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SURGICAL TEAM COMMUNICATION AND COMPLIANCE IN IMPLEMENTING SURGICAL SAFETY CHECKLIST

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ABSTRACT

Poor team communication is the most common cause of side effects in all aspects of health care. Non-compliance with the implementation of the surgical safety checklist is a form of poor team communication that can cause harm to patient safety. The purpose of this study was to determine the relationship between surgical team communication and compliance with the implementation of the surgical safety checklist. The research design used was a correlative analytical study with a cross- sectional approach with a total sampling technique with 42 respondents. The statistical test used in this study was the Spearman rank. The results showed that almost all respondents had good communication, and almost all respondents were compliant in implementing the SSC filling. From the results of the statistical test using Spearman's rank analysis H_1 was accepted, which means that there is a relationship between surgical team communication and compliance with the implementation of the surgical safety checklist. The results of this study can be input if the team communication support is good, then compliance in the implementation of SSC filling will also increase. It is expected that IBS nurses can improve team communication by complying with the implementation of SSC filling.

Keywords: Communication; Compliance; Surgical Safety Checklist

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Introduction

One of the services provided by the hospital is surgery. Providing surgical services that must be important and absolutely considered is patient safety. The World Health Organization (WHO) explains that the surgical safety checklist (SSC) in the operating room is used through three stages, each according to the time flow, namely before induction of anesthesia (sign In), before incision (time Out), and before removing the patient from the operating room (Sign Out). It is a practical and simple communication tool in ensuring patient safety in the preoperative, intraoperative and postoperative stages. In general, in the implementation of filling out the surgical safety checklist (SSC) there are several obstacles so that it cannot be implemented properly such as work stress and workload.

Translated with DeepL.com (free version)Surgery or surgery is a treatment that uses invasive techniques. This invasive technique is a technique of opening or displaying the body part to be treated through an incision that ends with wound closure and suturing (Talindong & Minarsih, 2020). Surgical Safety Checklist is a checklist to provide safe and quality surgery to patients. Safety & compliance, Surgical Safety Checklist is a communication tool, encouraging teamwork for patient safety used by a team of professionals in the operating room to improve quality and reduce deaths and complications due to surgery, and requires a common perception between surgeons, anesthesiologists and nurses (WHO, 2018).

The use of and adherence to surgical safety checklists results in reduced post-surgical mortality and morbidity. The use of surgical safety checklists resulted in a 47% reduction in mortality and a 36% reduction in morbidity post-surgery (Weiser & Haynes, 2018, Clack et al., 2019). According to research by Efa Trisna, (2016) as an effort in patient safety services in the operating room by applying the Surgical Safety checklist which is used as a form of communication in Indonesia, the phenomenon related to surgical treatment is gauze sticking to the muscles and bones that Parjo experienced at the Remen Waras hospital, besides that there is also a leg amputation process at the prime hospital, this is due to the lack of verbal communication carried out by members of the surgical team, towards the application of the Surgical Safety checklist and compliance in filling and documenting the Surgical Safety checklist in the surgical installation room. A risk of death due to major complications in hospitals is 3% to 22% occurring in admitted patients, 36%-54% are surgery related. .

In preliminary research conducted at the Central Surgical Installation of RSUD dr. Soeroto Ngawi in October 2024 showed that the compliance of the surgical team in filling out the Surgical safety checklist was not entirely good. It is known that in 2024 the compliance rate for filling out the surgical safety checklist from January to June 2024 was between 76.56% and 84.38%. This is still below the standard of 100%. Patient safety is much more important than just service efficiency. Nurses' behaviors and skills play an important role in the implementation of patient safety. Unsafe behavior, forgetfulness, lack of attention/motivation, carelessness, carelessness and skills that do not care about and maintain patient safety are at risk for errors and will result in patient injury, in the form of Near Miss (KNC) or Adverse Event (KTD), further reduction of errors can be achieved by modifying behavior (Lombogia, Rottie, & Karundeng, 2018).

