



Received: 19-01-2024
Accepted: 29-02-2024

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Assessment and Management of Fall Risk in the Inpatient Ward of the Aceh Government Hospital: Case Study

¹ Revi Zahra Fonna Usi, ² Hajjul Kamil, ³ Putri Mayasari, ⁴ Noraliyatun Jannah, ⁵ Muhammad Yusuf

¹ Nurse Professional Study Program, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

^{2, 3, 4, 5} Department of Basic Nursing and Nursing Management, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

DOI: <https://doi.org/10.62225/2583049X.2024.4.2.2460>

Corresponding Author: Hajjul Kamil

Abstract

One of the goals of patient safety is to prevent patient falls. Patient falls are an incident in hospitals that result in injury and even death of patients and are the second most common adverse event in health services after medication errors. Nurses can prevent falls by implementing fall prevention guidelines such as closely monitoring patients at high risk of falling and involving the patient's family to avoid falls. Nurses have a role in assessing and managing falls in patients by providing education to patients and taking fall prevention measures based on applicable Standard Operating Procedures. This case study aims to determine the assessment and management of fall risk in the Aceh Government Hospital inpatient ward. The sampling technique used total sampling with a total of 23 nurses. Data

was collected in September 2023 after obtaining institutional permission and filling out informed consent to become a research respondent. The data collection tool uses an observation sheet to assess and manage fall risk, developed based on Standard Operational Procedures. Data analysis uses descriptive statistical tests. This case study shows that 78.2% of nurses did not carry out fall risk assessments, and 74.00% did not manage fall risks. As direct superiors of nurses, first-line managers can carry out supervision, guidance, and regular discussions to assess and manage fall risk. Hospital Patient Safety Committees must provide ongoing training regarding patient safety goals to improve patient safety.

Keywords: Evaluation, Management, Risk of Falls, Patients

1. Introduction

Hospital patient safety is a system where hospitals make patient care safer, which includes risk assessment, identification and management of matters related to patient risk, reporting and analysis of incidents, the ability to learn from incidents and their follow-up, as well as implementing solutions to minimize the emergence of risks and prevent injuries caused by errors resulting from carrying out an action or not taking action that should be taken^[14]. The patient safety program aims to reduce the number of sentinel events that often occur in patients while being treated in the hospital, so they can be detrimental to several parties, especially the patient and the hospital^[10].

There are six national and global patient safety goals, namely identifying patients correctly, increasing effective communication, increasing the safety of cautionary medicines, ensuring the correct location of surgery for both procedures and correct patient surgery, reducing the risk of healthcare-related infections, and the risk of lowering patient injury due to falls^[14]. The aims and objectives of the six patient safety goals are to prevent patient safety incidents from occurring in health services such as hospitals, one of which is the target of reducing the risk of patient injury due to falls.

Fall incidents not only have an impact on injuries but also increase the length of stay and patient care costs. Injured patients can result in an additional 6.3 days of hospital stay^[8]. Patient falls are the most worrying event in hospitals and have an impact on patient injury and even death. They are the second most common adverse event in health care after medication errors^[15]. The World Health Organization (WHO) explains that around 684,000 fatal falls occur every year, making this incident one of the top two causes of unintentional death after traffic accidents. More than 80% of fall-related deaths occur in low- and middle-income countries, with the Western Pacific and Southeast Asia regions accounting for 60% of these deaths^[17].

The impact resulting from a fall incident or injury due to a fall can affect the patient's physical, mental, social, and emotional well-being [3]. Serious injuries that can occur due to falls include pelvic fractures, brain hemorrhage, or even death. In addition, unintentional falls also impact health institutions economically due to increased treatment costs resulting from injuries and increased hospital long-term stays. This statement is supported by research showing that patients who fall have an average of 12 days longer stay, and the resulting injuries cause a 61% increase in care costs [1].

Nurses can prevent falls by implementing fall prevention guidelines such as closely monitoring patients at high risk of falling and involving the patient's family to avoid falls [7].

Nurses have an essential role in assessing and preventing falls in patients by providing education to patients and taking fall prevention measures based on applicable Standard Operating Procedures (SOP) [11].

Effective management to reduce or minimize the number of fall risk incidents is by planning, education, and monitoring, where leaders plan the space, equipment, and resources needed to support clinical services provided safely and effectively. All staff are educated about the facilities, how to reduce risk, including carrying out risk assessments, and how to monitor and report risky situations, including comprehensive examinations and regular monitoring [18].

Based on the observations in the field, it was found that not all patients were given a yellow fall risk marker on the patient's bracelet, a yellow triangle at the foot of the patient's bed, and the nurse on duty did not control it. There were room conditions at risk of falling incidents, and there was rarely any education regarding preventing falls to patients or companions. This case study aims to determine the assessment and management of fall risk in the Aceh Government Hospital inpatient ward.

2. Methods

This case study is a quantitative observational study; the sampling technique uses total sampling; all 23 nurses in the Aqsha 3 Inpatient ward were sampled. Data was collected in September 2023 after obtaining institutional permission and filling out informed consent to be a research respondent. The data collection tool uses an observation sheet to assess and manage fall risk, developed based on SOP. Data analysis uses descriptive statistical tests; the results are presented as frequency distribution tables and percentages.

