The Effect of Handover Training on Nurses' Communication Skills at Pembinaan Kesejahteraan Umat Muhammadiyah Surakarta

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INTRODUCTION

The quality of a hospital’s services is closely related to the quality of nursing services, considering that nurses are the largest human resource who interact directly with patients (Yusefi et al, 2022). Patient safety has been a source of recent discussion, in Brazil and internationally, mainly because of its importance to the health system and its impact on society in general (Lawati et al, 2018). Effective communication between health workers reduces the occurrence of errors and this supports patient safety because the consequences of communication errors can result in significant patient care errors that can damage the continuity of service and quality of service. Communication failure threatens patient safety, especially when services are handed over from one health worker to another (Gluyas H, 2015).

One aspect of the quality of service in a hospital can be reflected through the handover carried out by nurses. Handover plays a role of 80% in causing medical errors (Sujan et al, 2015). Ineffective handovers can lead to a variety of patient-related problems, such as care...
errors and safety violations, including medication errors, surgical errors, and even patient death. This problem is a major concern that can be monitored through handover activities. The information transferred relates to the patient's clinical condition, needs, personal circumstances and social aspects. The goal is to convey information effectively and ensure effectiveness and safety in patient care. It is important to improve the quality of handover implementation in order to minimize incidents that could harm patients (Marsden J, 2015).

Previous research regarding the influence of communication during handover to identify errors that occur in hospital services has not been carried out much. Nurses’ understanding is still less than optimal (20%) regarding the importance of consideration as a first step, resulting in errors in implementing patient safety (Eggins, S & Slade, D, 2015). Therefore, action is needed to increase nurses' knowledge and skills regarding considerations in implementing patient safety. Increasing the ability to receive and receive patients can be done through development activities, such as providing effective patient weighing training (Noviyanti et al, 2021)

We decided to conduct research at the Surakarta Community Welfare Development Hospital for various reasons. We found that in hospitals there are many problems in implementing patient safety programs. Although patient safety programs have been implemented, they have not been optimal in increasing compliance with standards and procedures. Once again, communication and related documentation are still not going well, this can be seen from the high percentage of adverse events of 29%, near-injury incidents of 20%, and non-injury incidents of 61%. In fact, good communication during patient handover, as a first step to identify service errors and as a solution to patient safety, has not been implemented optimally. Nurses' understanding (20%) is still less than optimal regarding the importance of consideration as a first step, resulting in errors in implementing patient safety.

In practice, nurse handover performance shows little improvement over observation-focused clinical training. Thus, nurses must have the opportunity to understand the patient's condition thoroughly and convey details of nursing practice through handover training. Several studies have shown that inadequate or poor communication between healthcare providers is one of the preventable causes of patient injuries in healthcare facilities (Bakon S, 2017). This year's research stated that 62.6% of nurses still had minimal experience in handover activities. Additionally, most examples of handover education for new nurses simply consist of observing a fellow nurse's handover or learning from their senior nurse through simple verbal instructions. This resulted in reported difficulties in new nurses’ handover performance for assigned patients.
Therefore, it is necessary to improve the current nursing education system and develop educational programs to bridge the gap in nurse training (Raeisi A et al, 2019).

METHODS

This research used a pre-experimental design with a one group pretest and posttest approach. The intervention in this study was shift assignment handover training (handover). Handover training is part of nurse management and leadership training in hospitals. The training in this research is a hospital management refresher program to improve nurses' skills and abilities. This training uses lecture and demonstration methods. The demonstration aims to see the abilities and skills of nurses in carrying out shift handover. Aspects of the training material are consideration techniques and effective communication with nurses. The nurses involved in the training were 100 nurses. Nurses involved in the training were selected using purposive sampling with the criteria of inpatient room nurses, work experience of at least one year, willing to take part in the training until completion. Training will be held on October 19 2023 from 08.00 to 17.00. Measurement of communication variables before training was carried out on October 18 2023. The questionnaire used to measure communication variables was a weighing questionnaire and a checklist for carrying out weighing (Payne, 2008, Parke & Mishkin, 2005). The nurse's ability to convey information clearly, effectively and empathetically to patients, the patient's family and members of the health team in the process of handing over/admitting patients to the inpatient unit. The communication variable was measured again after the training, namely on October 30 2023. Statistical analysis using SPSS 10. Analysis to measure communication variables using the Paired sample T-test with an alpha significance level of 5% and a CI-95% confidence interval.

