



## ANALYSIS OF INCIDENCE RATE IN INPATIENCE BASED ON PATIENT SAFETY TARGETS MITRA MEDIKA HOSPITAL BANDAR KLIPPA

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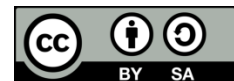
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### ABSTRACT

**Introduction :** Patient safety incidents are unintentional events and conditions that have the potential to result in preventable injury to patients so that patient safety incidents can affect the incident rate in hospitalization. **Objective:** To identify and analyze the incidence rate in the inpatient unit based on patient safety goals in the Hospital from 6 (six) patient safety goal elements. **Method:** The type of research used is quantitative with a cross sectional approach. The population and sample in this study used a saturated sampling technique with a total of 80 respondents. **Results:** Research using the chi square test includes identifying patients correctly with a p-value of  $0.002 < 0.05$ , increasing effective communication with a p-value of  $0.002 < 0.05$ , increasing drug safety needs to be watched out for with a p-value of  $0.046 < 0.05$ , ensuring the correct location and surgical procedure in the patient with a p-value of  $0.444 > 0.05$ , reducing the risk of infection related to health services has a p-value of  $0.166 > 0.05$ , reducing the risk of injury to patients due to falls with a p-value of  $0.016 < 0.05$ , against the incidence rate in hospitalization. **Conclusion:** There is an influence between the variables identifying the patient correctly, increasing effective communication, increasing drug safety needs to be watched out for, and reducing the risk of patient injury due to falls on the incidence rate in hospitalization and there is no influence between ensuring the location and surgical procedure in the correct patient, Reducing the risk of health care-associated infection to the incidence rate in hospitalization. Suggestions that can be given are SPO socialization and training for nurses in inpatients related to patient safety goals and communication and collaboration between teams are always improved in service.

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## 1. INTRODUCTION

According to the WHO (World Health Organization), a hospital is an integral part of a social and health organization with the function of providing comprehensive (comprehensive) services, curative (curative) and disease prevention (preventive) services to the community (1). The hospital as a plenary service center also provides inpatient, outpatient, and emergency health services (2). In line with the health services that have been provided by this hospital, the hospital is also required to provide health services according to standards. Standards are one that can be used as a reference while patient safety standards are a reference for hospitals in Indonesia in carrying out all their activities, in this case the process of health services. Every health service provider, especially hospitals must meet patient safety standards. These seven patient safety standards refer to the Hospital Patient Safety Standards issued by the Joint Commission On Accreditation Of Health Organizations Illinois, USA. One of them is patient safety and continuity of service (3).

Patient safety incidents are any unintentional events and conditions that result in or have the potential to result in preventable injury to patients (4). A patient is anyone who consults about health problems to obtain the necessary health services, either directly or indirectly from a doctor or dentist (5). As for other terms regarding patients, namely people who have physical or mental weaknesses submit supervision and care, receive and follow the treatment prescribed by health workers (6).

Inpatients are patients who are at risk of experiencing an unexpected event (KTD). Therefore, health services have an important role in providing nursing care to patients, thus ensuring patient safety and reducing Adverse Events (KTD) in hospitals (7). Health services that prioritize patient safety must be carried out evenly in all parts of the hospital. This includes inpatient rooms which are one of the locations for health services in hospitals with a high risk of medical injury and complications (8).

Based on Permenkes RI No 11 of 2017, Patient Safety is a system that makes patient care safer, including risk assessment, identification and management of patient risks, reporting and analysis of incidents, the ability to learn from incidents and their follow-up, as well as implementation of solutions to minimize risks. and preventing injuries caused by mistakes due to carrying out an action or not taking the action that should have been taken (4).

There are six patient safety goals in Indonesia, namely patient identification, increasing effective communication, increasing drug safety to watch out for, certainty of the right location, right procedure, right patient for surgery, reducing the risk of infection, and reducing the risk of patient falling. Patient Safety Goals (SKP) are indicators in the assessment of National Hospital Accreditation Standards (SNARS) and are developed based on standards in the Joint Commission International (9).

Patient safety goals are a requirement to be implemented in all hospitals accredited by the National Hospital Accreditation Standards (SNARS) as stated in Permenkes 1691/Menkes/Per/VIII/ 2011. The intent and purpose of Patient Safety Goals is to encourage hospitals to carry out specific improvements in patient safety. This goal highlights problematic areas of hospital care and describes the evidence and expert consensus solutions to these problems. A good system will have an impact on improving the quality of hospital services and patient safety (10).

