

The Effect of Clinical Supervision Using The 4S Model on Risk of Patient Harm Resulting from Falls Assessment

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Abstract

Background: Reducing the risk of patients falling is an important part of the six goals for hospital patient safety as stipulated in Minister of Health Regulation No. 11 of 2017. The implementation of this fall risk assessment is also influenced by several supporting factors and several inhibiting factors. factors that can support the implementation of this assessment are related to the existence of motivation among colleagues and complete facilities and infrastructure. This is different from the inhibiting factors in the implementation of a fall risk assessment, namely leadership and management factors, namely supervision.

Aims: The aim of this study was to see the Effect of Clinical Supervision Using the 4S Model (Structure, Skill, Support, Sustainability) on Risk of Patient arm Resulting from Patient Fall Assessment at the UPTD Puskesmas Mersam in 2021.

Methods: This research is quantitative research with pre-experimental method. The research design used a one group pretest-posttest design. The population in this study were all nurses on duty at the Mersam Health Center UPTD inpatient unit, totaling 16 nurses.

Results: The results of the univariate analysis showed that the majority (81.2%) of the implementing nurses were not good at implementing the patient fall risk assessment before being given the 4S model supervision intervention, more than half (68.8%) of the implementing nurses were good at implementing the patient fall risk assessment after given the 4S model supervision intervention. The results of the bivariate analysis showed that there was a significant effect of clinical supervision using the 4S model on Risk of Patient arm Resulting from Patient Fall Assessment at the UPTD Puskesmas Mersam in 2021 (P-Values 0.005).

Conclusion: There was a significant effect of clinical supervision using the 4S model on Risk of Patient arm Resulting from Patient Fall Assessment.

Suggestion: It is hoped that the Health Office and the Community Health Center will develop a work program to train all HRHK, especially nurses working in inpatient departments regarding how to assess the risk of falling patients. Then, it is also suggested that the Batang Hari Jambi District Health Office should compile regulations for all Puskesmas to implement routine, systematic and scheduled supervision with the 4S model.

Keywords

Clinical Supervision, 4S Model, Risk of Patient Falls

Background

Reduce risk of patient arm resulting from patient fall so that patients remain safe during treatment. There are 3 components that are of concern in preventing falls which are recommended by evidence-based guidelines to prevent patient falls, namely identifying the elderly who have a higher risk of falling. The second component is to assess multifactorial risk factors using screening tests such as a history of falls. The last component is doing a balance test (Jang, Insun·Park, Seungmi·Kim, Yeon Sook, 2019).

The impact that occurs as a result of health service facilities not implementing Reducing the risk of falling patients can result in a decrease in the quality of hospital services. The impacts that will arise

include a decrease in hospital quality, a decrease in patient satisfaction, an increase in costs related to additional hospitalization, court process costs, treatment of infections and disabilities resulting in losses of US\$ 6 billion - US\$ 29 billion per year, so that hospital profits decrease. (Cairns & Mccallum, 2017; Parand & Vincent, 2018 in Tri Asih Oktariani, et.al. 2020). This impact can occur because the patient's fall risk reduction assessment is not implemented according to standards so that patient safety targets are not achieved.

The many impacts that will be detrimental to the hospital if patient safety is not implemented optimally, one of which is preventing the risk of patient falling, this is of course influenced by several factors. Vincent (2017) put forward the theory of "The Seven Levels of Safety", which is influenced by seven factors namely patient factors,

task and technology factors, individual factors, team factors namely the supervisory function of managers, work environment factors, organizational factors and institutional context factors.

The implementation of the fall risk assessment is also influenced by several supporting factors and several inhibiting factors. factors that can support the implementation of this assessment are related to the existence of motivation among colleagues and complete facilities and infrastructure. Completeness of facilities and infrastructure in the form of completeness of assessment filling documents and operational standards for their implementation. This is different from the inhibiting factors for the implementation of a fall risk assessment, namely the patient's condition (unstable patient, decreased consciousness, tantrums, etc.), patient's family factor who is not in place, nurse's factor (nurse's busyness, high workload, insufficient human resources, too many patients), leadership and management factors, namely not optimal supervision (Nur, 2017).

Based on the results of several studies which state that supervision is the main factor influencing the prevention of patient's risk of falling. According to Anderson & Kodate (2015) states that this is influenced by the supervision and motivation factors of the nursing manager. According to Giles, Panagioti, Hernan, Sohi, & Lawton, (2015) and Davis, Burke, & Kingston, (2015), factors that affect patient safety (patient fall risk) are the leader factors who have a change agent soul in providing supervision to staff. . The results of research by Cruz, Carvalho, & Lopes (2016) and Anggraeni, Hakim, & Widjiati (2015) that supervision is effective in preventing incidents of falls (high fall risk). So, supervision has an effect on the application of a patient's fall risk prevention assessment.

The implementation of supervision is not only carried out in hospitals but in all areas of nursing services both in hospitals and in puskesmas (Estes, 2013). Implementation of good supervision is able to encourage nurses to comply with procedures for implementing patient safety measures, one of which includes preventing the risk of patient falls (Parwa, Krisnawati, & Yanti, 2019). Implementation of supervision in health services can be carried out with various desired models because they have the same goal, namely to improve staff performance, but the 4S-based supervision model is more complex not only to improve performance but rather to improve the quality of care (Mustikaningsih, 2014).

Clinical Supervision of 4S model is a process of directing, monitoring performance, problem solving, motivating and supporting staff so that staff can do work effectively based on structure, skills, support, and sustainability (Waskett, 2015). 4S Supervision includes: The process is structured in terms of schemes, policies, and time used; Supervisors have good skills; Support will make the supervision process more conducive to improving and improving nurse performance; Sustainable (routine) includes monitoring and improving the system's overall performance (Marques & Kean, 2002; Mentey & Moduga, 2015). With this method, supervision does not only function as a supervisory process but also as a structured guidance process, staff

support, consistency, a means of brainstorming or good discussion, continuous and improving service quality.

