



ANALYSIS OF FACTORS INFLUENCING COMPLIANCE WITH THE IMPLEMENTATION OF SURGICAL SAFETY CHECKLIST

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ABSTRACT

The use of a checklist will be very effective if it is supported by the compliance of medical personnel in implementing it. Objective: to determine the factors that influence adherence to the implementation of the surgical safety checklist in IBS RSUP dr. Soeradji Tirtonegoro Klaten. Methods: This study used a survey method with a cross-sectional approach. The sampling technique used total sampling, as many as 57 nurses. The data collection instrument uses a questionnaire that has been tested for validity and reliability. Statistical test using person correlation, chi square and multiple logistic regression analysis. Results: Bivariate test between age and compliance ($p=0.914$), gender and compliance ($p=0.114$), education and compliance ($p=0.037$), years of service and compliance ($p=0.718$), knowledge and compliance ($p=0.002$) and motivation with obedience ($p=0.421$). Multivariate test of education ($p=0.013$; OR= 0.433) and knowledge ($p=0.010$; OR 0.210). Conclusion: Factors related to adherence to the implementation of the surgical safety checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten is education and knowledge. The most dominant factor affecting adherence to the implementation of the surgical safety checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten is education.

Keywords: adherence to the application; central surgical installations; surgical safety checklists

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INTRODUCTION

The World Health Organization (WHO) estimates that 234 billion surgeries are performed annually worldwide. A systematic review of the records of more than 74,000 patients showed an adverse event rate of 9.2% and 43% of operations that were preventable. The National Reporting and Learning System (NRLS) in England and Wales reported that 10,526 patients died or suffered serious damage due to incidents of errors in operations (WHO, 2016). Surgery can cause life-threatening complications, so a safe service is needed to deal with surgical complications. According to WHO data, the main complications of surgery are disability and long-term hospitalization in 3-16% of surgical patients in developing countries. Globally, the total mortality rate for various surgeries is 2-10%. It is estimated that up to 50% of complications and deaths in developing countries could be prevented if certain basic care standards were followed (Klase, Pinzon and Meliala, 2016).

The risk of an unexpected event is very high so patient safety, patient preparation, and the procedure to be performed must be considered. One of the criteria for international patient safety goals is correctly identifying patients and ensuring correct surgical sites and correct surgical procedures. Through the World Alliance for Patient Safety, WHO has created a

Surgical Safety Checklist (SSC) as a tool used by operating room doctors to improve operating safety and reduce surgical deaths and complications (WHO, 2017). Surgical safety checklist is a checklist to provide patients with safe and quality operations. The purpose of this checklist is to improve patient safety during surgery and reduce surgical complications and mortality. According to WHO, there are four factors that are closely related to patient safety accidents: organization, type of work, environment, and personal factors (Utami, 2020). The use of a structured checklist in the surgical process is very effective if the implementation of the surgical safety checklist is supported by the compliance of health professionals (Sudibyo, 2020).

Nurse compliance is the nurse's professional behavior towards recommendations, procedures, or rules that must be implemented or followed. Compliance is influenced by several factors, namely, internal factors in the form of education, knowledge, motivation, attitude, age, skills and years of service. While the external factors are the workplace, work groups, and organizational and environmental characteristics (Sari, Induniasih and Maryana, 2018). Research by Muara and Yulistiani (2021), explains that age, education, years of service, knowledge and motivation affect compliance with completing the Surgical Safety Checklist. Improving adherence to the surgical safety checklist requires a mature educational age for strong physical fitness and long and balanced work periods to produce better jobs. With age, people become more emotionally controlled, more intelligent, responsible at work and able to think rationally. A high level of education increases knowledge by making it easier for someone to get information. According to the journal's findings, the longer people work, the more productive they are. Completion of SSC is felt as a burden for nurses, because the lack of knowledge about SSC causes a lack of understanding, and the higher the level of knowledge, the higher the respondent's compliance. The more motivated a person is, the greater the impact of completing a good surgical safety checklist. The strong push to implement surgical safety checklists helps improve individual and team performance and enables optimal outcomes to be achieved.

