGURE 1. Fishbone Diagram Analysis

**TABEL 1.** Priority Weighting of Problem Causes Suboptimal Weighting and Acceptance

No	Cause of the Problem	Mg	Sv	Mn	Nc	Af	Total Score	PrioritY
1.	Nurses' knowledge regarding acceptance considerations with SBAR is still lacking	5	5	4	5	4	2000	1
2.	Periodic monitoring is not yet optimal	3	3	4	4	4	576	5
3.	Do not yet have monitoring and evaluation instruments for handover	5	3	5	3	4	900	4
4.	There is no definitive evaluation team yet	5	4	3	4	4	960	3
5.	The components in the SBAR format are not yet optimal in documentation	4	4	4	5	4	1280	2

Based on table 1, the causes of the problems were identified and can be prioritized as follows:

- 1. Nurses' knowledge of handover with SBAR is still lacking
- 2. The components in the SBAR format are not optimal in the documentation
- 3. There is no definitive evaluation team
- 4. There is no instrument for monitoring and evaluating handover
- 5. Periodic monitoring is not optimal

The importance of handover cannot be doubted, because the practice is useful for maintaining patient safety and ensuring continuity of care. The main challenges in implementing handover practices are effective communication, lack of guidelines and standardized procedures (Sonmez et al., 2024). In addition, the quality of documentation during handover must also be a concern because it is very important to ensure the transfer of information between nurses in ensuring patient safety (Lee &



Lim, 2021). Health institutions such as hospitals are required to evaluate patient safety culture in order to improve safety and quality of service. Safety culture is a developing concept that focuses on preventing medical errors and providing patient safety as stated in Law Number 44 of 2009 concerning Hospitals, which states that as a health service institution, hospitals are required to provide complete health services to individuals as one of the health service facilities that aim to create better health recovery and maintenance (Krisnawati et al., 2023). All hospital community members must be able to understand and cultivate patient safety as per the Regulation of the Minister of Health Number 11 of 2017 concerning patient safety targets in the form of standards for patient safety such as correctly identifying improving communication, patients, improving the safety of drugs that must be watched out for, ensuring the correct location. surgical correct surgical procedures, and reducing the risk of infection due to health services and injuries due to falls (Koten et al., 2020). The handover process is in accordance with patient safety target number two where effective communication is essential in the implementation process, effective communication is reflected in the SBAR method (Situation. Background, Assessment, Recommendation), which is a structured method designed to improve communication during handover in the health service environment (Pazar et al., 2024). SBAR is a communication standard that can reduce errors and improve patient safety by ensuring that important information is conveyed accurately during handover (Wulandari et al., 2023). The implementation of SBAR in handover has been associated with improved quality of service, as it ensures that all relevant information is communicated effectively,

leading to better patient outcomes and reduced length of stay in the hospital (Zulkifli & Sulastien, 2023).

The results of interviews observations in this study were then subjected to fishbone analysis and showed that handover activities using the SBAR method were carried out by all nurses in the internal medicine room of hospitals in Cirebon Regency, but in its implementation it was not optimal because the knowledge of nurses regarding handover with SBAR was still lacking, documentation by nurses was also still incomplete, this is in accordance with research conducted by Jiang et al. (2020) which stated that in a large hospital in the city of Zuangzhou, China, only 42.55% of nurses understood and were aware of carrying out handover using the SBAR method, the remaining 57.45% of nurses in the hospital did not understand the SBAR method well and were not aware of documentation. Likewise, Benitez and Jimenez (2023) in their study showed that 72.1% of nurses had insufficient knowledge about implementation of handover, this gap can hinder effective communication and patient safety, so there needs to be ongoing education and training to ensure that all nursing staff are proficient in using the SBAR method effectively. The absence of a definitive evaluation team, the absence of monitoring and evaluation instruments and the absence of periodic monitoring activities are the causes of the suboptimal implementation of handover obtained from the results of the fisbone analysis. Yuliastanti et al. (2020) in a study conducted at the Sultan Agung Islamic Hospital in Semarang stated that previously monitoring and evaluation had not been implemented, but after implementing the monitoring and evaluation process using structured instruments, there were changes



in handover that were getting better and showed an increase in knowledge and skills in nurses in implementing handover using the SBAR method.

Rezkiki et al. (2023) emphasized that monitoring and evaluation carried out periodically using instruments standardized by the hospital have been proven to improve the quality of handover, increase knowledge and potentially reduce the length of patient care days. Therefore, hospitals need to prepare standard forms or instruments for monitoring and evaluation activities which then form an evaluation team that will be scheduled periodically in its implementation. Then the need to modify structured devices such as the SBAR-based Handover Form which can make it easier for nurses to fill in documentation is then determined as a Standard Operating Procedure (SOP) so that it can be applied in all rooms in the hospital. According to Riyami et al. (2023) an implementation standard is needed to ensure the smooth transfer of information, care and management of service security to patients.

## CONCLUSIONS AND RECOMMENDATIONS

Handover is a very important process in the implementation of nursing care because it is related to the transfer of information and patient safety. From the results of the study, five causes of suboptimal handover activities in the internal medicine room of a hospital in Cirebon City were obtained, therefore, to overcome this, a follow-up plan is needed from the hospital. In this case, the author provides the following recommendations:

- 1. Provide education or training on handover with the SBAR method for nurses.
- 2. Compile instruments or checklist forms that are easier for nurses to use in handover between shifts.
- 3. Re-socialize the handover SOP to nurses.

- 4. Compile a monitoring schedule by the head of the room or team leader.
- 5. Form an evaluation team and compile a periodic evaluation schedule.

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