RESULTS

Respondent Characteristics

1. Characteristics of Respondents Based on Age

<table>
<thead>
<tr>
<th></th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Maximum</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td>Average</td>
<td>32.67</td>
<td>33.80</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>5.858</td>
<td>7.137</td>
</tr>
</tbody>
</table>

Based on the age characteristics of the respondents, the treatment group had a mean and standard deviation value of 32.67 ± 5.858 with the lowest value being 25 and the highest
value being 55, for the control group respondents' age the mean value and standard deviation was 33.80 ± 7.137 with the lowest value obtained, of 24 and the highest value of 53.

2. Characteristics of Respondents Based on Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Man</td>
<td>7</td>
<td>15.6</td>
<td>11</td>
</tr>
<tr>
<td>Woman</td>
<td>38</td>
<td>84.4</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
<td>45</td>
</tr>
</tbody>
</table>

Based on the gender characteristics of respondents in both the treatment and control groups, there were more female respondents than male respondents.

3. Characteristics of Respondents Based on Length of Work

<table>
<thead>
<tr>
<th></th>
<th>Treatment Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Average</td>
<td>7.68</td>
<td>10.18</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>6,270</td>
<td>6,713</td>
</tr>
</tbody>
</table>

Based on the characteristics of the work period of respondents in the treatment group, the mean and standard deviation value was 7.69 ± 6.270 with the lowest value being 1 and the highest value being 30. For the work period of respondents in the control group, the mean value and standard deviation was 10.18 ± 6.713 with the lowest score obtained, is 1 and the highest score is 29.

4. Characteristics of Respondents Based on Last Education (N = 45)

<table>
<thead>
<tr>
<th>Education</th>
<th>Treatment Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>D3 Midwifery</td>
<td>2</td>
<td>4.4</td>
<td>1</td>
</tr>
<tr>
<td>D3 Nursing</td>
<td>27</td>
<td>60.0</td>
<td>40</td>
</tr>
<tr>
<td>Bachelor's Degree in Nursing</td>
<td>5</td>
<td>11.1</td>
<td>2</td>
</tr>
<tr>
<td>Bachelor's Degree in Nursing</td>
<td>11</td>
<td>24.4</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100</td>
<td>45</td>
</tr>
</tbody>
</table>

Based on the current educational characteristics of respondents in both treatment and control groups, respondents with a D3 Nursing education were more dominant.
The results of the research include several parts, including a description of the treatment group communication variables and analysis of mean difference tests before and after training. The results of the complete descriptive analysis of communication variables are presented in table 5. Meanwhile, table 6 presents the results of the analysis of differences in communication variables before and after training.

### Table 4. Description of communication variables before and after training

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Pre-Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum score</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>Maximum score</td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>Average</td>
<td>35.53</td>
<td>36.71</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2,322</td>
<td>2,668</td>
</tr>
</tbody>
</table>

*Primary data: Processed data*

Based on the results of the univariate test on the pre-test data for the treatment group above, the mean value and standard deviation were obtained at $35.53 \pm 2.322$ with the lowest value at 27 and the highest at 43, while the post-test data for the treatment group obtained a mean value and standard deviation at $36.71 \pm 2.668$, with the lowest value of 32 and the highest of 44.