Other factors that influence nurse compliance according to research by Ernawati, Sari and Kartiningrum (2020), such as knowledge, nurse skills, education, motivation and training. Research conducted by Yuliati et al. (2019), stated that there was a very significant relationship between knowledge, training and education in implementing SSC in the operating room. Preliminary study at the Central Surgical Installation of dr. Soeradji Tirtonegoro Klaten on December 12 2021 shows data on the number of nurses and anesthetists of 57 people. The results of interviews with the head of the room in the surgical installation room said that only 80% of the surgical team had carried out a surgical safety checklist. Interviews with 4 IBS nurses obtained data that 2 nurses said they had carried out a surgical safety checklist but not regularly, one said they did not understand the SOP for a surgical safety checklist, and one knew but did not fully understand. All staff stated that the dissemination of the SOP checklist for surgical safety had not been maximized. Observational data on five reports found that there were items in the surgical safety checklist that were empty. This proves that filling out the Surgical Safety Checklist at the Central Surgical Installation of Soeradji Tirtonegoro Klaten Hospital is not complete. The IBS room coordinator always reminds the operating team to fill in and complete the SSC at conference activities to reduce the incidence of incomplete SSC. Incomplete SSC filling is one of the parameters for nurse non-compliance in maintaining the security and safety of patients who will undergo surgery. Based on the background above, this study aims to analyze the Factors Influencing Compliance with the Implementation of the Surgical Safety Checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten.

METHOD

This research uses a descriptive design and is a survey method. Retrieval of data with a cross sectional approach. This research was conducted in the IBS room of dr. Soeradji Tirtonegoro Klaten. Data collection was carried out on 18-29 July 2022 The population in this study were all nurses and anesthetists in the IBS room at RSUP dr. Soeradji Tirtonegoro Klaten. The total population is 57 nurses. The sampling technique was taken using a total sampling technique, namely a sampling technique by taking the entire existing population (Sugiyono, 2016). The instrument used to collect data in this study is a questionnaire. The procedure for obtaining data was carried out by giving questionnaires to respondents to fill out and collect back to the researchers at the same time after completing the filling then observing the SSC compliance of each respondent in each sign-in, time-out and sign-out phase. The bivariate data analysis used was the Person correlation and chi square tests while the multivariate used multiple logistic regression tests. This test uses a significance of 95% with a probability of 0.05.

RESULTS

The results of the analysis are presented in the following table:

Table 1.
Univariate Analysis of Age and Years of Service of Nurses (n= 57)

| Variable | Mean | SD | Min | Max |
|------------------|-------|--------|-----|-----|
| Age | 44,61 | 9,108 | 24 | 58 |
| Years of service | 20,11 | 10,667 | 1 | 39 |

Table 2.
Gender, Education, Knowledge, Motivation and Compliance (n=57)

| Variable | f | % |
|---------------------|----|------|
| Gender : | | |
| Man | 44 | 77,2 |
| Woman | 13 | 22,8 |
| Amount | | |
| Total | 57 | 100 |
| Education : | | |
| Master of Nursing | 2 | 3,5 |
| Nurse | 13 | 22,8 |
| Bachelor of Nursing | 6 | 10,5 |
| Nursing Diploma | 36 | 63,2 |
| Total | 57 | 100 |
| Knowledge : | | |
| Good | 15 | 26,3 |
| Enough | 38 | 66,7 |
| Not enough | 4 | 7,0 |
| Total | 57 | 100 |
| Motivation : | | |
| Good | 56 | 98,2 |
| Not enough | 1 | 1,8 |
| Total | 57 | 100 |
| Obedience : | | |
| Obey | 33 | 57,9 |
| Not obey | 24 | 42,1 |
| Total | 57 | 100 |

Table 3.
Bivariate Analysis of the Relationship between Age and Years of Service of Nurses and Compliance with the Application of the Surgical Safety Checklist (n=57)

| Correlation Variable | r count | p value |
|------------------------------|---------|---------|
| Age with Compliance | 0,015 | 0,914 |
| Working time with Compliance | 0,049 | 0,718 |

Table 4.
Bivariate Analysis of the Relationship between Gender, Education, Knowledge and Motivation of Nurses with Compliance with the Application of the Surgical Safety Checklist (n=57)