The Joint Commission received reports of sentinel events with varying numbers, namely the number of incidents that started in 2018 had a total of 828 incidents, and increased in 2019 with a total of 910 incidents, then experienced a slight decrease in 2020 with a total of 809 incidents and finally in 2021 with a total of 1068 incidents. With reports in 2021 sentinel events, namely delays in treatment totaling 97 incidents, patient falls totaling 485 incidents, medication errors totaling 35 incidents, wrong-patient-wrong-procedure-procedure totaling 85 incidents, and surgical/postoperative complications totaling 97 incidents ( 11).

In the report of The National Patient Safety Agency (2021) in the period April - June 2021 the number of patient safety events reported from England was 2,109,057 events (12). Meanwhile, in neighboring Malaysia, the Ministry of Health Malaysia (Ministry Of Health Malaysia) recorded 2,769 incidents related to patient safety in a span of seven months (13).

Patient safety incident reports (IKP) in Indonesia up to April 2022 with an incident number of 9491 incidents. Among them, Sentinel Incidents with 1637 incidents, Near-Injury Events (KNC) with 1633 incidents and Non-Injury Events (KTC) with 1476 incidents. With the age group that experienced the highest incidence, namely 30 years - 65 years, there were 2241 incidents.

Based on previous research at RSU Mitra Medika Bandar Klippa, the results of reporting from the KPRS team in 2018 included 33 patient safety incidents including 5 KPC, 16 KNC, 9 KTC, and sentinel 0. Meanwhile, in 2019 there were 40 IKP reports consisting of 9 KPC, 10 KNC, 19 KTC, 2 KTD, and sentinel 0. In this case there was an increase in the number of IKP reporting, but in August 2019 the achievement of the timely reporting indicator was achieved at 0%. Based on these data it can be assumed that natural awareness of the value of patient safety is still lacking.

With the description above, the researchers aim to find out and analyze the incidence rate in inpatient units based on patient safety goals at Mitra Medika Bandar Klippa General Hospital in 2022 seen from 6 (six) elements of patient safety goals.

The formulation of the problem is how is the incidence rate in the inpatient unit based on patient safety goals at Mitra Medika Bandar Klippa General Hospital in 2022.

## 2. RESEARCH METHODE

The type of research used is quantitative. Quantitative is research that requires a lot of numbers, starting from data collection, interpretation of the data, and the appearance of the results (14). With a cross-sectional approach, cross-sectional is a type of research that emphasizes the time of measurement/observation of independent variable data and depends only once at a time. (15). The research location was conducted at Mitra Medika Bandar Klippa General Hospital which is located at Jl. Medan - Batang Quiz Dusun XI Emplasmen, Bandar Klippa, Kec. Percut Sei Tuan, Deli Serdang Regency, North Sumatra 20371. The research was conducted from December to September 2022.

The sampling technique for determining the sample in this study used a saturated sampling technique, the entire population was used as a research sample (16). The sample in this study were 80 nurses and midwives inpatient rooms at RSU Mitra Medika Bandar Klippa. Types and sources of data used are primary data, secondary data, tertiary data. The data analysis used was univariate, bivariate, and multivariate analysis. Data processing techniques in this study consisted of collecting, checking, coding, entering, data processing.

## 3. RESULT AND ANALYSIS

Distribution of respondents: Characteristics of respondents based on the age of the respondents, it can be seen from the number of 80 respondents as many as 61 respondents (76.3%) aged 20-30 years, 15 respondents (18.8%) aged 31-40 years, and 4 respondents (5.0%) aged > 40 years. Characteristics of the last respondent's education, can be seen from the number of 80 respondents who had DIII nursing education as many as 44 respondents (55.0%), DIII midwifery as many as 23 respondents (28.8%), DIV midwifery as many as 4 respondents (5.0%), S1 nursing as many as 6 respondents (7.5%) and Nurses as many as 3 respondents (3.8%). The

characteristics of the gender of the respondents, can be seen from the number of 80 respondents, there were 5 male respondents (6.3%) and 75 female respondents (93.8%). Characteristics of the respondents' tenure, can be seen from the number of 80 respondents as many as 18 respondents (22.5%) who have worked < 1 year, 31 respondents (38.8%) who have worked 1-2 years, 24 respondents (30, 0%) who have worked for 3-4 years and 7 respondents (8.8%) who have worked for > 4 years.

