



THE RELATIONSHIP OF NURSE BEHAVIOR TO THE APPLICATION OF K3 CULTURE IN THE INPATIENT INSTALLATION OF DR. R.M. DJOELHAM BINJAI HOSPITAL IN 2022

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KeyWords

Nurse Behavior, K3 Culture, Inpatient Installation.

ABSTRACT

Introduction; Occupational Health and Safety (K3) culture in health organizations has a strong influence on many efforts, including attempts to identify behaviors, assumptions or omissions that can lead to medical errors. The results of observations at the hospital. Dr. R.M. Djoelham by looking directly at the behavior of nurses in the inpatient room shows that there are still nurses who do not apply the K3 culture such as not using handsoons during patient examinations and not wearing masks. Purpose; to find out the relationship of nurse behavior to the application of K3 culture in the Inpatient Installation of Dr. R.M. Djoelham Binjai Hospital. Method; This type of research uses a quantitative design with a cross-sectional design. The study population was all inpatient nurses as many as 199 people with a sample of 67 people taken using random sampling techniques. Data analysis using univariate and bivariate analysis with chi-square test statistics. Results; The results showed that the P value for the knowledge variable = $0.002 < \alpha = 0.05$, attitude = $0.000 < \alpha = 0.05$ and action = $0.002 < \alpha = 0.05$ which means that knowledge, attitudes and actions have a relationship to the application of K3 culture in the Inpatient Installation of Dr. R.M. Djoelham Binjai Hospital. Conclusion; there is a relationship of knowledge, attitudes and actions towards the application of K3 culture in the Inpatient Installation of Dr. R.M. Djoelham Binjai Hospital.

INTRODUCTION

Every Hospital needs to implement safe Occupational Health and Safety. The hospital is one of the workplaces with various threats of danger that have an impact on the health of one of the high-risk hospital workers, namely nurse workers, therefore the importance of a culture of Occupational Health and Safety (K3) for nurses to avoid infectious diseases such as not using Personal Protective Equipment (PPE), one of which is the use of handsoons which can lead to contagion such as transmission from contaminated droplets and liquids.

Hospitals are health service institutions that provide individual health services on a regular basis (including promotive, preventive, curative and rehabilitative) by providing inpatient, outpatient, and emergency services. Hospital services concern various functions of health services, education, research and also cover various medical actions and disciplines. A hospital is a workplace that has the potential for work accidents (1).

According to WHO (World Health Organization) the definition of Occupational Safety and Health (K3) is an effort that aims to improve and maintain the highest degree of physical, mental and social health for workers in all types of work, prevention of workers'

health disorders caused by working conditions; protection for workers in their work from risks due to factors that are detrimental to health (2).

Occupational Safety and Health (K3) is a form of effort to create a workplace that is safe, healthy, free from environmental pollution, so that it can protect and be free from work accidents which ultimately increases work efficiency and productivity (3).

K3 culture is very important to apply in hospitals, K3 culture is generally defined as the values, beliefs, and perceptions that surround the behavior of people working in hospitals. Occupational Health and Safety (K3) culture in health organizations has a strong influence on many efforts, including attempts to identify behaviors, assumptions or omissions that may lead to medical errors (4).

Occupational Safety and Health Culture (K3) The hospital has implemented a culture of Occupational Safety and Health (K3), namely by socializing about Occupational Safety and Health (K3) in the Hospital to patients or introducing patients and supporting the Hospital to be provided with information through posters, pamphlets and banners. The hospital has also implemented this program in accordance with the Ministry of Health of the Republic of Indonesia No. 1087 of 2010 which states that hospitals need to provide information on facilities related to Occupational Safety and Health (K3), information on facilities related to Occupational Safety and Health (K3), information about the risk of special hazards in the workplace, Standard Operating Procedures (SOP) equipment, and the use of Standard Operating Procedures (SOP) for the use of Personal Protective Equipment (PPE) (5).

Protecting yourself by using complete PPE at work is very important, the implementation of a culture of Occupational Safety and Health (K3) is an obligation that must be carried out by all activity actors to protect the safety of workers. The implementation of the Occupational Safety and Health (K3) culture is a process of implementing occupational health and health values aimed at increasing the effectiveness of planned, measurable, structured, and integrated work protection (6).

