

THE INFLUENCE OF KNOWLEDGE, MOTIVATION AND WORKLOAD ON IMPLEMENTATION OF MEDICAL COMPLIANCE IN SIRS

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ABSTRACT

Based on the Law of the Republic of Indonesia Number 44 of 2009 concerning Hospitals Article 32 it is stated that every Hospitals are required to record and report on all Hospital management activities in the form of a Hospital Management Information System. The effect of knowledge, motivation and workload in the implementation of SIRS with medical personnel compliance as an intervening variable at the Kemayoran Athlete's Wisma RSDC. This study uses quantitative analysis using a cross sectional. This research was conducted in December-January 2021 with 161 samples, the sampling technique was random sampling. Data analysis using univariate and bivariate with test chi-square with $p < 0.05$. The results showed that there was a significant relationship between knowledge and SIRS compliance (P Value = 0.000), Motivation (P Value = 0.000), Workload (P Value = 0.000). The author recommends evaluating several aspects such as networking, system requirements development, human resource development to be reviewed and the addition of a personnel information subsystem to the SIRS service.

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Introduction

According to the Law of the Republic of Indonesia Number 44 of 2009, concerning the Hospital is one of the health service facilities that provide complete health services, in order to support the best service to the community, especially patients, the hospital is required to provide medical services and non-medical, where one of the non-medical services is the organization of medical records (Gastaldi & Corso, 2012). Based on the Law of the Republic of Indonesia Number 44 of 2009 concerning Hospitals article 32 it is stated that every hospital is required to record and report on all activities of the organization of the Hospital in the form of a Hospital Management Information System and Regulation of the Republic of Indonesia Number 82 of 2013 concerning Management Information Systems. Hospitals stated that hospitals are required to organize SIRS and must meet the minimum requirements set by the Minister of Health of the Republic of Indonesia (Handiwidjojo, 2015).

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The issuance of the Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2013 Article 3 states that every hospital is obliged to implement a Hospital Management Information System (SIRS). According to Yusof (2006), SIRS is a collection of processes that are implemented to help improve the efficiency and effectiveness of health organizations in carrying out their functions and achieving their goals. It aims to improve the quality of health services in hospitals.

Based on data from the Ministry of Health through the Hospital Information System (SIRS), guidelines for hospitals to carry out routine recording and reporting, until the end of November 2016 it was found that 1257 of 2588 (or about 48%) hospitals in Indonesia already have a Hospital Management Information System (SIRS) which is functional. There are 128 hospitals (5%) that report having a Hospital Management Information System (SIRS) but not running functionally, 425 hospitals (16%) do not yet have a Hospital Management Information System (SIRS) , and 745 hospitals (28%) that did not report having a Hospital Management Information System (SIRS) or not. Based on the 2016 SIRS processed data, the number of functional Hospital Management Information Systems (SIRS) is mostly found in type C hospitals (597 hospitals) followed by type B hospitals (267). mostly found in type A hospitals (79%) and type B hospitals (73%). (Wu, Chen, & Greenes, 2009)

According to research by Lacrum, H. & Ellingsen, G. (2001) in conducting research on the use of three electronic medical record systems with the aim of comparing them (DIPS, DocutiveEPR, Infomedic). The results of this study, more doctors use the electronic medical record system in carrying out their duties, because it is much more efficient than the previous system. SIRS is very necessary to be implemented in hospitals, this is in line with the demands of the community who require increasingly quality health services, because SIRS can offer the advantage of preventing medical errors through three mechanisms, namely (1) prevention of adverse events, (2) having a fast response, after the occurrence of adverse events, and (3) tracking and having feedback on adverse events

The RSDC Wisma Atlet Kemayoran Hospital has been operated as a field hospital since March 23, 2020 to be able to provide services for Covid-19 patients with mild to moderate disease severity (Lu et al., 2020). Referring to its status as a field hospital, it has an impact on the management system with the concept of disaster (Takain & Katmini, 2021). Unlike other definitive hospitals in general, the Wisma Atlet Kemayoran Hospital cannot manage the hospital independently. Hospital management is still using collaborative resources between several elements and institutions (TNI, POLRI, government agencies, private sector, and other volunteers). Wisma Atlet Kemayoran is the largest field hospital for handling Covid-19 in Indonesia (Chaudhry et al., 2006).