| Variable | SSC Implementation Compliance | | | | | | P value |
|---------------------|-------------------------------|------|----------|------|-------|-----|---------|
| | Obey | | Not obey | | Total | | |
| | f | % | f | % | f | % | |
| Gender : | | | | | | | |
| Man | 23 | 52,3 | 21 | 47,7 | 44 | 100 | 0,114 |
| Woman | 10 | 76,9 | 3 | 23,1 | 13 | 100 | |
| Amount | 33 | 57,9 | 24 | 42,1 | 57 | 100 | |
| Education : | | | | | | | |
| Master of Nursing | 1 | 50,0 | 1 | 50,0 | 2 | 100 | 0,037 |
| Nurse | 4 | 30,8 | 9 | 69,2 | 13 | 100 | |
| Bachelor of Nursing | 2 | 33,3 | 4 | 66,7 | 6 | 100 | |
| Nursing Diploma | 26 | 72,2 | 10 | 27,8 | 36 | 100 | |
| Knowledge : | | | | | | | |
| Good | 3 | 20,0 | 12 | 80,0 | 15 | 100 | 0,002 |
| Enough | 28 | 73,7 | 10 | 26,3 | 38 | 100 | |
| Not enough | 2 | 50,0 | 2 | 50,0 | 4 | 100 | |
| Motivation : | | | | | | | |
| Good | 33 | 58,9 | 23 | 41,1 | 56 | 100 | 0,421 |
| Not enough | 0 | 0,0 | 1 | 100 | 1 | 100 | |

Table 5. Multivariate Analysis

| Variable | B | p value | OR | 95% CI | | Perubahan OR |
|-----------|--------|---------|---------|--------|-------|--------------|
| | | | | Lower | Upper | |
| Education | -0,837 | 0,013 | 0,433 | 0,223 | 0,839 | 1,6% |
| Knowledge | -1,561 | 0,010 | 0,210 | 0,064 | 0,691 | 2,7% |
| Constant | 5,248 | 0,002 | 190,168 | | | |

DISCUSSION

Age

This research showed that the mean age of the nurses was 44.61 ± 9.108 years. These results are supported by Sudiby (2020), showing that the average age of the respondents is 44.71 years with a standard deviation of 5.53 years. Age is related to the level of maturity or maturity, in the sense that the increasing a person's age will also increase technical and psychological maturity, and the more able to carry out their duties (Pauldi, 2021). According to Nursalam (2016), that the more mature, the level of maturity and strength of a person will

be more mature in thinking and working. Because with increasing age a person's maturity in thinking is getting better so that they will be motivated every time they do work in serving patients professionally.

Working period

The average length of service for nurses in this study was 20.112 ± 10.667 years. These results are supported by Sudibyo (2020), showing that the average working period of the respondents is 20.07 years with a standard deviation of 6.2 years. The duration of work for nurses in this study was very long. This result is supported by Nurhayati and Suwandi (2019), the highest length of service for nurses in their research was quite long, namely between 5-9 years with a total of 36.7%, followed by length of service > 10 years 33.3%. According to Saifullah (2017), states that the longer a person works, the skills and experience will also increase, tenure and experience will be directly proportional to the level of skill and maturity of a person in doing a job. Notoatmodjo (2013), explains that tenure is an individual characteristic that shapes individual behavior so that individuals are increasingly aware of working conditions and ultimately lead to compliance. So it can be concluded that someone who has a longer working period should have better obedience in carrying out a job.

Gender

Characteristics of gender found that most of the respondents were male as many as 44 respondents (77.2%). According to psychological theory, men expect to be more aggressive and successful than women. Men are more obedient and more active in attendance at work than women, married women are more likely to be absent than men because of their additional responsibilities (Arifianto, 2017). The majority of nurses working in the operating room should be male, this is because the male nurse will be stronger and also ready than the female sex, plus the demands in the operating room are very large, where all actions will be pursued. with time so that it requires readiness both physically and mentally, because of that male nurses are needed more than female nurses (Purwanti et al., 2022).

Education

The results of this study showed that there were more respondents with Diploma in Nursing education, namely 36 respondents (63.2%). The number of DIII education is because the subjects used in this study are at least DIII Nursing and this education is the minimum level of education that must be taken to become a nurse. Nursing education is an institution that plays an important role in the development and formation of the nurse specialization process. Nursing education can provide a form and style of staff that can facilitate the formation of a nursing community by having a certain level of skills and providing vocational and social comments and contributions (Natalia, 2021).

Knowledge

The results of this study obtained that the majority of nurses' knowledge about the application of the Surgical Safety Checklist in the Implementation of Procedures in the Operating Room Room was sufficient, as many as 38 respondents (66.7%). The knowledge of a nurse varies depending on the level of education possessed. This is related to the development of nursing science, the depth and breadth of knowledge will affect the ability of nurses to think critically in carrying out nursing actions (Sudibyo, 2020). Education is one of the factors that influence knowledge. Insufficient knowledge of the respondents in this study was due to the education of the majority of respondents being Diploma III in Nursing. Budiman and Riyanto (2013), explained that the higher the level of education, the better the absorption of information. In addition, the higher the level of education, the mindset will also be better so that it will cause

a person to have better analytical abilities.