Work accidents can be at any time when on duty in hospitals, Occupational Safety and Health (K3) is one of the important issues in the world of work today including in the hospital environment. The number of work accidents in hospitals is higher than other workplaces and is largely due to unsafe behavior (7).

Work accidents are an important problem in the Hospital environment. This is because the Hospital is a health service unit that provides services in all fields and types of diseases. Therefore, hospitals are required to be able to provide and implement an effort so that all human resources in the hospital can be protected, both from diseases and accidents due to work.

Hospital K3 culture is the creation of an environmental culture that is Compact, Neat, Cool, Caring and Diligent (5R) healthy, safe, and free of potential hazards and risks that can increase effectiveness, efficiency and productivity (8). Based on PMK RI No. 66 of 2016, that in hospitals as health service institutions for the community is a workplace that has a high risk to the safety and health of Human Resources (HR) hospitals, patients, patient companions, visitors, and the hospital environment.

Dr. R.M. Djoelham Binjai Regional General Hospital is a Regional General Hospital owned by the Regional Government of Binjai City which is currently classified as a type B general hospital located on Jl. Sultan Hasanuddin No. 9, Kartini, Binjai City District, Binjai City, North Sumatra. The Director of RSUD Dr. R.M. Djoelham Binjai is dr. David Immanuel Tambun, Sp. B. Dr. R.M. Djoelham Binjai Regional General Hospital has 199 nurses on duty in the inpatient room. Dr. R.M. Djoelham Binjai Hospital is the highest referral hospital in Binjai City.

Based on a preliminary survey conducted on January 21, 2022 at the Dr. R.M. Djoelham Binjai Regional General Hospital by conducting interviews and direct observations. The results of the interview to the Chairman of the Occupational Safety and Health Committee related to the behavior of implementing the K3 culture in the inpatient room by nurses are that there are still nurses who do not comply with the SOP and there are still nurses who behave rashly by not using PPE when conducting patient examinations so that there is a chance of work accidents. This happens because of the nurse's lack of knowledge about K3 culture so that it affects the attitude and actions of nurses at work. And the data recorded in the inpatient room of Dr. R.M. Hospital. Djoelham Binjai City had 13 cases of work accidents in 2019, 11 cases of work accidents in 2020, and 16 cases of work accidents in 2021.

Cases of work accidents in nurses in the inpatient room of Dr. R.M. Djoelham Binjai Hospital are mostly nurses who have been pierced by syringes or other sharp objects before / after or when providing health services that have the possibility of spreading nosocomial disease. The results of the observation by looking directly at the behavior of nurses in the inpatient room are that there are still nurses who do not apply the K3 culture such as not using handsoons during patient examinations and not using masks. As a result of this behavior, the author is interested in conducting research related to "The Relationship of Nurse Behavior to the Application of K3 Culture in the Inpatient Installation of Dr. R.M. Djoelham Binjai Hospital in 2022"

The purpose of this study is to determine the relationship of nurse behavior to the improvement of K3 culture in the inpatient installation of Dr. R.M. Djoelham Binjai Hospital in 2022.

METHOD

This study used ; This type of research uses quantitative design with cross-sectional design (9). The study population was all inpatient nurses as many as 199 people with a sample of 67 people taken using random sampling techniques. The data analysis used was using univariate and bivariate analysis using the chi-square test.

RESULT

Table 1 is known that of the 67 respondents who had the age of 25-29 years as many as 8 respondents (11.9%), 30-34 years as many as 6 respondents (9.0%), 35-39 years as many as 16 respondents (23.9%), 40-44 years as many as 16 respondents (23.9%), 45-49 years as many as 13 respondents (19.4%) and 50-54 years as many as 8 respondents (11.9%)

In gender characteristics, respondents who were female were 39 respondents (58.2%) and men as many as 28 people (41.8%). The number of respondents on educational characteristics, respondents who had D3 nursing education were 32 respondents (47.8%), S1 Nursing as many as 26 respondents (38.8%) and S2 Nursing as many as 9 respondents (13.4%).