3. Results

The case study results are presented as follows:

Table 1: Respondent Characteristics

Characteristics	f	%
Age:		
26-35 Years	16	69,6
36-45 Years	7	30,4
Gender:		
Female	23	100
Male	0	0,0
Nursing Education:		
Vocational Nurse	12	52,2
Professional Nurse	11	47,8
Work Experience:		
1-10 Years	10	43,5
≥10 Years	13	56,5

Nurses' positions:		
Team leader	5	21,7
Team members	18	78,3

Table 1 shows that 69.9% of respondents ranged from 26 to 35 years, 100% were female, 52.2% had vocational nursing education, 56.5% had work experience ≥ 10 years, and 78.3% had nursing positions as team members.

Table 2: Frequency Distribution of Fall Risk Assessment

Category	f	%
Implemented	5	21,8
Not Implemented	18	78,2

Table 2 shows that 78.2% of respondents did not implement a fall risk assessment.

Table 3: Frequency Distribution of Implementation of Fall Risk Management

Category	f	%
Implemented	6	26,0
Not Implemented	17	74,0

Table 3 shows that 74.0% of respondents did not implement fall risk management.

4. Discussion

The results of observations of the implementation of fall risk assessment measures showed that not all components of the action were carried out by nurses, such as implementing fall risk prevention for patients according to the level of risk, including explaining to patients and families and reporting the level of fall risk for patients.

The initial fall risk assessment is a series of fall risk assessment processes that take place when the patient is admitted to the hospital for a systematic examination to identify nursing problems in the patient within 24 hours [6]. Nurses perform an initial fall risk assessment when a new patient enters the inpatient ward.

The fall risk assessment is carried out by interviewing the patient's family. There are several choices of items from the fall risk assessment that must be asked of the patient's family, which, of course, cannot be seen directly by the nurse, for example, the patient's fall history item (on the Morse scale, Humpty Dumpty scale, and Edmonson scale), the nurse carries out the fall risk assessment by ticking the items that have been selected. Provided in assessment format [5].

Nurses' compliance in fall risk assessments can be seen from how often nurses carry out fall risk assessments, both initial assessments and reassessments [5].

Many factors cause the problem of nurses not taking preventive measures. To carry out fall prevention measures, a nurse has the knowledge and skills to improve safety and protection. Efforts to prevent falls should be an essential concern for nurses, considering that if a patient has experienced a fall, there will be either mild or severe complications. It is not only the skills and knowledge of nurses but also the availability of facilities provided by the hospital to assist nurses in taking steps to prevent the risk of falls. For example, not having a bell for each patient makes it difficult for nurses to know if a patient has fallen [2].

Nurses have an essential role in changing family behavior and preventing the risk of falls in patients through

education. Nurses not only provide nursing care to patients but must also be able to carry out the role of counselors who provide information regarding fall risk prevention practices [12].

Patient safety incident reporting, from now on referred to as incident reporting, is a system for documenting patient safety incident reports, analysis, and learning solutions. Every hospital is obliged to form a Hospital Patient Safety Team (HPST), which is determined by the head of the hospital to carry out patient safety activities, one of which is reporting incidents related to falls in the inpatient room [12]. Reducing the risk of patient falls requires various SOPs, including implementing them to prevent falls. Namely the SOP for assessment and reassessment and the SOP for placing patient fall risk stickers [5]. Identification of a patient's risk of falling can be done by giving the patient a bracelet. Apart from containing information about identity, medical personnel on duty can identify patient bracelets with various specific colors as special conditions that need attention. Patients with a high risk of falling are given a yellow bracelet. This aims to provide information to other medical personnel so they can supervise these patients more strictly [12].

Nurses' compliance in installing fall-risk bracelets is essential because this action can prevent falls in patients being treated in the hospital. Therefore, nurses must always comply with the SOP for displaying fall risk signs that the hospital has set. Hospitals must also continuously socialize the SOP to install fall risk signs, especially for new nurses. [9].

In the 6th patient safety goal, it was found that nurses had identified fall patients by giving them fall risk signs or hanging signs. It was also found that nurses were still confused about the changing risk assessment format for fall patients. Implementing the 6th patient safety goal in the research, as the first element in the fall risk reduction program, a risk assessment method for falling patients carried out by nurses [13]. The fall risk assessment aims to provide special attention to patients at risk of falling. A patient's fall risk assessment is carried out when the patient is first admitted to the hospital (initial assessment) and when the patient experiences a change in clinical status as a result of care or treatment while in the hospital [16].

Efforts to prevent the risk of patient falls to reduce the incidence of falls in hospitalized patients. Avoiding the risk of patient falls involves an initial assessment of the risk of falling, periodic assessments whenever there is a change in the patient's condition, and implementing preventive measures for patients at risk of falling. Implementation in inpatient care takes the form of a process of identifying and assessing patients at risk of falling and providing special identification marks to these patients, for example, yellow bracelets, providing risk markers, lowering the patient's bed, installing patient bed restraints and written information to the patient or patient's family [4].