Motivation

In this study, it was found that most of the nurses' motivation in implementing the surgical safety checklist in the operating room was good, as many as 56 respondents (98.2%). Good motivation in respondents proves that respondents understand that motivation is important to encourage someone to work because motivation is the energy that encourages someone to get up to carry out work tasks to achieve the goals set. Motivation is an individual driven by his emotions or thoughts to work, to exert his strength in action (Nursalam, 2016). The higher a person's motivation will affect the level of compliance in filling out a good surgical safety checklist (Nursalam, 2016). A very strong urge to carry out a surgical safety checklist will be able to help improve the performance of oneself and the team so that maximum results will be obtained (Muara & Yulistiani, 2021).

Compliance

Nurse compliance in implementing SSC at the sign-in, time-out and sign-out stages in this study showed that the majority were compliant by 33 respondents (57.9%). Compliance is a behavior in the form of response or reaction to stimuli or stimuli from outside the individual. In giving a response very dependent on the characteristics or other factors. Notoatmodjo (2013), describes that a person's behavior is influenced by three factors, namely predisposing factors, supporting factors, and reinforcing factors. Predisposing factors are factors that will facilitate the occurrence of a person's behavior, supporting factors are factors that facilitate behavior or action while reinforcing factors are factors that encourage and strengthen the occurrence of behavior.

Relationship between Age and Compliance

Test analysis of the relationship between age and SSC compliance obtained a p value of 0.914 (α ; 0.05) so that H_0 is accepted and H_a is rejected, which means that there is no relationship between age and adherence to the application of the surgical safety checklist in IBS RSUP dr. Soeradji Tirtonegoro Klaten. This result is in line with the research of Yuliati et al. (2019), there is no significant relationship between age and the application of SSC in the operating room indicated by a p value of 1,000. Age is not related to obedience because age is related to maturity, maturity and ability to work. As we get older we become more mature, able to think rationally, make decisions, be smarter, control our emotions, follow rules and norms, and work faithfully. Older people look more experienced, make the right decisions, are wise, are able to control their emotions, and have a strong commitment to work ethic and quality (Arifianto, 2017).

Relationship of Tenure with Compliance

The results of the analysis between years of service and compliance obtained a p value of 0.718 (α ; 0.05) so that H_0 is accepted and H_a is rejected, which means that it can be concluded that there is no relationship between years of service and adherence to the application of the surgical safety checklist in IBS RSUP dr. Soeradji Tirtonegoro Klaten. This research is supported by Selano, Kurniawan and Sambodo (2019), the results of Fisher's test obtained a p value of 0.586 ($>$ 0.05) then H_0 was accepted H_a was rejected, so it can be concluded that there is no relationship between length of work of nurses and compliance with filling out the Surgical Safety Checklist at Semarang Private Hospital Central Surgical Installation. Mother's research contradicts the theory put forward by Notoatmodjo (2013), tenure is an individual characteristic that shapes their behavior in a way that allows them to better understand the situation at work and ultimately leads to compliance. From this we can conclude that the

longer you serve, the better your obedience in doing work.

Relationship between Gender and Compliance

Based on the results of the study, there were more male respondents who adhered to the implementation of the SSC by 23 respondents (52.3%) and there were also more female respondents who adhered to the SSC by 10 respondents (76.9%). These results prove that men and women have the same level of obedience and there is nothing that differentiates compliance between men and women. This is also supported by the results of bivariate analysis with the chi square test obtained χ^2 count 2.501 and χ^2 table 3.841 (χ^2 count $<$ χ^2 table) while the p value of 0.114 means $p > 0.05$ so that H_0 is accepted and rejects H_a which means there is no relationship between species sex with compliance with the implementation of the Surgical Safety Checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten. Research with similar results was also obtained by Yuliati et al. (2019), that gender is not significantly related to the implementation of the surgical safety checklist in the operating room of the Batam City Hospital, indicated by a p value of 0.916. The results of this correlation state that between men and women have the same number of surgical safety checklist applications and there is nothing that differentiates them.