### Table 5. Analysis of differences in communication abilities

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Method</th>
<th>Std. Dev.</th>
<th>Z</th>
<th>signature</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>35.53</td>
<td>2,322</td>
<td>-1.734</td>
<td>0.083</td>
<td>Does not mean</td>
</tr>
<tr>
<td>Post Test</td>
<td>36.71</td>
<td>2,668</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Data source: Processed data*

The differences in nurses' communication skills variables can be seen in table 2. Based on the results of statistical tests using the Wilcoxon sign test, a p value of $0.083$ was obtained, so it was concluded that nurses' communication skills before and after handover training had a good influence. no effect. significantly different.

**DISCUSSION**

**Differences in Nurse Communication Skills Before and After Patient Weighing Training in the Inpatient Room at Pembinaan Kesejahteraan Umat Muhammadiyah Hospital, Surakarta**

In the treatment group, there was no difference in nurses' abilities before and after the patient reception training treatment in the inpatient room at Pembinaan Kesejahteraan Umat Muhammadiyah Hospital, Surakarta. Handover or handover or often called operant is a technique or method for conveying and receiving a report relating to a patient. These considerations must be carried out as effectively as possible by explaining briefly, clearly and distinctly the nurse's independent actions, collaborative actions, those that have been completed and those that have not been carried out as well as the patient's progress at that time. The
information conveyed must be truly accurate and continuous so that nursing care can run perfectly (Nursalam, 2017).

Shahid & Thomas (2018) the handoff or handover process is a communication process involved in exchanging patient information between all health workers, especially nurses during shift changes, which is an element in ensuring the provision of continuous care and patient safety. More, Lucy Pilcher (2015) Clinical handover is an important aspect of clinical communication, described as the transfer of professional responsibility and accountability for some or all aspects of the care of a patient, or group of patients, to another person or group of professionals on a temporary or permanent basis.

In Seoul, Korea, education is carried out with the help of simulations in assessing patient acceptance. A simulation-based program, it allows students to experience the problem-solving process while gaining theoretical knowledge. This helps them practice in a realistic environment, thereby improving their communication skills and independence (Norman, 2016, in Lee & Lim, 2021). This simulation education involves expert nurses who have more than 10 years of experience in the nursing field. Technically, nurses who take part in patient acceptance education pay attention to the simulation shown by an expert nurse, then practice it in the next simulation and then apply it in nursing work. Lee & Lim (2021) found the results of research in Seoul Korea that patient acceptance education using simulation was able to improve nurses' communication in carrying out their nursing duties both individually and in groups.

**Differences in Communication Skills of Control Group Nurses in the Inpatient Room at Pembinaan Kesejahteraan Umat Muhammadiyah Hospital, Surakarta**

In the control group, there was no difference in nurses' abilities before and after the patient reception training treatment in the inpatient room at Pembinaan Kesejahteraan Umat Muhammadiyah Hospital, Surakarta. The handoff or handover process is a communication process involved in exchanging patient information between all health workers, especially nurses during shift changes, which is an element in ensuring the provision of continuous care and patient safety (Blazin et al, 2020).

The results of research in Korea show that only 8.4% of all respondents admitted to having received handover education as a component of official courses in the form of lectures, training sessions and standard educational materials. In addition, 77.4% of small and medium hospitals do not have guidelines or checklists regarding nurse handover. Thus, the absence of systematic handover education in nursing education indicates the need for university education for handover (Yon Hee Seo., et al, 2023).
Nursing handover practices show little improvement over observation-focused clinical training. Thus, nurses must have the opportunity to understand the patient's condition thoroughly and convey details of nursing practice through handover training. This resulted in reported difficulties in new nurses' handover performance for assigned patients. Therefore, it is necessary to improve the current nursing education system and develop educational programs to bridge the gap in nurse training (Lee & Lim, 2021).

Syamim's Research Results (2017) suggests that poor communication processes create opportunities for error when caregivers fail to transfer complete and consistent information. Inadequate or nonexistent clinical handover or failure to transfer information, responsibility, and accountability can have dire consequences for hospitalized patients.

The results of Nababan's (2023) research on nurses show that having a disciplined attitude in carrying out handover activities effectively as a provider of nursing services can prevent patient safety incidents and is useful in improving the quality of management in hospital services.