Based on the IKP report of the Central Surgical Installation at RSUD Dr. Soeroto Ngawi in the vulnerable months of January to June 2024, 9 incidents of KNC, 6 incidents of KTC, 3 incidents of KTD were reported. So in a period of 6 months, 18 incidents were reported. Errors that often occur in the surgical room of RSUD Dr. Soeroto Ngawi are the marking of the surgical site that has not been done, drugs that have not been inserted, the patient has not been attached to the restraint, preoperative that has not been done optimally and the expansion of the incision due to ineffective communication between members of the surgical team. Poor communication is the most common cause of adverse events in all aspects of healthcare, leading to problems in patient identification, medication and transfusion errors and overlooked allergies, wrong surgical procedures, wrong side of the surgical site, all of which have the potential to lead to patient safety

incidents and can be prevented by improving communication (Ulva, 2017).

Initial data obtained by researchers from RSUD Dr. Soeroto Ngawi above still found the incidence of unexpected events after the implementation of the surgical safety checklist. Then from the results of interviews with the Head of the room in the central surgical installation said that the surgical team was only 80% compliant with filling out the Surgical safety checklist. This can be seen from the surgical team of 42 people consisting of 16 surgeons and 15 surgical nurses, 2 anesthesiologists and 9 anesthesiologist nurses, during surgery there are points that are not done such as in the time out phase the surgical team does not introduce themselves verbally, the surgical team does not review the patient verbally and the surgical safety checklist sheet which should be filled in by the circular when durente surgery but there are several circulars who fill in before surgery, after surgery is complete, or not filled in at all. From the explanation above, it can be concluded that the Surgical safety Cheklist is an effective communication tool that aims to improve patient safety and with good communication between the surgical team can reduce errors that occur in the room such as the number of Unexpected Events (KTD), the number of Near Injury Events (KNC), and medication errors. Based on the background that has been described, the researcher wants to conduct research on the Relationship between Surgical Team Communication with Compliance with the Implementation of Surgical Safety Checklist at RSUD dr. Soeroto Ngawi.

Methods

He quantitative research approach using quantitative research relies on data collection in the form of numbers from measurements. According to Suharsimi Arikunto, quantitative research is an approach that requires a lot of numbers, data collection, interpretation of data and appearance of the results. The study analyzed the relationship between communication between the surgical team and compliance with the implementation of the Surgical Safety Checklist at RSUD dr. Soeroto Ngawi. The sampling technique used total sampling research for the independent variable, namely team communication, while the dependent variable was compliance. This study used a questionnaire and the analysis used was the Spearman Rank Correlation Test.

Results

1. **Demographic characteristic**

   a. Characteristics of respondents based on gender

Table 4. 1: Frequency Distribution of Respondents

No		Frekuensi	Prosentase %
	Gender		
1	Male	34	81
2	Female	8	19
	Age		
1	21-30 y.o	3	7.14
2	31-40 y.o	11	26.19
3	41-60 y.o	28	66.70
	Education		
1	Diploma	5	11.9
2	Bachelor	1	2.4
3	Bachelor and Ners	19	45.2
4	Medical Doctor specialist	17	42.5

Table 1 shows that almost all (80.95%) respondents were of the following types male gender is 34 respondents, age range 41-60 years old, that almost half of the respondents

(45.2%) have an S1 Ners education, 18 respondents.

2. Special data

a. Distribution by team communication

Table 2: Distribution by team communication

No	Communication	Frequency	Percentage (%)
1	Good	37	88,10
2	Less	5	11,90
	Total	42	100

Table 2 shows that almost all (88.10%) respondents have good communication, 37 respondents.

b. Distribution based on SSC implementation have good

Table 3 : Frequency distribution based on SSC implementation compliance

No	compliance	Frequency	Procentage (%)
1	Compliant	38	90,50
2	Non-compliant	4	9,50
	Total	42	100

Table 3 shows that almost all (90.50%) respondents are compliant in the application of SSC filling, 38 respondents data.

c. Distribution analysis of the relationship between surgical team communication and compliance with surgical safety checklist implementation l

Table 4: Data distribution analysis of the relationship between surgical team communication and Compliance with surgical safety checklist implementation

		compliant	%	Non-compliant	%	f	%
1	good	37	0	0	100	37	100
2	Less good	1	20	4	80	5	100

From the results of the cross tabulation of the relationship between surgical team communication and compliance with the implementation of the surgical safety checklist, it was found that of the 37 respondents who had good team communication, all (100%) had an obedient category. And of the 5 respondents who had poor team communication, 1 person (20%) had a compliant category and 4 people (80%) had a non-compliant category.

d. SPSS Statistical test analysis

Table 4.6 Statistical Test Results of the Relationship between Surgical Team Communication and Compliance with the Implementation of Surgical Safety Checklist at RSUD dr. Soeroto Ngawi.