Relationship between Education and Compliance

The results of bivariate analysis using the chi square test obtained a p value of 0.037 meaning $p < 0.05$ so that there is a significant relationship between education and adherence to the implementation of the Surgical Safety Checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten. These results were supported by Pauldi (2021), in the research conducted which stated that there was a relationship between nurse education factors and adherence to the application of the Surgical Safety Checklist (SSC) at Indrasari Hospital and Kasih Ibu Rengat Hospital. The results of the analysis also show the Odd Ratio (OR) = 24.4, which means that undergraduate nurse education has a 24.4 times chance of increasing nurse compliance in applying the Surgical Safety Checklist (SSC) than diploma nurse education.

This study found that respondents with a master's degree in nursing education were 1 respondent (50%) who complied and 1 respondent (50%) who did not comply with the SSC application.), the majority of nurses with Bachelor of Nursing education were disobedient in implementing the SSC by 4 respondents (66.7%) and respondents with Diploma in Nursing education were more compliant in implementing SSC by 26 respondents (72.2%). This result is supported by Yuliati et al. (2019), that the education of most surgical nurses in several hospitals is D3 in nursing even though education has a relationship with the application of surgical safety checklists. D3 Nursing education is more obedient because they have received training so they have met the requirements to become nurses in the operating room. This is in line with Ongun and Intepeler (2017), training such as basic life support and basic surgery is an absolute requirement for a nurse in the operating room. Training such as knowing where and how to use the emergency trolley is provided in basic life training. Basic surgical training teaches nurses how to prepare, operate, communicate effectively, and patient safety. All the training provided is the basis for nurses in implementing patient safety. HIPKABI (2014), also explains the standards set by the professional organization of the Indonesian Surgical Room Nurse Association that as a competent operating room nurse at least is certified in basic surgery and basic life support (HIPKABI, 2017).

Relationship between Knowledge and Compliance

The results of this study obtained the chi square test with a p value of 0.002 meaning $p < 0.05$ so that H_0 is rejected and H_a is accepted which means there is a significant relationship

between knowledge and compliance with the application of the Surgical Safety Checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten. This result is supported by Yuliati et al. (2019), the results of statistical tests show a p value = 0.002 indicating that there is a significant relationship between knowledge and the application of SSC. Research by Muara and Yulistiani (2021), also stated that in their research a p value = 0.039 was obtained so that there was a relationship between the level of knowledge and adherence to filling out the surgical safety checklist. Pauldi's research (2021), states that there is a relationship between the knowledge factor of nurses and adherence to the application of the Surgical Safety Checklist (SSC) at Indrasari Hospital and Kasih Ibu Rengat Hospital with a p value = 0.034 $< \alpha = 0.05$. Knowledge is a predisposing factor that influences behavior. Predisposing factors are factors that form the basis or encourage individuals to take actions that support or inhibit a person from certain behaviors, for example knowledge, beliefs, values or attitudes, beliefs. Muara and Yulistiani (2021), stated that a high level of knowledge will affect the high level of compliance of respondents.

This study found that nurses who had good knowledge were more disobedient in applying SSC by 12 respondents (90.0%), nurses who had sufficient knowledge were more obedient in implementing SSC by 28 respondents (73.7%). This is because successful implementation of the surgical safety checklist depends on staff training to increase knowledge and compliance. It cannot be assumed that the automatic introduction of checklists will lead to better results. In addition, communication with staff is essential to improve compliance.

The Relationship between Motivation and Compliance

Based on bivariate analysis with the chi square test, X^2 count 1.400 and X^2 table 3.841 (X^2 count $<$ X^2 table) while a p value of 0.421 means $p > 0.05$ so there is no relationship between motivation and adherence to the application of the Surgical Safety Checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten. This study concluded that the better the motivation, the more obedient in implementing SSC and conversely, the less good the motivation, the more disobedient in implementing SSC. Evidenced by the results of the study which stated that respondents who had good motivation were more compliant in implementing the SSC by 33 respondents (58.9%) while respondents who had less motivation were 1 respondent (100%) and did not comply in implementing the SSC.