SIRS implemented by hospitals is considered less attention by related parties and has not prepared everything related to SIRS, such as many officers who do not understand and understand, this is because there is no support, supervision and evaluation from management and technology that has not run optimally. In this previous study, SIRS had not run smoothly because officers did not understand and understand the implementation of SIRS (Sari & Ramadani, 2021).

Method

In this study, an analytical observational method was used with cross-sectional. The approach departs from a theoretical framework, the ideas of experts, as well as the understanding of researchers based on experience, then developed into problems and proposed solutions to obtain justification or rejection in the form of empirical support in the field. The independent variables are (Knowledge, Motivation, Workload) (X)) while the dependent variable is the application of SIRS (Y) while the intervening is the compliance of medical personnel (Z).

Results and Discussion

Results

Table 1. Effect of Knowledge, Motivation and Workload with Medical Personnel Compliance on SIRS Implementation SIRS

Compliance	compliance		P-Value	PR 95% CI		
	No	Compliance				
Knowledge						
Low	3	5	33	50	0,00	4,588 (2,250-9,358)
High	17	17,9	78	82,1		
Motivation						
Low	36	52,9	32	47,1	0,000	6,346(3,024-13,325)
High	14	15,	79	84,9		
Workload						
Low	34	47,2	38	52,8	0,000	4,028(2,2003-8,319)
High	16	18,0	73	82,0		
Implementatio n of SIRS						
Less	14	17,5	66	82,5	0,000	2,417(1,046-5,584)
Application	36	44,	45	55,6		

Respondents who have low knowledge in the compliance group non-compliant with SIRS (50.0%) and compliance with SIRS (50,0%). Meanwhile, respondents who have high knowledge in the SIRS low compliance group (38.3%), than those who have high knowledge of adherence (82.1%). The results of the Chi Square test showed that there was a significant relationship between SIRS knowledge and compliance (P-value 0.000). The results of the PR calculation show that respondents who have low knowledge are 4 times less likely to comply with the implementation of SIRS (95% CI 2,250-9,358).

The Influence of Knowledge, Motivation and Workload on Implementation of Medical Compliance in SIRS

Respondents who had low motivation in the SIRS non-compliant group (52.9%) and high motivation in SIRS compliance (47.1%). Meanwhile, respondents who have high motivation in the SIRS low compliance group (15.1%), than those who have high motivation to comply (84.9%) (Putra & Vadriasm, 2020). The results of the Chi Square test showed that there was a significant relationship between SIRS user motivation and compliance (P-value 0.000). The results of the PR calculation show that respondents who have low motivation 6 times are not compliant with the implementation of SIRS (95% CI (3,024-13,325)). Respondents who have a low workload in the compliance group do not comply with SIRS (47,2%) and a high workload on compliance SIRS compliance (52.8%). Meanwhile, respondents who have a high workload in the SIRS low compliance group (18.0%), than high workload in compliance (82.0%). Chi Square test results show that there is a significant relationship between the workload of SIRS users and compliance (P-value 0.000) The results of the PR calculation show that respondents who have a low workload are 4 times not compliant with the implementation of SIRS (95% CI (2.2003-8.319)).

Respondents who have low SIRS application in the group SIRS non-compliance (17.5%) and SIRS implementation were high on SIRS compliance (82.5%), while respondents who had high SIRS application were in the low SIRS compliance group (44.4%), than those who had SIRS implementation were low. high adherence to compliance (55.6%). The results of the Chi Square test showed that there was a significant relationship between the implementation of SIRS and compliance (P-value 0.000). Relationship Effect of Knowledge, Motivation, Workload in the Implementation of SIRS.

Table 2. The Effect of Knowledge, Motivation and Workload on the Implementation of SIRS at RSDC Wisma Atlet Kemayoran

Implementati on of SIRS	Implementation of SIRS				P-Value	PR 95% CI
	Not Implementatio n of SIRS		Implementat ion of SIRS			
	n	%	n	%		
Knowledge						
Low	26	39,4	40	60,6	0,29	,494 (2,250-,835)
High	54	56,8	41	43,2		
Motivation						
Low	28	41,2	40	58,8	0,65	,552(,293-1,040)
High	52	55,9	41	44,1		
Workload						
Low	35	48,6	37	51,4	0,806	,925(,497-8,319)
High	45	50,6	44	49,4		
Compliance						
Non Compliance	14	28,0	36	72,0	0,000	,265(,129-,547)