Mamalelala's (2023) research results show that ER and ICU nurses have significantly different requirements and expectations regarding handover procedures. In addition to complete documentation, subtle interpretations of information provided and received also impact requirements. ER and ICU nurses need to agree on the content of a structured handover framework because different specialties and departments have different expectations for achieving an effective handover.

**Differences in Communication Skills of Inpatient Room Nurses at Pembinaan Kesejahteraan Umat Muhammadiyah Hospital Surakarta, Treatment and Control Groups**

The results of the study showed that there was no significant difference in the communication skills of nurses in the treatment group and the control group. Communication during handover of duties (overload/consideration) between nurses requires clear communication regarding patient needs, interventions that have and have not been implemented, as well as responses that occur in patients. Nurses carry out patient admission checks together with other nurses by going around to each patient and conveying the patient's condition accurately to those closest to the patient. Because this method is considered more effective and helps nurses in receiving excess payments/considerations (Nursalam, 2017).

The Joint Commission on Accreditation of Health Service Organizations WHO (2007) considers effective communication to be an important aspect in patient care to ensure patient safety, as a strategy to reduce unexpected events (KTD), near-miss events. program). KNC as
well as sentinel events. Joint Commission on Accreditation of Health Care Organizations". establishes effective communication as the second of six national safety goals. The WHO Collaborating Center for Patient Safety on May 2, 2007 published the guide “Nine Patient Safety Solutions that Save Lives" (Nine patient safety solutions in hospitals), one of the systems or interventions is correct communication when the patient enters (Kemenkes RI, 2008).

Jack Pun Research Results (2021) shows that during handover practices, communication is the most important component in human interaction and is necessary for the transfer of information from the sender to the recipient. However handovers were inconsistent across hospitals and junior nurses were sometimes not given the necessary support and supervision, due to patient acuity and a shortage of nurses in units. There is no structured handover tool to ensure that the process is formalized for all nurses in the Intensive Care Unit to follow. Nurses' perceptions and communication skills impact clinical handover capabilities.

Tools are needed to improve nurse communication in conducting handoffs. In Malaysia SBAR (Situation, Background, Assessment and Recommendations) was proposed to facilitate the collection, organization and exchange of information between health workers, while providing an approach to strengthen teamwork. This SBAR communication tool starts from the Situation which emphasizes the main reason for hospitalization, followed by the Background which states the patient's history such as history of previous treatment or surgery, any allergies, previous treatment and so on (Geok., et al, 2021). Meanwhile, the assessment is the part where the patient's current condition will be mentioned in detail, while recommendations will be prepared based on a summary of the assessment findings in accordance with the patient's treatment plan.

Tataei's (2023) research results show that the use of ENHS significantly improves the quality and efficiency of shift handover, reduces the possibility of clinical errors, saves handover time, and ultimately improves patient safety compared to paper-based methods. The results of the study also showed positive views of ICU nurses regarding the positive effects of ENHS on improving patient safety.

CONCLUSION

The research results showed that there was no significant influence between nurses' communication skills before and after weighing training in the Inpatient Room at Pembinaan Kesejahteraan Umat Muhammadiyah Hospital, Surakarta. Based on these results, several things that can be recommended include a commitment to carry out considerations in the form
of policies, direction and evaluation of the implementation of considerations, for the sake of continuity of nursing care which has an impact on increasing nurses' communication skills in implementing patient safety as well as adding samples to ensure sample representation in further research and optimize patient admission training by providing strict sanctions for nurses who do not carry out patient admission procedures.

REFERENCE


Gluyas H. (2015). Effective communication and teamwork promotes patient safety. Nursing standard (Royal College of Nursing (Great Britain) : 1987), 29(49), 50–57. https://doi.org/10.7748/ns.29.49.50.e10042


Sugiyono, Educational Research Methods Quantitative, Qualitative and R&D Approaches (Bandung: Alfabeta, 2015), 110-111.