**Table 1. Distribution of Respondent Characteristics Based on Variables in the Inpatient Unit of RSU Mitra Medika Bandar Klippa Medan in 2022**

Variabel	Frekuensi	Persentase (%)
<i>Mengidentifikasi Pasien Dengan Benar</i>		
Ya	57	71,3
Tidak	23	28,8
<b>Total</b>	<b>80</b>	<b>100</b>
<i>Meningkatkan Komunikasi Yang Efektif</i>		
Ya	53	66,3
Tidak	27	33,8
<b>Total</b>	<b>80</b>	<b>100</b>
<i>Peningkatan Keamanan Obat Yang Perlu Diwaspadai</i>		
Ya	54	67,5
Tidak	26	32,5
<b>Total</b>	<b>80</b>	<b>100</b>
<i>Memastikan Lokasi Pembedahan Yang Benar, Prosedur Yang Benar, Pembedahan Pada Pasien Yang Benar</i>		
Ya	57	71,3
Tidak	23	28,8
<b>Total</b>	<b>80</b>	<b>100</b>
<i>Pengurangan Risiko Infeksi Terkait Pelayanan Kesehatan</i>		
Ya	57	72,5
Tidak	23	28,8
<b>Total</b>	<b>80</b>	<b>100</b>
<i>Mengurangi Risiko Pasien Cedera Akibat Jatuh</i>		
Ya	58	72,5
Tidak	22	27,5
<b>Total</b>	<b>80</b>	<b>100</b>
Tingkat Insiden Pada Rawat Inap		
Ya	49	61,3
Tidak	31	38,8
<b>Total</b>	<b>80</b>	<b>100</b>

Based on the table above, it can be seen that the variable identifying the patient correctly was known from 80 respondents with a Yes opinion of 57 people (71.3%), and No as many as 23 people (28.8%). Improving effective effective communication from 80 respondents with Yes opinion as many as 53 people (66.3%), and No as many as 27 people (33.8%). Increased drug safety that needs to be watched out for from 80 respondents with a Yes opinion of 54 people (67.5%), and No as many as 26 people (32.5%). Ensuring the correct location and surgical procedure in the patient from 80 respondents with a Yes opinion of 57 people (71.3%), and No as many as 23 people (28.8%). Reducing the risk of infection related to health services from 80 respondents with a Yes opinion of 57 people (71.3%), and No as many as 23 people (28.8%). Reducing the risk of patient injury due to falls from 80 respondents with a Yes opinion of 58 people (72.5%), and No as many as 22 people (27.5%). The incidence rate of hospitalization from 80 respondents with a Yes opinion was 49 people (61.3%), and No as many as 31 people (38.8%).

**Table 2. Variable Relationships Correctly Identifying Patients at the Inpatient Unit of RSU Mitra Medika Bandar Klippa Medan in 2022**

No	Variabel Identifikasi Pasien	Tingkat Insiden				Total		Asymp.Sig Sided
		Ya		Tidak		F	%	
		F	%	F	%			
1	Ya	45	56,2	12	15,0	57	71,2	0,000< $\alpha$
2	Tidak	4	5,0	19	23,8	23	28,8	0,05
<b>Jumlah</b>		<b>49</b>	<b>61,2</b>	<b>31</b>	<b>38,8</b>	<b>80</b>	<b>100</b>	

Based on the variable relationship table identifying patients correctly with the incidence rate at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022, it is known that of the 80 respondents to the variable correctly identifying patients with the Yes category, there were 57 (71.2%) respondents, with who voted yes 45 (56.2%) respondents and no 12 (15.0%) respondents. While the variable identifies the patient correctly with category No, namely as many as 23 (28.8%) respondents, with those who chose yes 4 (5.0%) respondents and no 19 (23.8%) respondents. From the results of the chi-square test there is a significant relationship between the variables identifying the patient correctly and the incidence rate with a p-value of  $0.000 < 0.05$ . This shows that there is a relationship between the variable identifying the patient correctly and the incidence rate at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022.

**Table 3. Variable Relationships to Increase Effective Communication in the Inpatient Unit of RSU Mitra Medika Bandar Klippa Medan in 2022**

No	Variabel Komunikasi Efektif	Tingkat Insiden				Total		Asymp.Sig Sided
		Ya		Tidak		F	%	
		F	%	F	%			
1	Ya	45	56,2	8	10,0	53	66,2	0,000< $\alpha$
2	Tidak	4	5,0	23	28,8	27	33,8	0,05
<b>Jumlah</b>		<b>49</b>	<b>61,2</b>	<b>31</b>	<b>38,8</b>	<b>80</b>	<b>100</b>	

Based on the variable relationship table increasing effective communication with incident rates at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022, it is known that out of 80 respondents to the variable increasing effective communication with the Yes category, there are 53 (66.2%) respondents, with who voted yes 45 (56.2%) respondents and no 8 (10.0%) respondents. While the variable increases effective communication with the No category, namely as many as 27 (33.8%) respondents, with those who chose yes 4 (5.0%) respondents and no 23 (28.8%) respondents. From the results of the chi-square test there is a significant relationship between the variables increasing effective communication with the incidence rate with a p-value of  $0.000 < 0.05$ . This shows that there is a relationship between the variable increasing effective communication and the incidence rate at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022.