Mersam Health Community Center is a health service center for the Mersam community that provides inpatient services. This shows that the need to pay attention to patient safety, one of which is preventing the risk of patient falling, which is also a requirement for FKTP accreditation standards. Data on the prevalence of incidents at the UPTD Mersam Health Center was not properly recapitulated and monitored so that it does not have valid data that can be reported periodically. However, the implementation of the screening assessment of the risk of falling patients has not been carried out according to the standards set by the ministry of health and FKTP accreditation (Administration of UPTD Puskesmas Mersam, 2020). Thus it can be concluded that the Mersam Puseksmas UPTD has not implemented optimal patient fall risk reduction practices, this is in accordance with the results of preliminary studies, observations and interviews conducted on the heads of inpatient rooms and implementing nurses. The aim of this study was to see the Effect of Clinical Supervision Using the 4S Model (Structure, Skill, Support, Sustainability) on Risk of Patient arm Resulting from Patient Fall Assessment at the UPTD Puskesmas Mersam in 2021

Methods

Study Design

The research design that has been carried out is a pre-experimental design with a 'pre-test and post-test one group design'. namely research using pre-test and post-test where observations were made 2 times, before and after the experiment.

Population and Samples

This research was conducted in the UPTD inpatient room at the Mersam Health Community Center, Batang Hari Regency, Jambi Province. The researcher's sampling technique used total sampling with a total sample of 16 respondents .

Data Collection

This research was conducted in the UPTD inpatient room at the Mersam Health Community Center, Batang Hari Regency, Jambi Province.

Data Analysis

The data analysis technique used in this study was the Wilcoxon test because the data found were not normally distributed. The test results obtained 0.000 ($P \leq \alpha 0.05$) H_0 was rejected and it meant that there was a difference before and after the intervention.

Results

Based on the results of the analysis of research findings, it was found that the average value of the difference in increase in conducting a patient fall risk assessment by the implementing nurse was 15 scores. The results of the statistical test using the Wilcoxon test obtained a p-value of 0.005, so it can be concluded that there is a significant effect of clinical supervision using the 4S model on the assessment of the risk of falling patients at the Mersam Health Community Center in 2021 can be seen in the following table 1.

Table 1 The Effect of Clinical Supervision Using the 4S Model on Risk of Patient Harm Resulting from Patient Fall Assessment Mersam Health Center, Batang Hari Regency 2021 (n=16)

Risk of Patient arm Resulting from Patient Fall Assessment	n	Mean	Min-Max	p- value
Before intervention	16	35	28-48	0,005
After Intervention	16	45	40-55	

Discussion

Based on the research findings, it was found that the average difference in increase in assessing the risk of falling patients by implementing nurses was 10 scores. The results of the statistical test found that there was a significant effect of clinical supervision using the 4S model on the risk assessment of patients falling at the UPTD Puskesmas Mersam in 2021.

The results of this research are in line with the research of Amiri, Kademian & Nikandish (2018) which found that there was a significant effect of implementing patient safety, one of which was reducing the risk of falling patients carried out by implementing nurses between the intervention group and the control group. Research according to Anderson & Kodate (2015) also found results that the implementation of patient safety carried out by the intervention group was better than the control group, this means that supervision has a big influence in changing the performance of implementing nurses for the better. The results of this study were also reinforced by research conducted by Tri Asih, Yulastri Arif & Dewi Murni (2020) that there was an influence of 4S (Structure, Skills, Support and Sustainable)-based clinical supervision on the implementation of patient safety by implementing nurses in the intervention group with p- value 0.012.

According to Anderson & Kodate (2015) patient safety practices, one of which is reducing the risk of patient falling, are influenced by the supervision and motivation factors of the nursing manager. According to Giles, Panagioti, Hernan, Sohi, & Lawton, (2015) and Davis, Burke, & Kingston, (2015), factors that affect patient safety are leaders who have a change agent soul in providing supervision to staff. The results of research by Cruz, Carvalho, & Lopes (2016) and Anggraeni, Hakim, & Widjiati (2015) show that supervision is effective in preventing high fall risk and carrying out patient identification. So, supervision affects the implementation of patient safety.

The application of the 4S model of clinical supervision at the UPTD Puskesmas Mersam, through managerial activities is a form of supervision that allows the head of the room to instill a sense of responsibility and adherence of the implementing nurses to the established standards of care. Through this activity the nurses sit together to understand, improve, and build a commitment to improve performance based on predetermined standards. In line with research conducted by Robert (2013) stated that nurses who feel they are being supervised by supervisors in doing their work are more satisfied with their work, including in carrying out patient fall risk assessments.

Clinical Supervision bases 4S model is a process of directing, monitoring performance, problem solving, motivating and supporting staff so that staff can do work effectively based on structure, skills, support, and sustainability (Waskett, 2015). 4S Supervision includes: The process is structured in terms of schemes, policies, and time used; Supervisors have good skills; Support will make the supervision process more conducive to improving and improving nurse performance; Sustainable (routine) includes monitoring and improving the system's overall performance (Marques & Kean, 2002; Mentey & Moduga, 2015). With this method, supervision does not only function as a supervisory process but also as a structured guidance process, staff support, consistency, a means of brainstorming or good discussion, continuous and improving service quality.

Conclusion

There is a significant effect of clinical supervision using the 4S model on the risk assessment of patients falling at the Health Community Center of Mersam, Batang Hari.

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