This study is comparable to Muara and Yulistiani (2021), it is known that data analysis using the Spearman rank test obtained $p 0.032 < \alpha$, then H_0 was rejected and H_a was accepted, which means that there is a relationship between the level of motivation and the compliance of the operating room team at the Central Surgical Installation of Banyumas Hospital. The closeness test obtained a value of 0.320 so that it can be interpreted that the higher the level of motivation, the higher the respondent's compliance. The level of motivation of nurses plays an important role in compliance with the Surgical Safety Checklist documentation because the better the motivation of nurses, the more obedient the nurses will be in documenting the Surgical Safety Checklist. Given that documentation of the Surgical Safety Checklist is one of the important things in health services that can prevent errors and even death in the surgical installation room, as well as the importance of documentation as proof of nurse's responsibility and accountability if something unexpected happens related to legal aspects. Therefore, nurses who work in surgical installation rooms need good motivation because motivation will affect the performance of the nurses themselves (Nurdiana, 2018).

Multivariate Analysis

The results of multivariate analysis with multiple logistic regression showed that education

and knowledge were the dominant factors related to SSC compliance with the results of p values 0.013 and 0.010 ($p < 0.05$) with the results of OR (odds ratio) analysis on the education factor having a chance of 0.433 times towards SSC compliance, which means that respondents with low education are at risk of disobedience by 0.433 times in the application of SSC, while knowledge has a chance of 0.210 times for SSC compliance, which means that respondents with less knowledge are at risk of disobedience by 0.210 times in implementing SSC. However, when viewed from the magnitude of the risk factors, it is stated that education is the most dominant factor influencing SSC adherence. The level of education has an effect on SSC compliance. The level of education will affect a person's ability to work. The education level of nurses affects the performance of the nurse concerned if nursing staff with higher education will have better performance because they already have broader knowledge and insight, can provide useful suggestions or input to nursing managers in improving nursing performance (Dulay, 2021).

Education is a process of changing attitudes and behavior through formal and non-formal teaching and training which will eventually produce knowledge (Notoatmodjo, 2018). There needs to be a type of nurse with a higher education and a minimum D3 in Nursing to improve the quality of Nursing services (Dulay, 2021). Research conducted by Yuliati et al. (2019), that education is related to the application of the Surgical Safety Checklist.

CONCLUSION

The results showed that the average age of nurses was 44.61 ± 9.108 years and the average length of service for nurses was 20.11 ± 10.667 years. Most of the male nurses (77.2%) had a Diploma in Nursing education (63.2%). The majority of nurses' knowledge is sufficient (66.7%), the motivation of nurses is good (98.2%) and the majority of nurses' compliance is obedient (57.9%). Bivariate test between age and compliance ($p = 0.914$), gender and compliance ($p = 0.114$), education and compliance ($p = 0.037$), years of service and compliance ($p = 0.718$), knowledge and compliance ($p = 0.002$) and motivation with compliance ($p = 0.421$). Multivariate test of education ($p = 0.013$; OR = 0.433) and knowledge ($p = 0.010$; OR 0.210). Factors related to adherence to the implementation of the surgical safety checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten is education and knowledge while factors that are not related are age, gender, years of service and motivation. The most dominant factor affecting adherence to the implementation of the surgical safety checklist at IBS RSUP dr. Soeradji Tirtonegoro Klaten is education. Education has an opportunity of 0.433 times.

REFERENCES

- Arifianto. (2017). Kepatuhan Perawat dalam Menerapkan Sasaran Keselamatan Pasien pada Pengurangan Resiko Infeksi dengan Penggunaan APD. Universitas Diponegoro.
- Budiman, & Riyanto. (2013). Kapita Selekta Kuesioner: Pengetahuan dan Sikap dalam Penelitian Kesehatan. Jakarta: Salemba Medika.
- Daulay, A. R. (2021). Hubungan Karakteristik, Pengetahuan dan Sikap dengan Kepatuhan Perawat dalam Penerapan Patient Safety di Rumah Sakit Umum Permata Bunda Medan Tahun 2020. Skripsi, 1–89.
- Ernawati, Y., Sari, I. P., & Kartiningrum, E. D. (2020). Faktor-Faktor Yang Mempengaruhi Kepatuhan Perawat Terhadap Penerapan Surgical Patient Safety Fase Time Out Di Instalasi Bedah Sentral RSUD Dr Moh Shaleh Kota Probolinggo, 12(1), 11–24.