**Table 4. Relationship between Variables for Increasing Drug Safety to Watch Out for with Levels Incidents at the Inpatient Unit of RSUD Mitra Medika Bandar Klippa Medan in 2022**

No	Variabel Peningkatan Keamanan Obat	Tingkat Insiden				Total		Asymp.Sig Sided
		Ya		Tidak		F	%	
		F	%	F	%			
1	Ya	43	53,8	11	13,8	54	67,5	0,000< $\alpha$ 0,05
2	Tidak	6	7,5	20	25,0	26	32,5	
<b>Jumlah</b>		<b>49</b>	<b>61,2</b>	<b>31</b>	<b>38,8</b>	<b>80</b>	<b>100</b>	

Based on the table of the relationship between the variable of increasing drug safety that needs to be watched out for and the incidence rate in the inpatient unit of RSUD Mitra Medika Bandar Klippa Medan in 2022, it is known that out of 80 respondents to the variable of increasing drug safety that needs to be watched out for in the Yes category, there are 54 (67.5%) respondents, with those who voted yes 43 (53.8%) respondents and no 11 (13.8%) respondents. While the variable for increasing drug safety that needs to be watched out for is in the No category, namely as many as 26 (32.5%) respondents, with those who chose yes 6 (7.5%) respondents and no 20 (25.0%) respondents. From the results of the chi-square test there is a significant relationship between the variables that need to be watched out for to increase drug safety and the incidence rate with a p-value of  $0.000 < 0.05$ . This shows that there is a relationship between the variables of increasing drug safety that need to be watched out for and the incidence rate at the inpatient unit of RSUD Mitra Medika Bandar Klippa Medan in 2022.

**Table 5. Variable Relationships Ensuring Locations and Surgical Procedures in Correct Patients with Incidence Rates in the Inpatient Unit of RSUD Mitra Medika Bandar Klippa Medan in 2022**

No	Variabel Memastikan Lokasi dan Prosedur Pembedahan Pada Pasien Yang Benar	Tingkat Insiden				Total		Asymp.Sig Sided
		Ya		Tidak		F	%	
		F	%	F	%			
1	Ya	45	56,2	12	15,0	57	71,2	0,000< $\alpha$ 0,05
2	Tidak	4	5,0	19	23,8	23	28,8	
<b>Jumlah</b>		<b>49</b>	<b>61,2</b>	<b>31</b>	<b>38,8</b>	<b>80</b>	<b>100</b>	

Based on the variable relationship table ensuring the correct location and surgical procedure for the patient with the incidence rate in the inpatient unit of RSUD Mitra Medika Bandar Klippa Medan in 2022, it is known that of the 80 respondents on the variable ensuring the correct location and surgical procedure for the correct patient with the Yes category, that is as many as 57 (71.2%) respondents, with those who voted yes 45 (56.2%) respondents and no 12 (15.0%) respondents. While the variable ensures the location and surgical procedure in the correct patient with the No category, namely as many as 23 (28.8%) respondents, with those who chose yes 4 (5.0%) respondents and no 19 (23.8%) respondents.

From the results of the chi-square test there is a significant relationship between the variables to ensure the location and surgical procedure in the correct patient with an incident rate with a p-value of  $0.000 < 0.05$ . This shows that there is a relationship between the variables of ensuring the location and surgical procedure in the correct patient and the incidence rate at the inpatient unit of RSUD Mitra Medika Bandar Klippa Medan in 2022.

**Table 6. The Relationship between Health Service-Related Infection Risk Reduction Variables and Incidence Rates in the Inpatient Unit of Mitra Medika RSU Bandar Klippa Medan Year 2022**

No	Variabel Pengurangan Risiko Infeksi Terkait Pelayanan Kesehatan	Tingkat Insiden				Total		Asymp.Sig Sided
		Ya		Tidak		F	%	
		F	%	F	%			
1	Ya	42	52,5	15	18,8	57	71,2	0,001< $\alpha$ 0,05
2	Tidak	7	8,8	16	20,0	23	28,8	
<b>Jumlah</b>		<b>49</b>	<b>61,2</b>	<b>31</b>	<b>38,8</b>	<b>80</b>	<b>100</b>	

Based on the table of the relationship between the variable for reducing the risk of infection related to health services and the incidence rate at the inpatient unit at RSU Mitra Medika Bandar Klippa Medan in 2022, it is known that out of 80 respondents to the variable reducing the risk of infection related to health services in the Yes category, there were 57 (71.2%) respondents, with those who voted yes 42 (52.5%) respondents and no 15 (18.8%) respondents. Meanwhile, the infection risk reduction variable related to health services is in the No category, namely as many as 23 (28.8%) respondents, with 7 (8.8%) respondents choosing yes and 16 (20.0%) respondents choosing not. From the results of the chi-square test there is a significant relationship between the variable of reducing the risk of infection related to health services and the incidence rate with a p-value of 0.001 < 0.05. This shows that there is a relationship between the variable risk reduction of infection related to health services and the incidence rate in the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022.