Implementati on of SIRS	Implementation of SIRS				P-Value	PR 95% CI
	Not Implementatio n of SIRS		Implementat ion of SIRS			
	n	%	n	%		
Knowledge						
Low	26	39,4	40	60,6	0,29	,494 (2,250-,835)
High	54	56,8	41	43,2		
Compliance	66	59,5	45	40,5		

Source: SPSS Processing Results (2022)

Respondents who have low knowledge in the group do not apply SIRS (39.4%) while the application of SIRS (60.6%). Meanwhile, respondents who have high knowledge in the group do not apply SIRS (56.8%), than those who have high knowledge on the application of SIRS (43.2%). Test Chi-Square show that H0 failed to be rejected, which means that there is no significant relationship between knowledge on the implementation of SIRS and the obtained value (P Value 0.29) > (0.05).

Respondents who had low motivation in the group did not apply SIRS (41.2%) and high motivation in the application of SIRS (58.8%). Meanwhile, respondents who have high motivation in the group do not apply SIRS (55.9%), than those who have high motivation to apply SIRS (44.1%). Test Chi-Square showed that H0 failed to be rejected, which means that there was no significant relationship between motivation to the implementation of SIRS and obtained a value (P Value 0.65) > (0.05).

Respondents who have a low workload in the group without SIRS application (48.6%) and high workload in the SIRS application (51.4%). Meanwhile, respondents who had a high workload in the group that did not apply SIRS (50.6%), than those who had a high workload in the group that applied SIRS (49.4%). Test Chi-Square show that H0 failed to be rejected, which means that there is no significant relationship between workload and the implementation of SIRS with the obtained value (P Value 0.806) > (0.05).

Respondents who had low SIRS compliance in the compliance group did not comply with the implementation of SIRS (28.0%) and adhered to the application of SIRS (72.0%). Meanwhile, respondents who had high SIRS compliance in the group that did not apply SIRS (59.5%), than those who had high SIRS implementation in the non-compliant group (40.5%). The results of the Chi Square test showed that there was a significant relationship between compliance with the implementation of SIRS (P-value 0.000).

Discussion

Relationship Effect of knowledge, motivation, and workload on the implementation of SIRS with medical personnel compliance as an intervening variable at RSDC Wisma Athlete Kemayoran.

Hospital is one of the organizations engaged in the field of health services, which is very complex and professional, technology-intensive, and rule-intensive (Uswatun Hasanah, 2022). As one of the organizations in health services, hospitals often experience difficulties in processing information for both internal and external needs, so it is necessary to improve the management of information that is efficient, fast, easy, accurate, and safe. information technology through the use of a computer-based Management Information System. The results showed that the results of the Chi Square test showed that there was a significant relationship between compliance with the implementation of SIRS (P-value 0.000). The conclusion is that based on the variables of knowledge, motivation, workload on SIRS compliance at RSDC Wisma Atlet Kemayoran there is a relationship (P-value 0.000).

The Hospital Management Information System is known as SIRS. SIRS is an application program or computer software created to assist hospital management in performing data entry, processing data and making patient data reports. Hospital management information system is an inseparable part of overall hospital services, and is even one of the main joints in daily activities (Sutanta, 2003). Application of Hospital Management Information System.

The results of the research from Hendri 2018 are known that the success in implementing SIRS RSUD Dr. Sudirman Kebumen is influenced by factors of system quality, service quality, system use, user satisfaction and benefits. User satisfaction is the variable that has the greatest influence.

The Relationship of the Effect of SIRS Knowledge in Improving Compliance Medical Personnel

Knowledge is the result of remembering something, including recalling events that have been experienced either intentionally or unintentionally and this occurs after people make contact or observations of a certain object (Notoatmodjo, 2007).

Knowledge or knowledge is the result of human sensing or the result of knowing someone about an object through their five senses (Ananta & Dirdjo, 2021). The five human senses to sense objects are sight, hearing, smell, taste and touch. At the time of sensing to produce knowledge is influenced by the intensity of attention and perception of the object. A person's knowledge is mostly obtained through the sense of hearing and the sense of sight (Notoatmodjo, 2014).

The results of the Chi Square test showed that there was a significant relationship between SIRS knowledge and medical personnel compliance (P-value 0.000). The results of the PR calculation show that respondents who have low knowledge 4 times experience disobedience to the application of SIRS. The results of previous research from (Regester & Larkin, 2008). There are factors that most influence the behavior of nurses in using SIRS is the knowledge factor, the respondent's understanding of SIRS is not related to the training obtained but associated with how often they use SIRS in documenting all activities related to patients.