Table 1.
Frequency Distribution of Respondents' Characteristics in Inpatient Installations of Dr.RM Hospital. Djoelham Binjai in 2022

Characteristic	f	%
Age		
25-29 Years	8	11,9
30-34 Years	6	9,0
35-39 Years	16	23,9
40-44 Years	16	23,9
45-49 Years	13	19,4
50-54 Years	8	11,9
Sum	67	100
Gender		
Woman	39	58,2
Man	28	41,8
Sum	67	100
Education		
D3 Nursing	32	47,8
S1 Nursing	26	38,8
S2 Nursing	9	13,4
Sum	67	100

Table 2. cross-tabulation between knowledge of the application of K3 culture, it is known that of the 35 respondents (52.2%) who are well knowledgeable, as many as 22 respondents (32.8%) apply K3 culture well and as many as 13 respondents (19.4%) do apply K3 culture poorly. Furthermore, of the 32 respondents (47.8%) who were poorly knowledgeable, as many as 7 respondents (10.4%) applied K3 culture well and as many as 25 respondents (37.3%) did apply K3 culture poorly. Based on the results of the *chi-square* test , it shows the value of $sig-p = 0.002 < 0.05$. This proves that there is a relationship between nurses' knowledge and the application of K3 culture in the Inpatient Installation of Dr.RM Hospital. Djoelham Binjai in 2022.

The results of the cross-tabulation between attitudes towards the application of K3 culture, it was found that of the 28 respondents (41.8%) who had good attitudes, as many as 23 respondents (34.3%) applied K3 culture well and as many as 5 respondents (7.5%) did apply K3 culture poorly. Furthermore, of the 39 respondents (58.2%) who had a bad attitude, as many as 6 respondents (9.0%) applied K3 culture well and as many as 33 respondents (49.3%) did apply K3 culture poorly. Based on the results of the *chi-square* test , it shows the value of $sig-p = 0.000 < 0.05$. This proves that there is a relationship between nurses' attitudes towards the application of K3 culture in the Inpatient Installation of Dr.RM Hospital. Djoelham Binjai in 2022.

Furthermore, cross-tabulation between actions against the application of K3 culture, it was found that out of 31 respondents (46.3%) had good actions, as many as 20 respondents (29.9%) did apply K3 culture well and as many as 11 respondents (16.4%) did apply K3 culture poorly. Furthermore, of the 36 respondents (53.7%) who had poor actions, 9 respondents (13.4%) did a good application of K3 culture and as many as 27 respondents (40.3%) did an unfavorable application of K3 culture. Based on the results of the *chi-square* test , it shows the value of $sig-p = 0.003 < 0.05$. This proves that there is a relationship between nurses' actions and the application of K3 culture in the Inpatient Installation of Dr.RM Hospital. Djoelham Binjai in 2022.

Table 2.
The Relationship of Knowledge, Attitudes and Actions towards the Application of K3 Culture in the Inpatient Installation of Dr.RM Hospital. Djoelham Binjai in 2022

Variable	Application of K3 Culture				Total		Sig-p
	Good		Not Good Enough		f	%	
	f	%	f	%			
Knowledge							

Good	22	32,8	13	19,4	35	52,2	0,002
Not Good Enough	7	10,4	25	37,3	32	47,8	
Total	29	43,3	38	56,7	67	100	
Attitude							
Good	23	34,3	5	7,5	28	41,8	0,000
Not Good Enough	6	9,0	33	49,3	39	58,2	
Total	29	43,3	38	56,7	67	100	
Action							
Good	20	29,9	11	16,4	31	46,3	0,003
Not Good Enough	9	13,4	27	40,3	36	53,7	
Total	29	43,3	38	56,7	67	100	

DISCUSSION

The Relationship of Nurse Knowledge to the Application of K3 Culture

Based on the results of the *chi-square* test, it shows the value of $sig-p = 0.002 < 0.05$. This proves that there is a relationship between nurses' knowledge and the application of K3 culture in the Inpatient Installation of RSUD Dr.RM. Djoelham Binjai tahun 2022.

In line with research conducted by Kh a rismasari in 2018 on the Relationship of K3 Knowledge and Behavior with K3 Culture in Nurses at Widodo Hospital, it shows that there is a relationship between K3 knowledge ($p-value = 0.000$) and $r = 0.356$ and there is no relationship between K3 behavior ($p value = 0.512$) K3 culture for nurses at Widodo Hospital (10).

Research conducted by Yusmadar in 2019 on Faktor yang Affecting the Implementation of K3 di Inpatient Room of Sultan Abdul Aziz Syah Peureulak Hospital, showed that the perception of having $sig 0.029 < 0.05$ to the implementation of K3 in the Inpatient Room, *knowledge sig* $0.037 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room, *sig action* $0.019 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room, the policy *sig* $0.028 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room and SPO *sig* $0.021 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room (11).