**Table 7. Relationship of Variables Reducing Patient Risk of Injury Due to Falls with Incident Rates at the Inpatient Unit of RSU Mitra Medika Bandar Klippa Medan in 2022**

No	Variabel Mengurangi Risiko Pasien Cedera Akibat Jatuh	Tingkat Insiden				Total		Asymp.Sig Sided
		Ya		Tidak		F	%	
		F	%	F	%			
1	Ya	45	56,2	13	16,2	58	72,5	0,000< $\alpha$ 0,05
2	Tidak	4	5,0	18	22,5	22	27,5	
<b>Jumlah</b>		<b>49</b>	<b>61,2</b>	<b>31</b>	<b>38,8</b>	<b>80</b>	<b>100</b>	

Based on the table of the relationship between the variables reducing the risk of patient injuries due to falls with the incidence rate at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022, it is known that of the 80 respondents on the variable reducing the risk of patient injuries due to falls with the Yes category, that is as many as 58 (72.5%) respondents, with those who voted yes 45 (56.2%) respondents and no 13 (16.2%) respondents. While the variable reduces the patient's risk of injury due to falls in the No category, namely as many as 22 (27.5%) respondents, with who voted yes 4 (5.0%) respondents and no 18 (22.5%) respondents. From the results of the chi-square test there is a significant relationship between the variables reducing the risk of patient injury due to falls with the incidence rate with a p-value of 0.000 < 0.05. This shows that there is a relationship between the variable reducing the risk of patient injury due to falls and the incidence rate at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022.

**Table 8. Variable Candidate Results**

Variabel	Sig-p
Correctly identify patients	0,000
Increase effective communication	0,000
Increasing drug safety needs to be watched out for	0,000
Ensure the correct location and surgical procedure on the patient	0,000
Reducing the risk of health care-associated infection	0,001
Reducing the risk of patient injury from falls	0,000

The step taken in the logistic regression analysis is to select the variables to be included in the multivariate analysis. Variables included in the multivariate analysis are variables that in the analysis have a sig p value  $<0.25$  (17). Based on the results in table 4.15, it shows that the variables are identifying the patient correctly, increasing effective communication, increasing drug safety to watch out for, ensuring the correct location and surgical procedure for the patient, reducing the risk of infection related to health services, reducing the risk of patient injury due to falls are variables that selected to be included in the multivariate because it has a sig p value  $<0.25$ .

**Table 9. Logistic Regression Test Step 1, Step 2, Step 3**

	Variabel	B	Sig.	Exp(B)
Step 1 <sup>a</sup>	Correctly identify patients	4,516	0,003	91,496
	Increase effective communication	3,319	0,045	27,629
	Increasing drug safety needs to be watched out for	2,179	0,053	8,840
	Ensure the correct location and surgical procedure on the patient	1,459	0,444	2,941
	Reducing the risk of health care-associated infection	1,459	0,165	4,304
	Reducing the risk of patient injury from falls	2,896	0,16	18,105
	<i>Constant</i>	-24,239	0,001	0,000
Step 2 <sup>a</sup>	Correctly identify patients	4,546		94,121
	Increase effective communication	4,071	0,003	56,610
	Increasing drug safety needs to be watched out for	1,878	0,004	6,538
	Reducing the risk of health care-associated infection	1,437	0,166	4,208
	Reducing the risk of patient injury from falls	2,908	0,012	18,323
	<i>Constant</i>	-23,356	0,000	0,000
Step 3 <sup>a</sup>	Correctly identify patients	4,337	0,002	76,504
	Increase effective communication	4,126	0,002	61,950
	Increasing drug safety needs to be watched out for	1,950	0,046	7,030
	Reducing the risk of patient injury from falls	2,498	0,016	12,155
	<i>Constant</i>	-20,489	0,000	0,000

Based on the table above the logistic regression test step 1, step 2 and step 3, the independent variable (independent) which has a significant effect on the dependent variable, namely the variable identifying the patient correctly has a sig-p value of 0.002  $<0.05$ , increasing effective communication has a sig-p value of 0.002  $<0.05$ , increasing drug safety needs to be watched out for has a sig-p value of 0.046  $<0.05$ , reducing the risk of patient injury due to falls has a sig-p value of 0.016, ensuring the location and surgical procedure in the patient those that were correct had a sig-p value of 0.444  $>0.05$ , reduced risk of infection related to health services had a sig-p value of 0.166  $>0.05$ .