The Relationship of the Effect of Motivation in Improving Compliance of Medical Workers

Motivation is very important because with motivation it is expected that every employee will work hard and be enthusiastic to achieve high work productivity. Motivation will provide inspiration, encouragement, morale for employees so that good working relationships are established between employees and leaders so that organizational goals can be achieved optimally (Ahmad, 2014).

The results of the Chi Square test showed that there was a significant relationship between SIRS user motivation and compliance (P-value 0.000). The results of the PR calculation show that respondents who have low motivation 6 times do not comply with the implementation of SIRS (Regester & Larkin, 2008).

The results of previous research from Muhammad Husni found that motivation had a positive and significant effect on adherence to writing diagnoses on the patient's medical resume (p values 0.000 and 0.000; R2 0.562 and 0.574). Knowledge, attitude and motivation jointly affect compliance (p value 0.000; R2 0.679). Zahirah Hospital should continue to support the working environment at the hospital so that the doctor's compliance in writing disease diagnoses on the patient's medical resume increases. Doctors at Zahirah Hospital should be able to write a disease diagnosis on a medical resume in a timely manner.

The results of previous research from Dani 2019. found that the implementation of SIRS at the TPPRJ had run smoothly, with the SIRS at the TPPRJ it really helped them in their work and was more time efficient from manual to system. However, in its application there are some officers who have not been responsible and disciplined. This is because there is no support and motivation from management specifically for officers not yet.

Relationship Effect of Workload in Improving Compliance of Medical Personnel

Workload can be defined as a difference between the capacity or ability of workers and the demands of the work that must be faced. Given that human work is mental and physical, each has a different level of loading. The level of loading that is too high allows excessive energy consumption and overstress occurs, on the contrary Loading intensity that is too low allows boredom and saturation or understress. Therefore it is necessary to strive for the optimum level of loading intensity that exists between the two extreme limits and of course differs from one individual to another.

According to (Di Gennaro et al., 2020) every job is a burden for the perpetrator. The burden depends on how the person works so it is called workload. So the definition of workload is the ability of the human body to accept work. Based on an ergonomic point of view, every workload received by a person must be appropriate and balanced both to the physical abilities, cognitive abilities and limitations of humans who receive the load. The burden can be in the form of a physical burden or a mental burden. Physical workload can be in the form of heavy work such as caring, transporting, lifting, and pushing. While

the mental workload can be in the form of the extent to which the level of expertise and work performance possessed by individuals with other individuals (Indonesia, 2020).

The results of the Chi Square test show that there is a significant relationship between the workload of SIRS users and compliance (P-value 0.000). The results of the PR calculation show that respondents who have a low workload 4 times are not compliant with the implementation of SIRS (Khairani, Soviyant, & Aznuriyandi, 2018).

Conclusion

Knowledge, motivation, and workload have a significant effect on the compliance of health workers in implementing SIRS as an intervening variable at RSDC Wisma athletes Kemayoran. because the presence of these three variables has an impact on the implementation of SIR on the compliance of health workers. Knowledge has a positive effect in increasing the compliance of health workers. with good knowledge of health workers on SIR can have an impact on the use and utilization of the. Motivation system has a positive effect in increasing compliance of medical personnel. With the motivation given by the hospital leadership, it will have a positive impact on organizational culture so that health workers have the responsibility to carry out the tasks that are given responsibility for the use of SIR. Workload has a positive effect on increasing the compliance of medical personnel. in accordance with the workload with the number of health workers will make it easier to use SIR because with the high workload automatically health workers are less focused on the use of SIR. Knowledge has a negative effect on the implementation of SIRS at the Wisma Atlet Kemayoran Hospital. with the influence of high or low knowledge does not affect the application of SIR because in the hospital system it is always recommended to apply SIR in accordance with the regulations. Motivation has a negative effect on the implementation of SIRS at the RSDC Wisma Atlet Kemayoran. with low motivation, it cannot affect the application of SIR because in hospitals it is always recommended the application of SIR, but its application is not optimal. Workload has a negative effect on the implementation of SIRS at RSDC Wisma Atlet Kemayoran. because in hospitals it is always recommended to apply SIR even though the number of human resources is not in accordance with the workload experienced by health. workers. the presence of competent health workers can affect compliance with the application of SIR so that SIR can facilitate existing services at the hospital.

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