



IMPLEMENTATION OF TIME OUT PROCEDURE TO REDUCE OPERATION SIDE IDENTIFICATION ERRORS AT ST ELISABETH HOSPITAL BEKASI

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Abstract

In response to this, WHO has launched a global movement to promote safe surgery, which gave birth to the surgical safety checklist. The use of this checklist has been shown to reduce mortality by 50% and reduce complications from 11% to 7%. Objective the effect of the Implementation of Time Out Procedure on Reducing Errors in Identification of the Surgical Site at St. Elisabeth Hospital, Bekasi Research Method cross-sectional research method, with data analysis carried out univariately and bivariately with the chi square test. Research Results: Description of the results of the characteristics of respondents based on age, the most are in patients who underwent with the age of 46-55 years, the most gender is in patients who underwent surgery, the female gender is 36 respondents (56.2%), the most type of surgery in patients with major surgery is 41 respondents (64%). Based on the results of the chi square statistical test in this study, the results of the p-value were $0.000 < 0.05$ H_0 was rejected and H_a was accepted, meaning that there was a significant relationship between the Time Out Procedure operation and the occurrence of errors in identifying the side of the operation in the surgical room of St. Elisabeth Hospital, Bekasi in 2025. Conclusion there is an influence between Time Out Procedure surgery and the incident of error opening the surgical side in the ST Elisabeth Bekasi Hospital surgical room with a p-value of 0.000

Keywords: *Time Out Procedure, Errors in Identification of the Surgical Site, Surgery, Age, Gender, Patient Safety, procedures surgical, experience Adverse Events (KTD), Near Miss Events (KNC)*

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INTRODUCTIO

Surgery or operation is an action to handle emergency cases in hospitals, surgery carries out invasive medical treatment through incisions to open or display the body part to be treated and ends with closing and suturing the wound, but in surgery it will trigger anxiety problems in patients before facing surgery (Lutfianti, 2022).

Surgical procedures must always pay attention to patient safety, patient readiness, and the procedures to be carried out, considering the high risk of accidents if they do not follow the established operational standards (Gunawan, 2020). Although the operating room team does not intend to harm the patient, data shows that some patients experience Adverse Events (KTD), Near Miss Events (KNC), or sentinel events, which are KTDs that are fatal or cause serious injury, Therefore, a program is needed to improve patient care and safety (Ministry of Health, 2021). In response to this, WHO has launched a global movement to promote safe surgery, which gave birth to the surgical safety checklist. Use of this checklist has been shown to reduce mortality by 50% and reduce complications from 11% to 7% (WHO, 2022). According to WHO, the number of clients undergoing surgery has increased significantly every year. It is estimated that 165 million surgical procedures are performed worldwide every year. It was recorded that in 2020 there were 234 million clients in all hospitals in the world. In Asia itself, especially in Singapore, the number of surgeries received 3 million surgical patients each year (WHO, 2022).

Surgical procedures in Indonesia in 2020 reached 1.2 million people with the highest province in DKI Jakarta at 14.9%. Based on data from the Indonesian Ministry of Health, surgical procedures are ranked 11th out of 50 disease treatments in Indonesia, 32% of which are elective surgical procedures. The disease pattern in Indonesia is estimated to be 32% major surgery with patient safety incidents before the surgical safety checklist was implemented, a number of cases were found such as Near Injury Incidents (KNC) of 47.6%, Adverse Events (KTD) 46.2%. According to the KKPRS, DKI Jakarta province ranks highest at 37.9%, Central Java 15.9%, Yogyakarta 13.8%, East Java 11.7%, Aceh 10.7%, South Sumatra 6.9%, West Java 2.8%, Bali 1.4% (Ministry of Health, 2021). Patient identification is important to distinguish one patient from another,

in order to prevent errors that can have fatal consequences for patient safety when administering drugs, blood transfusions, clinical examinations, operations, and other medical procedures. Therefore, an accurate and efficient patient identification process is needed to avoid complications due to surgical site identification errors (Gunawan, 2020). Surgical site infection complications are one of the most common complications, ranking second after urinary tract infections, and can cause additional costs for hospitalization. A study in the UK involving 715 patients showed that 80 of them experienced surgical site infections after undergoing cesarean section, WHO estimates that the impact of surgical interventions on the public health system will continue to increase. Therefore, WHO has launched an initiative to improve safety in surgical procedures. From January 2007 to 2024, a special body for patient safety has been established, and WHO identified three important phases in the surgical process: before induction of anesthesia (sign in), before skin incision (time out), and before the patient leaves the operating room (sign out) (WHO, 2022).