Thus, the final test results of the step 3 logistic regression test show that the factors of identifying patients correctly, increasing effective communication, increasing drug safety need to be watched out for, reducing the risk of patient injury due to falls have a significant effect on the incidence rate in the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022, while the factors of ensuring the location and surgical procedures in the correct patient and reducing the risk of infection related to health services do not have a significant effect on the incidence rate in the inpatient unit of RSU Mitra Medika Bandar Klippa Medan in 2022.

## DISCUSSION

### **Correctly Identifying Patients:**

Patient identification errors can occur in all diagnoses and procedures. The identification process requires at least two or three forms of identification such as the patient's name, date of birth, and identification number. Correct patient identification is the first step in implementing patient safety goals. Errors in identifying patients can cause injury to patients (18).

Accuracy in identifying patients aims to minimize the occurrence of identification errors which can result in wrong patients, wrong actions or procedures given when patients receive medical services at the hospital. The implementation of patient identification also aims to minimize the potential for medical malpractice and several other risks that can occur to patients. Patient identification is something that must be met and is an important goal in patient safety. This is because it is inconceivable that medical staff, nurses or doctors make medication errors and medical procedures on patients who don't really need that action.

Misidentification of patients can lead to minor, moderate medical injuries or even loss of life. So, this goal is very important to fulfill (3). The dual purpose of this goal is first, to reliably identify patients as individuals who are intended to receive services or treatment; and second, to match the service or treatment to that individual. Policies and/or procedures that are collaboratively developed to improve the identification process, in particular the process used to identify patients when administering drugs, blood or blood products; taking blood and other specimens for clinical examination; or provide treatment or other actions (4).

Based on the results of the research, the variables identifying patients correctly have an influence on the incidence rate in the inpatient unit of RSU Mitra Medika Bandar Klippa Medan. The results of the researcher's interview with the PMPK (Quality Improvement and Patient Safety) section with incidents that occurred in the range of January - July included drug administration errors and electrolyte administration errors to patients by the DPJP (Patients in Charge) of 3 (three) incidents due to excess previously did not identify the patient correctly or did not double check the patient.

The results of this study are also in line with research conducted by Savitri Citra Budi, et al in 2020 concerning Patient Identification Errors Based on Patient Safety Goals in patient safety incidents Mismatched drug administration identity with a p-value of 2.05% or  $0.02 < 0.05$  thus indicating that there is a relationship between patient identification errors and incident rates on patient safety goals in hospitalization (6).

**Effective Communication:** The implementation of effective communication improvement which is one of the points in patient safety goals has not fully run optimally in several hospitals. Officer compliance factor is a factor that often causes the implementation of this target is not optimal. Not reconfirming the order and not writing down the order given is a problem that often occurs in the implementation of this target. Commands that are not reconfirmed can have the

opportunity for misperceptions to occur in understanding orders. In addition, not writing down the command can cause the command to be forgotten because it is not recorded. Therefore, a health service facility must be able to develop several strategies to increase the effectiveness of communication between nurses and doctors (18).

Effective communication, which is timely, accurate, complete, clear, and understood by the recipient, will reduce errors, and result in increased patient safety. Communication can be electronic, verbal, or written. Communication that is most prone to errors is orders given verbally and those given by telephone, if permitted by law. Another communication that is prone to errors is the reporting back of critical examination results, such as a clinical laboratory calling the patient care unit to report the results of the examination immediately/cito (4).

Based on the research results, the variable increasing effective communication has an influence on the incidence rate in the inpatient unit of **RSU Mitra Medika Bandar Klippa**. With the data obtained by researchers with incidents of drug administration errors to different patients or patients swapped from this incident there was no explanation of the drug to the patient so that it was consumed but did not cause injury and late reporting and no written evidence of drug handover.

The results of this study are also in line with research conducted by Savitri Citra Budi, et al regarding Variation of Incidents Based on Patient Safety Goals in Hospitals with effective patient safety goals of 11 (eleven) incidents including communication errors between nurses and laboratory staff or other units 3 (three) incidents with a percentage of 2.17% or p-value  $0.0217 < 0.05$  (6).

Increasing drug safety that needs to be watched out for: Increasing drug safety that needs to be watched out for, that is, if any drug is used incorrectly, it can endanger the patient, even the danger can cause death or disability of the patient, especially drugs that need to be watched out for. Drugs with the title of needing to watch out for are a class of drugs that have a high risk that can harm the patient if there is an error in their use. For example, electrolyte concentrates and drugs that look similar in name, appearance, and pronunciation (**Look Alike Sound Alike/Similar Speech Drug Names**). Therefore, high-alert drugs require special treatment which is usually different from other types of drugs. High-alert drugs are a type of drug that has a high risk of causing significant injury to the patient if not used correctly (18).