Knowledge is the result of human sensing, or the result of a person's knowledge of an object through the senses he has (eyes, nose, ears, and so on) so as to produce knowledge that is influenced by the intensity of attention and perception of the object. Knowledge or cognitive realm is a very important domain in shaping a person's attitude (*Overt Behaviour*). If a person accepts a new behavior or adopts a behavior based on knowledge, awareness, and a positive attitude, then the behavior will last a long time. On the other hand, if the behavior is not based on knowledge and awareness, it will not last long. If a person adopts a behavior (new behavior), then he must first know what the meaning or benefit of the behavior means to himself or his family (12).

Occupational Safety and Health Culture (K3) The hospital has implemented a culture of Occupational Safety and Health (K3), namely by socializing about Occupational Safety and Health (K3) in the Hospital to patients or introducing patients and supporting the Hospital to be provided with information through posters, pamphlets and benners. The hospital has also implemented this program in accordance with the Ministry of Health of the Republic of Indonesia No. 1087 of 2010 which states that hospitals need to provide information on facilities related to Occupational Safety and Health (K3), information on facilities related to Occupational Safety and Health (K3), information about the risk of special hazards in the workplace, Standard Operating Procedures (SOP) equipment, and the use of Standard Operating Procedures (SOP) for the use of Personal Protective Equipment (PPE) (5).

According to the researchers' assumptions nurse knowledge has a relationship to the application of K3 culture. This is because there are still many officers who are still knowledgeable, such as lack of insight into officers to comply with the regulations made, do not understand how to implement K3 in the workplace effectively and also there are still those who do not understand what happens if they ignore the application of K3 culture. The understanding of K3 in nurses still needs to be deepened. It is not only limited to theoretical or knowledge but also understanding and application in the field, considering that there are still nurses who are confused about implementing a good and correct K3 culture in hospitals. One's own knowledge is influenced by formal education and is closely related. It is hoped that with higher education, the wider knowledge will be. But a poorly educated person is not absolutely low-knowledge anyway, as it can be influenced by a variety of other factors.

The Relationship of Nurses' Attitudes towards the Application of K3 Culture

Based on the *results of the chi-square test*, it shows the value of $sig-p = 0.000 < 0.05$. This proves that there is a relationship between nurses' attitudes towards the application of K3 culture in the Inpatient Installation of Dr.RM Hospital. Djoelham Binjai tahun 2022.

In line with research conducted by Pinontoan in 2020 on Psychological and Behavioral Factors towards the Application of Hospital Occupational Safety and Health Management at Pobundayan Hospital, Kotamobagu City, *it shows that* there is a meaningful relationship between beliefs ($p=0.031$), perceptions ($p=0.007$), knowledge ($p=0.039$), attitudes ($p=0.039$) and actions ($p=0.007$) with the application of K3RS at Pobundayan Hospital, Kotamobagu City (13).

Research conducted by Kumayas in 2019 on the Relationship of Knowledge and Sikap with Occupational Health and Safety (K3) P in Perawat at Bhayangkara Hospital TK III Manado, showed that the probability value in K3 knowledge and application was 0.019 and the probability value of K3 attitudes and absorption was 0.000. The conclusion is that there is a relationship between knowledge and attitudes with the application of occupational health and safety (K3) to nurses at Bhayangkara Tk III Manado hospital (14).

An attitude is a reaction or response of a person who is still closed to a stimulus or object. The manifestation of attitude cannot be seen immediately, but can only be interpreted in advance from closed behavior. Attitude manifestly indicates the connotation of the existence of a congruence of reactions to a particular stimulus. In everyday life is an emotional reaction to social stimulus. *Newcomb* one of the social psychologists stated that the attitude is a readiness to act, and not an executor of any particular motive. An attitude is not yet an action or activity, but is a 'predisposition' of an action or behavior. That attitude is still a closed reaction, not an open reaction (12).