ST Elisabeth Hospital Bekasi implements the second phase of the Surgical Safety Checklist, namely Time Out, which is carried out in the operating room after the patient receives anesthesia, be it General Anesthesia (GA), Regional Anesthesia (RA), or Local Anesthesia, before the incision is made by the doctor. At this stage, there is a principle of "No Time Out No Scalpel," which means that the doctor is not allowed to make a surgical incision before the Time Out phase is completely implemented.

In the explanation of GAP in this study, many have researched the Surgical Safety Checklist but only researched in general, namely only about compliance in filling it out, general factors of health workers and there are still few studies that specifically measure the outcome of surgical errors so that researchers conducted this study which is more to measure the outcome of surgical errors. From the preliminary study data that has been conducted by the researcher, there were a total of 114 operations at ST Elisabeth Hospital in January, 107 operations in February, and 90 operations in March. From the overall data of the operation, 100% of the operating team carried out Time Out according to the Surgical Safety Checklist, but not according to the SOP (Standard Operating Procedure) such as the surgical safety checklist sheet was not filled in and the team was

not complete so that it could later cause the operation time out not to be carried out according to the procedure which would result in patient identification errors. Therefore, from the data above, the researcher is interested in conducting a study entitled "Implementation of Time Out Procedure on Reducing Identification Errors on the Surgical Side at St Elisabeth Hospital Bekasi"

METHODS

The type of research used is quantitative research with a correlational descriptive research design using analytical methods with a *cross sectional approach*, namely research to determine the dynamics of the correlation between risk factors and effects, by approaching, observing or collecting data at one time (point time). approaches). This means that each research subject is only observed once and measurements are made on the character status or variables of the examination subject (Notoatmodjo, 2018). The data collection procedure in this study consists of 3 steps, namely the research preparation stage, the research administration stage and the research implementation stage. This procedure stage will later use SPSS as a data processing tool.

RESULT

Frequency Distribution of Respondent Characteristics Based on Age in Patients Undergoing Surgery

Age	Frequency	Persentase (%)
17-25 tahun	4	6,2
26-35 tahun	22	34,3
36-45 tahun	12	18,7
46-55 tahun	18	40,8
Total	64	100,0

Based on the results of the study table 5.1. the results of the characteristics of respondents based on age, the largest number is in patients undergoing treatment aged 46-55 years.

Frequency Distribution of Respondent Characteristics Based on Gender in Patients Undergoing Surgery

Gender	Frequency	Persentase (%)
Boy	28	43,8
Girl	36	56,2
Total	64	100,0

Based on the results of the study table 5.2. the results of the characteristics of respondents based on gender, the largest number of patients undergoing surgery were female, namely 36 respondents (56.2%).

Frequency Distribution of Respondent Characteristics Based on Type of Operation at St Elisabeth Hospital Bekasi

Type of Operation	Frequency	Persentase (%)
Mayor	41	64,0
Minor	23	36,0
Total	64	100,0

The results of the characteristics of respondents in Chronic Kidney Failure patients who underwent hemodialysis therapy were mostly in patients who had undergone hemodialysis for >2 years, namely 19 respondents (54.3%)

Frequency Distribution of Time Out Procedure Images in the Surgical Room of St. Elisabeth Hospital, Bekasi

Time Out Procedure Images in the Surgical Room	Frequency	(%)
Done	64	100,0
Are Not Done	0	0,0
Total	64	100,0

Of the 35 respondents, the most research was conducted on respondents who adhered to surgery treatment, namely 34 respondents (97.2%).obtained data from 64 respondents who underwent Time Out Procedure surgery at ST Elisabeth Hospital Bekasi.