5. Conclusions

78.2% of nurses did not implement fall risk assessments, and 74.0% did not manage fall risk in the Inpatient ward of the Aceh Government hospitals.

6. References

1. Avancean D, Calliste D, Contreras T, Lim Y, Fitzpatrick A. Effectiveness of patient-centered

interventions on falls in the acute care setting compared to usual care: A systematic review. *JBIR Database of Systematic Reviews and Implementation Reports*. 2017; 15(12):3006-3048. Doi: <https://doi.org/10.11124/JBISRIR-2016-003331>

2. Astuti NP, Santos OD, Pirena E. Upaya pencegahan pasien resiko jatuh dalam pelaksanaan asuhan keperawatan di rumah sakit. *Jurnal Manajemen Asuhan*. 2021; 5(2). Doi: <https://doi.org/10.33655/mak.v5i2.117>
3. Burns Z, Khasnabish S, Hurley AC, Dykes PC. Classification of injurious fall severity in hospitalized adults. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*. 2020. 75(10):e138-e144. Doi: <https://doi.org/10.1093/gerona/glaa004>
4. Ginting R. Pentingnya melakukan pelaksanaan langkah - langkah menuju keselamatan pasien dalam mencegah resiko jatuh di rumah sakit. Published online, 2019. Doi: <https://doi.org/10.31219/osf.io/9rhng>
5. Jati NPL. Kepatuhan perawat melaksanakan standar prosedur operasional pencegahan pasien jatuh berdasarkan faktor demografi dan motivasi. *Jurnal Ilmiah Kesehatan Media Husada*. 2017; 6(2):225-264. Doi: <https://doi.org/10.33475/jikmh.v6i2.44>
6. Berman A, Snyder SJ, Frandsen G. *Kozier & Erb's Fundamentals of Nursing: Concept, Process, and Practice* (10th Edition). New York: Pearson Education, Inc, 2016.
7. Maulina A, Febriani N. Pengetahuan perawat tentang penerapan pelaksanaan pencegahan insiden pada pasien resiko jatuh. *Jurnal KeperawatanWidya Gentari Indonesia*. 2015; 2(1):81-88. Doi: <https://doi.org/10.52020/jkwgi.v2i1.851>
8. Miake-Lye IM, Hempel S, Ganz DA, Shekelle PG. Inpatient fall prevention programs as a patient safety strategy: A systematic review. *Ann Intern Med*. 2017; 158(5):390-396. Doi: 10.7326/0003-4819-158-5-201303051-00005
9. Noorhasanah S, Amaliah N, Iswantoro. Hubungan karakteristik perawat dengan kepatuhan pemasangan tanda resiko jatuh. *Jurnal Darul Azhar*. 2019; 8(1):100-109.
10. Nursalam. *Manajemen Keperawatan: Aplikasi dalam Praktik Keperawatan Profesional*, Edisi 5. Jakarta: Selemba Medika, 2016.
11. Nurhasanah A, Nurdahlia N. Edukasi kesehatan meningkatkan pengetahuan dan keterampilan keluarga dalam pencegahan jatuh pada lansia. *Jurnal Keperawatan*. 2020; 5(1):84-100. Doi: <https://doi.org/10.32668/jkep.v5i1.359>
12. Nurhayati S, Rahmadiyah M, Hapsari S. Kepatuhan perawat melakukan assessment resiko jatuh dengan pelaksanaan intervensi pada pasien resiko jatuh. *Jurnal Ilmiah Keperawatann STIKes Hang Tuah Surabaya*. 2020; 15(2):2085-3742.
13. Machelia N, Nursery C. 'Pelaksanaan Enam Sasaran Keselamatan Pasien Oleh Perawat Dalam Mencegah Adverse Event Di Rumah Sakit. *Jurnal Keperawatan Suaka Insan (JKSI)*. 2018; 3(2):1-10. Doi: <https://doi.org/10.51143/jksi.v3i2.115>
14. Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 Tahun 2017 tentang Keselamatan Pasien.
15. Putrina A, Harmayetty dan Krisnana I. Kepatuhan Perilaku Kepatuhan Perawat Dalam Re-Assesment

- Pasien Risiko Jatuh Dengan Pendekatan Theory of Planned Behavior. *Fundamental and Management Nursing Journal*. 2019; 2(2):45-54.
16. Rahmadhani N. Implementasi Tugas Perawat Dalam Perencanaan Keperawatan Yang Sesuai Dengan Permasalahan Kesehatan Pasien. OSFPreprint. <https://osf.io/preprints/osf/6mr9y>, Accessed January 21, 2024
 17. World Health Organization. Falls. World Health Organization, 2021. Retrieved from: <https://www.who.int/news-room/fact-sheets/detail/falls>. Accessed January 21, 2024
 18. Zarah M, Djunawan A. Upaya Pencegahan Resiko Pasien Jatuh di Rawat Inap. *Jurnal Kesehatan Masyarakat*. 2022; 10(1):43-49. Doi: <https://doi.org/10.14710/jkm.v10i1.3162>