No	Communication	compliance				Total		P Value	Appr Sig
		compliant	%	Non-compliant	%	f	%		
1	Good	37	0	0	100	37	100	0,000	0,883
2	Less good	1	20	4	80	5	100		

Based on table 4.6 regarding the analysis of the relationship between the communication of the surgical team and compliance with the implementation of the surgical safety checklist at RSUD dr. Soeroto Ngawi, getting the results of the spearman correlation test with a p-value of 0.000 <0.05, H1 is accepted, which means that there is a relationship between the communication of the surgical team and compliance with the implementation of the surgical safety checklist at RSUD dr. Soeroto Ngawi. The direction of the relationship is positive, which means that the better the communication of the surgical team, the higher the compliance. The correlation value is 0.883 which means the correlation level is strong.

Discussions

Communication of the Surgical Team in the Central Surgical Installation

From the results of the study it is known that of the 42 respondents, 37 respondents (88.09%) had good communication, and as many as 5 respondents (11.90%) had poor communication. In line with research conducted by Sualistiarini and Anwar (2020) showed that of the 35 respondents, there were 9 respondents who had poor communication and 5 of them were not good at implementing Surgical Safety. Then as many as 26 respondents had good communication and 24 of them were good at implementing Surgical Safety. This research is supported by research conducted by Sualistiarini and Anwar (2020) showing the frequency of respondents' communication categories. Respondents who had good communication were 26 people with a percentage (74.3%). While respondents who had poor communication were 9 people with a percentage (25.7%).

Based on table 4.1 shows that of the 42 respondents, almost all (80.95%) of the respondents were male, 34 respondents. This is in line with research conducted by Saing (2019) based on gender characteristics showing that the gender of respondents at Bhayangkara Makassar Hospital was dominated by men as many as 13 respondents (65.0%) and women as many as 7 respondents (35.0%). Based on the results of the study above, the researcher assumes that respondents who have good communication are more compliant than those who are not compliant, in contrast to respondents who have poor communication more are not compliant.

Compliance with Surgical Safety Checklist Implementation in the Central Surgical Installation

Based on the results of the study, it shows that most of the respondents as many as 38 respondents (90.50%) were compliant in implementing the Surgical Safety Checklist, and as many as 4 respondents (9.50%) were not compliant in implementing the Surgical Safety Checklist. This is in line with research conducted by Sari (2022) on compliance with the implementation of the SSC (Surgical Safety Checklist) obedient category in nurses in the operating room of Permata Bunda Hospital Malang. Surgical safety checklist compliance is an obedient behavior in filling out a checklist in communicating between the surgical team in performing operations correctly and completely. The level of compliance with the application of the SSC (Surgical Safety Checklist) is known to nurses filling in the completeness of the SSC checklist observation sheet consisting of sign-in 9 points, time out 6 points, sign-out 7 points.

This research is supported by research conducted by Sualistiarini and Anwar (2020) showing compliance with the less obedient category as many as 8 respondents with a percentage (22.9%). While the compliant category was 27 respondents with a percentage of (77.1%). The frequency of Surgical Safety implementation variables, it can be seen that the percentage of respondents who stated that the application of Surgical Safety was not good was 7 respondents with a percentage of (20.0%), while respondents who stated that the application of Surgical Safety was good were 28 respondents with a percentage of (80.0%).