Distribution of Operation Site Identification Error Images in the Operating Room of St. Elisabeth Hospital, Bekasi

Operation Site Identification Error Images	Frequency	Persentase (%)
Yes	0,0	0,0
Not	64	100,0
Total	64	100,0

Based on the results of the study in table 5.5. of the 64 respondents who underwent surgery, all the procedures carried out did not result in any errors in identifying the operating site, namely 64 (100%).

Relationship between Time Out Procedure and Operation Side Identification Error Events

Time Out Procedure	Operation Site Identification Error Images						P-value
	Yes		Not		Total		
	F	%	F	%	F	%	
Done	0	0	0	0	0	0	0,00
Are Not Done	0	0	64	0	4	0	
Jumlah	0	0	0	0,0	0	0,0	

Based on the results of the study table 5.6. obtained data from 64 respondents who underwent Time Out Procedure surgery, all surgical patients did not experience an error in identifying the operating side, namely 64 respondents (100%), and there were no incidents due to errors in identifying the operating side at St. Elisabeth Hospital, Bekasi. Based on the results of the chi square statistical test in this study, the p-value was 0.000 <0.05 H0 was rejected and Ha was accepted, meaning that there was a significant relationship between Time Out Procedure surgery and the occurrence of errors in identifying the operating side in the operating room at St. Elisabeth Hospital, Bekasi in 2025.

Discussion

Based on the results of the study, data was obtained from 64 respondents who underwent Time Out Procedure surgery, all surgical patients did not experience an error in identifying the operating side, namely 64 respondents (100%), and there were no incidents due to errors in identifying the operating side at St. Elisabeth Hospital, Bekasi. Based on the results of the chi square statistical test in this study, the p-value was 0.000 <0.05 H0 was rejected and Ha was accepted, meaning that there was a significant relationship between Time Out Procedure surgery and the occurrence of errors in identifying the operating side in the operating room at St. Elisabeth Hospital, Bekasi in 2025.

This study is in line with research conducted by Rusdiana (2023) which states that there is a significant influence between patient safety culture and the implementation of surgical

safety checklists at the Sultan Agung Islamic Hospital, Semarang with a p-value of 0.000.

This study is in line with the study conducted by Dewi (2022) on the relationship between the implementation of the surgical safety checklist (SSC) and the safety of surgical patients that the completeness of the completion of the SSC in its three phases can reduce the readmission rate and reoperation of post-operative patients, from 4 other studies it was stated that the patient's LOS decreased by 0.6-1 day after the implementation of the SSC, and from 4 studies it was stated that the number of post-operative complications also decreased after the implementation of the SSC.

The results of this study are slightly different from the study conducted by Sulisty (2024) which stated that at Dirgahayu Hospital Samarinda, even though the surgical safety checklist had been filled in, there was still one near-injury incident in the operating room per year. This raises doubts about the effectiveness of filling in the surgical safety checklist.

Compliance of the surgical team, including nurses, in implementing time-outs is very important for patient safety. The quality of good team service can be measured through various indicators, one of which is compliance in implementing the surgical safety checklist, including the time-out process (Suryathi et al., 2021).

According to the researcher's opinion, implementing a time-out procedure before surgery can reduce the risk of errors in identifying the surgical site. This procedure ensures that all members of the surgical team verify the patient's identity, the surgical site, and the procedure to be performed. Therefore, it is recommended for hospitals to conduct routine audits of surgical procedures and the results can help identify areas that need improvement. Periodic evaluation of safety practices can provide valuable insights to improve the process.

CONCLUSION

Description of the characteristics of patients undergoing surgery in the surgical room of St. Elisabeth Bekasi, the age of the majority is patients aged 46-55 years, with the gender of the majority being women and the type of surgery that is the most, namely patients undergoing major surgery, from the overall results there were no errors in marking the location of surgery and time out was always carried out, then from the study There is an

influence between the surgical Time Out Procedure on the incident of surgical side identification errors in the surgical room at St Elisabeth Bekasi Hospital with a p-value of 0.000

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