In addition to receiving health services in the form of action and treatment, a number of patients will not be separated from drug administration. What is important for medical staff to pay attention to is caution if the patient's treatment plan also requires the consumption of drugs. So in patient safety management, hospitals must develop an approach to improve drug safety that must be watched out for. If drugs are part of the patient's treatment plan, then the application of the correct management is important/crucial to ensure patient safety (3).

Based on the results of the study, the variable that needs to be watched out for is the variable that needs to be watched out for, which has an influence on the incidence rate in the inpatient unit of **RSU Mitra Medika Bandar Klippa**. In this variable, the drugs that need to be watched out for are drugs that have an increased risk if we use them incorrectly and can cause great harm to the patient. In line with the data obtained by researchers that there were incidents related to effective communication, namely drug administration errors caused by communication errors between senior staff and junior staff in hospitalization, resulting in patients experiencing Unexpected Events (**KTD**) where patients experience nausea, vomiting and loss of appetite. eat after consuming 20 pills that were wrongly given. Then, drug administration errors were due to communication errors between the nurse and the pharmacy department and the absence of an **SPO** (Standard Operating

Procedure) regarding medication taking education and medication taking operands so that nurses were no longer allowed to take medication back to the pharmacy.

The results of this study are also in line with research conducted by Savitri Citra Budi, et al. about Variation of Incidents Based on Patient Safety Targets in Hospitals to increase drug safety that needs to be watched out for as many as 57 (fifty seven) incidents with inappropriate drug delivery percentage of 1.45% or p-value  $0.0145 < 0.05(6)$ .

Ensuring the Correct Location and Surgical Procedure for the Patient : Wrong location, wrong procedure and wrong patient surgery are alarming events and can happen in a hospital. Of course, this error stems from many factors. This could be due to the lack of effective communication between the medical team, the absence of reviewing medical records, not involving the patient in marking the location and the absence of procedures to verify the surgical site to be operated on (site marking), the use of abbreviations for action instructions or problems related to illegible handwriting. Hospitals also need to implement preoperative verification, especially in operating procedures in all cases. Marking the location of the operation must also exist until the operation is to be carried out and made by the operating team or the person who will carry out the medical procedure. Surgical site marking was performed in all cases including sides (laterality), multiple structures (fingers, toes, lesions) or multivel levels (spine) (3).

Pre-operative verification is also important with a number of steps including verifying the correct location, procedure and patient, ensuring all documents and photos are displayed and relevant and verifying the availability of the tools needed in the procedure before carrying out the operation. Do not let, when you are in the middle of or having performed an operation, in the middle of the road it is discovered that the patient has been switched, made the mistake or there has been another error. Because, it is certainly fatal. It should not also happen that in the middle of the operation it turns out that the marking of the operation location is wrong, the tools and operational needs are not available or other errors. Hospitals should also implement a stage before incision (time out) where at that stage it is possible for all questions or errors to be resolved. Time out is done at the place where the action will be carried out, right before starting the action which involves the entire operation team. For example, this policy is realized by having a pre-operation checklist that must be identified and checked one by one in an operations team before the operation is carried out (3).

Proper procedure, that is, all the necessary documentation and equipment are ready, before the patient is taken to the operating room, the officer should re-check the patient's readiness, for example, vital signs, administering preoperative medication, preparing blood transfusions if needed and other preparations according to the doctor's and nurse's instructions in charge of recording sign-in, time-out, and sign-out procedures. The right patient, that is, the first time he enters the operating room, the officer first confirms patient data and the type of operation to be performed on the patient according to the check list sheet (18).

Based on the results of the research, the variables ensure that the location and surgical procedures in patients correctly have no effect on the incidence rate at the inpatient unit of RSU Mitra Medika Bandar Klippa Medan. In this variable, the Hospital collaboratively develops a policy or procedure that is effective in minimizing risks that can endanger patient safety and with a percentage of 100% compliance.

The results of this study are also in line with the research conducted by Annisa Isti Haritsa and Yasir Haskas regarding Evaluation of the Implementation of Patient Safety at the General Hospital in the Laburan Baji Makassar Region with the implementation of patient safety showing that the accuracy of the location, the right procedure, and the right patient surgery have been carried out.

carried out well, it is known that the respondents (100%) have done the right location, the right procedure, and the right patient operation properly (19).