Based on table 4.2 shows that most (66.70%) of the respondents were 41-60 years old, totaling 28 respondents. This is in line with the research conducted by Saing (2019) showing that the age of respondents at the Makassar Hajj Hospital was mostly 20-50 years old, namely 7

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respondents (35.0%), and 51-60 years old only 1 respondent (5.0%). Whereas in Bhayangkara Hospital Makassar most of them were 31-50 years old as many as 7 respondents (35.0%), and 20-30 years old as many as 6 respondents (30%).

According to research conducted by Risanti et al., (2021) shows that nurse compliance in implementing the surgical safety checklist will reduce the risk of errors at work. Factors related to compliance with the application of the surgical safety checklist are age, education and tenure. The age factor found that most of the respondents were young adults, so they had quite high experience at work. This is supported by research conducted by Nurhayati & Suwandi, (2019) which states that there are several factors such as education, knowledge and motivation that influence the application of SSC, especially in the time out phase by nurses.

According to the researcher's assumption, the importance of compliance with the application of SSC (Surgical Safety Checklist) as a practical and simple communication tool in ensuring patient safety in the preoperative, intraoperative, and postoperative stages and reducing complications and deaths due to surgery. Surgical Safety checklist (SSC) is carried out through 3 stages, each of which is used according to its stage, namely before anesthesia (Sign In), before the incision begins (Time Out) and before the patient leaves the operating room (Sign Out). The purpose of SSC is to create surgical team behavior and a safe environment for patients, as well as strengthen safety practices and encourage better communication and teamwork between clinical disciplines.

Relationship between Surgical Team Communication and Compliance with Surgical Safety Checklist Implementation in Central Surgical Installation

The relationship between surgical team communication and compliance with the implementation of the surgical safety checklist with a p-value of 0.000 <0.05, so H1 is accepted, which means that there is a relationship between surgical team communication and compliance with the implementation of the surgical safety checklist at RSUD dr. Soeroto Ngawi. The direction of the relationship is positive, which means that the better the communication of the surgical team, the higher the compliance. The correlation value is 0.883 which means the correlation level is strong. This study is in line with research conducted by the results of research conducted (Saing, 2019) in the surgical installation room of the Haji Makassar Hospital and Bhayangkara Makassar Hospital.

With 40 respondents, it was found that respondents who had good communication and were compliant in implementing the Surgical Safety Checklist were 26 respondents (65%) more than respondents who had good communication and were not compliant as many as 2 respondents (10%). Meanwhile, respondents who had poor communication and complied were 0 respondents (0%) and respondents who had poor communication and were not compliant were 12 respondents (25.0%). And this research is reinforced by research conducted by Sualistiarini and Anwar (2020), that of the 35 respondents, 5 of them were not good at implementing Surgical Safety. Then as many as 26 respondents had good communication and 24 of them were good at implementing Surgical Safety. From these data it can be explained that the better the communication, the better the implementation of Surgical Safety so that it will provide safety to patients every action that will be performed by nurses / other surgical teams in the central surgical installation room of the friendship center general hospital.

This research is supported by research conducted by Sualistiarini and Anwar (2020) which shows that of the 35 respondents, 5 of them were not good at implementing Surgical Safety. Then as many as 26 respondents had good communication and 24 of them were good at implementing Surgical Safety. From these data it can be explained that the better the communication, the better the implementation of Surgical Safety so that it will provide safety to patients every action that will be performed by nurses / other surgical teams in the central surgical installation room of the friendship center general hospital. Researchers assume that the results of this study indicate that good surgical team communication means that compliance in implementing a surgical safety

checklist is also better. there is an influence between communication and compliance in implementing a surgical safety checklist. Communication as information that a nurse has so that it will be applied in their work to comply with the surgical safety checklist.

Conclusion

Most of the surgical teams at IBS dr. Soeroto Ngawi have good team communication. Most of the surgical team at IBS dr. Soeroto Ngawi has good compliance in implementing the surgical safety checklist. There is a relationship between surgical team communication and compliance with the implementation of the surgical safety checklist with a p-value of 0.000> 0.05, which means that there is a relationship between surgical team communication and compliance with the implementation of the surgical safety checklist at RSUD dr. Soeroto Ngawi. The direction of the relationship is positive, which means that the better the communication of the surgical team, the higher the compliance. The correlation value is 0.883 which means the correlation level is strong.

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