- HIPKABI. (2014). *Buku Pelatihan Dasar – Dasar Ketrampilan Bagi Perawat Kamar Bedah*. Jakarta: HIPKABI Press.
- Klase, S., Pinzon, R. T., & Meliala, A. (2016). Penerapan Surgical Safety Checklist Who Di Rsud Jaraga Sasameh Kabupaten Barito Selatan. *Berkala Ilmiah Kedokteran Duta Wacana*, 1(3), 173. <https://doi.org/10.21460/bikdw.v1i3.25>
- Muara, S. J., & Yulistiani, M. (2021). Pengetahuan dan Motivasi TIM Kamar Bedah dengan Kepatuhan Pengisian Surgical Safety Checklist, 7(1), 21–26.
- Natalia, D. (2021). Hubungan Tingkat Pendidikan Dan Lama Kerja Perawat Dengan Penerapan Surgical Safety Cheklist di Instalasi Bedah Sentral RSUD Talang Ubi Kabupaten Pali. *Stikes Bina Husada Palembang*, 177–187.
- Notoatmodjo, S. (2013). *Promosi Kesehatan dan Ilmu Perilaku*. Jakarta: Rineka Cipta.
- Notoatmodjo, S. (2018). *Metodologi Penelitian Kesehatan (3rd ed.)*. Jakarta: PT Rineka Cipta.
- Nurdiana. (2018). Hubungan Motivasi Perawat Dengan Kepatuhan Pendokumentasian Surgical Safety Checklist Di Ruang Instalasi Bedah Rumah Sakit Wilayah Makassar. Universitas Islam Negeri Alauddin Makassar.
- Nurhayati, S., & Suwandi, S. (2019). Kepatuhan Perawat Dalam Implementasi Surgical Safety Checklist Terhadap Insiden Keselamatan Pasien Ponek di Rumah Sakit Semarang. *Jurnal Smart Keperawatan*, 6(1), 59. <https://doi.org/10.34310/jskp.v6i1.215>
- Nursalam. (2016). *Manajemen Keperawatan: Aplikasi dalam Praktik Keperawatan Profesional*. Jakarta: Salemba Medika.
- Ongun, P., & Intepeler, S. S. (2017). Operating Room Professionals' Attitudes Towards Patient Safety and the Influencing Factors. *Pakistan Joernal of Medical Science*, 33(5), 1210–1214. <https://doi.org/10.12669/pjms.335.13615>
- Pauldi, H. (2021). Faktor yang Berhubungan dengan Kepatuhan Penerapan Surgical Safety Cheklist Kamar Operasi Rumah Sakit di Rengat Kabupaten Indragiri Hulu. *Stikes Al Insyirah*.
- Purwanti, N., Saputra, C., Guna, S. D., Azhar, B., Malfasari, E., & Pertiwi, P. I. (2022). Faktor Penerapan Surgical Safety Cheklist di Kamar Operasi. *Jurnal Keperawatan*, 14(1), 291–300.
- Saifullah, A. (2017). Hubungan Tingkat Pengetahuan Perawat dengan Tindakan Perawat dalam Manajemen Nyeri Pasien Post Operasi di Bangsal Bedah RSUP dr. Soehadi Prijonegoro Sragen. *Stikes Kusuma Husada Surakarta*, (2011).
- Sari, D. A., Induniasih, & Maryana. (2018). Faktor-Faktor yang Berhubungan dengan Kepatuhan Pelaksanaan Pendokumentasian Surgical Surgery Checklist. *Poltekkes Kemenkes Yogyakarta*.
- Sudibyoy. (2020). Hubungan Tingkat Pengetahuan Perawat Dengan Kepatuhan Dalam Penerapan Surgical Safety Checklist di Ruang Operasi Rumah Sakit Ortopedi Prof. DR. R. Soeharso Surakarta. *Stikes Kusuma Husada Surakarta*, 5(1), 43–54.

- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta.
- Utami, L. (2020). Hubungan Antara Sikap Perawat Dengan Kepatuhan Penerapan Surgical Safety Checklist Di Ruang Operasi RS Ortopedi Prof. Dr. R. Soeharso Surakarta. *Stikes Kusuma Husada Surakarta*, 1–13.
- WHO. (2016). *Surgical Safety Checklist*. Geneva.
- WHO. (2017). *Implementation Manual WHO Surgical Safety Checklist; Safe Surgery Saves Lives*. Geneva: World Health Organization.
- Yuliati, E., Malini, H., Yasman, Y., Keperawatan, P. M., Keperawatan, F., Andalas, U., ... Andalas, U. (2019). Analisis Faktor Yang Berhubungan Dengan Penerapan Surgical Safety Checklist Di Kamar Operasi Rumah Sakit Kota Batam, 4(3), 456–463.