Another sense of attitude is the readiness to react to an object in a certain way and is an evaluative response to cognitive experiences, reactions of affection, will and past behavior. Attitude will affect the thinking process, affection response, will and subsequent behavior. So attitude is an evaluative response based on the process of self-evaluation, which is inferred in the form of a positive or negative assessment that then crystallizes as a reaction to the object. Attitude manifestly indicates the condition of the existence of a congruence of the reaction to a particular stimulus. In everyday life, an attitude is a reaction of an emotional nature to a social stimulus. The relatively sedentary attitude, arising from experience, is not carried from birth but is the result of learning, therefore the attitude can be affirmed or changed (12).

According to the researchers' assumptions the attitude of nurses has a relationship with the application of K3 culture. This is because there are still nurses who are aware of implementing the K3 culture but do not understand the rules and are mistaken in applying the rules and ignore the rules that have been made. In addition, there are still nurses who do not implement the hospital's K3 culture. Therefore, it is recommended to nurses in hospitals to be positive about the procedures for implementing occupational safety and health in the form of supporting / approving all K3 programs, especially for the prevention of work accidents, so there is an effort to have a pro-active attitude to apply new knowledge about the implementation of occupational safety and health culture. The more pro-active the application of new knowledge, the more positive it will be about the implementation of K3 so that it will reduce the incidence of work accidents. Based on the recommendations above, it is necessary to participate in hospitals, especially the K3RS Committee to provide information and provisions on the standards for the application of K3 culture.

The Relationship of Nurse Action to the Application of K3 Culture

Based on the results of *the chi-square test*, it shows the value of $sig-p = 0.000 < 0.05$. This proves that there is a relationship between nurses' actions to the application of K3 culture in the Inpatient Installation of Dr.RM Hospital. Djoelham Binjai in 2022.

In line with the research conducted by Sitohang in 2019 on the Relationship between Nurse Behavior and the Application of Occupational Safety and Health (K3) in the Emergency Room, it shows that *knowledge is related to the application of*

K3 in Bunda Thamrin General Hospital, $p = 0.003 < 0.05$, attitude $p = 0.004 < 0.05$. The action relates to the application of K3 in Bunda Thamrin General Hospital, $p=0.001 < 0.05$ (15).

Research conducted by Yusmadar in 2019 on Factors Affecting the Implementation of K3 in the Inpatient Room of Sultan Abdul Aziz Syah Peureulak Hospital, showed that the perception of having a sig of $0.029 < 0.05$ to the implementation of K3 in the Inpatient Room, knowledge of sig $0.037 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room, sig action $0.019 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room, the policy of sig $0.028 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room and SPO sig $0.021 < 0.05$ has an influence on the implementation of K3 in the Inpatient Room (11).

Actions can be formed from knowledge, and individual attitudes. But an attitude has not been automatically manifested in an action (overt behavior). For the realization of attitudes into a real difference, supporting factors or possible conditions are needed, including facilities (26). After a person knows the object of health, then holds an assessment or opinion of what is known, the next process is expected that he will carry out or practice what he knows or is addressed, this is the so-called health practice or it can also be said to be health behavior (12).

According to the assumptions of researchers the actions of nurses have a relationship with the application of K3 culture. Good nurse actions have an impact on the implementation of a good K3 culture as well, and conversely, the actions of nurses who are not good tend to be in the application of K3 culture are also not good. Good nurse actions are usually because nurses are experienced at work so that in implementing the K3 culture, they are also used to it. However, in the results of this study, there are still nurses who have poor actions such as not wearing anti-slip shoes and often neglecting to use gloves when handling patients. Good actions in implementing the K3 culture must be carried out by nurses such as supporting every program of implementing the K3 culture in hospitals, namely using PPE at every time they work, avoiding work that is at risk of accidents and obeying regulations made by the hospital. This is done to reduce the risk of occupational accidents and occupational diseases.

Conclusion

The conclusions in this study include:

1. There is a relationship between nurses' knowledge and the application of K3 culture in the Inpatient Installation of D r.RM Hospital. Djoelham Binjai tahun 2022 with p value = $0.002 < \alpha = 0.05$.
2. There is a relationship between nurses' attitudes towards the application of K3 culture in the Inpatient Installation of D r.RM Hospital. Djoelham Binjai tahun 2022 with p value = $0.000 < \alpha = 0.05$.
3. There is a relationship between nurses' actions to the application of K3 culture in the Inpatient Installation of D r.RM Hospital. Djoelham Binjai tahun 2022 with p value = $0.003 < \alpha = 0.05$.

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