**Healthcare-associated infection risk reduction:** Health-care-associated infection risk reduction is the prevention or control of infection in a hospital setting. In general, infections related to health services in all service units including the urinary tract are caused by catheters, infections of vessels or bloodstream related to infusions both peripherally and centrally, and lung infections related to the use of ventilators. Efforts and infection control are the biggest challenges in the health care setting. This is because infections are usually found in all forms of health care (3).

Prevention efforts that can be done to reduce the risk of infection in the hospital is to apply good hand hygiene. The application of good hand hygiene can prevent the transmission of infection from patients to officers and from officers to patients. Implementation of hand hygiene by washing hands can be done in two ways, namely with soap or with handrub (Dewi, Arso and Fatmasari) and Sithi and Widyastuti's research states that the application of reducing the risk of infection due to suboptimal health services can have a high risk of incidents of patient safety (18).

Based on the results of the research, the variable of reducing the risk of infection related to health services has no effect. In this variable, the most important effort to eliminate infection is to maintain hand hygiene through hand washing with complete handrub (antiseptic liquid) and hand wash (antiseptic soap) facilities at the hospital. The researchers conducted interviews with the head of nursing as well as the patient safety target handling section (SKP) at the Hospital that every nurse, doctor or other medical staff had carried out the stages of washing hands properly and was in accordance with the five moments which included before contact with the patient, before aseptic measures, after being exposed to the patient's body fluids, after contact with the patient, after contact with the environment around the patient and the six stages of hand washing.

The results of this study are also in line with research conducted by Setyani, et al regarding the Implementation of Patient Safety Goals in the Inpatient Room of RSU Tangerang Regency. ).

**Reducing the Patient's Risk of Injury Due to Falls:** Patients who are injured due to falls are caused by various factors such as the patient's condition, the patient's functional disorders such as balance disorders, visual disturbances, location or situation in the hospital environment, and the patient's history of falls. Fall risk assessment is the first step in efforts to minimize the risk of injury from falling patients. The assessment is carried out in the form of an assessment at the time the patient enters and when there is a change in clinical status, in order to identify and predict the patient's risk for falling. By knowing the risk of falling, health workers can take action in the form of prevention and appropriate management of patients at risk of falling. Patient falls are a common cause of harm that occurs while receiving treatment at the hospital. The sixth goal in this patient safety goal aims to reduce the risk of incident falls that cause patient injury. Reducing this risk by conducting an assessment of a patient falling. Assessment can be done in two ways according to the category, namely, the Moorse scale for adult patients and the humpty dumpty for pediatric patients (18).

Based on the research results, the variable reducing the risk of patient injury due to falls has an influence on the incidence rate in the inpatient unit of RSU Mitra Medika Bandar Klippa Medan. In this variable, the Hospital creates a program to reduce patient falls which includes risk management and periodic reassessment of the patient population or the environment where services and care are provided. As for incidents of patients falling from the bed resulting in moderate injuries or classified as unexpected events (KTD), where there is no sign of risk of falling on the patient's bed and the nurses do not understand about the patient's risk of falling and communication between patients and nurses is not well established.

The results of this study are also in line with research conducted by Savitri Citra Budi, et al regarding Incident Variation Based on Patient Safety Goals in Hospitals with the goal of patient safety reducing the risk of patient injury due to falls with 6 (six) incident variations. The variation in the incidence of patients falling from the bed with a p-value percentage of 2.17% (0.0217) <0.05 (6).

#### 4. CONCLUSION

Based on the results of research on Incidence Rate Analysis in Hospitalization Based on Patient Safety Goals at Bandar Klippa General Hospital in 2022 it can be concluded that there is an influence between variables identifying patients correctly with a sig-p value of 0.002 <0.05, increasing effective communication with a value sig-p 0.002 < 0.05. increasing drug safety needs to be watched out for with a sig-p value of 0.046 < 0.05, reducing the risk of patient injury due to falls with a sig-p value of 0.016 > 0.05 and there is no influence between variables ensuring the location and surgical procedure in the correct patient with a sig value -p 0.444 > 0.05 and there is no effect between the variable reducing the risk of infection related to health services with a sig-p value of 0.166 > 0.05 on the incidence rate in the inpatient unit of RSU Mitra Medika Bandar Klippa in 2022. The effect between the patient safety target variables identify patients correctly, improve effective communication, increase drug safety needs to be aware of, ensure the location and surgical procedures in the correct patient, reduce the risk of infection related to health services, reduce the risk of patient injury due to falls, where the strongest influence on the incidence rate in hospitalization hospitalization at RSU Mitra Medika Bandar Klippa in 2022 is the variable of identifying patients correctly and increasing effective communication on the results of a sig p-value of 0.002 < 0.05

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