### **International Journal of Medical Science and Clinical Research Studies**

ISSN(print): 2767-8326, ISSN(online): 2767-8342

Volume 03 Issue 04 April 2023

Page No: 651-654

DOI: https://doi.org/10.47191/ijmscrs/v3-i4-15, Impact Factor: 6.597

### An Analysis of Knowledge, Attitudes and Support Effects on the Implementation of Infection Control Prevention at the Public Health Center in Bengkulu Province

Risma Apriani<sup>1</sup>, Popi Oktavera<sup>2</sup>

<sup>1</sup>Widyaiswara Ahi Madya UPTD Pelatihan Kesehatan Provinsi Bengkulu <sup>2</sup>Widyaiswara Ahi Muda UPTD Pelatihan Kesehatan Provinsi Bengkulu

#### ABSTRACT

**ARTICLE DETAILS** 

**Published On:** 

07 April 2023

**Background:** The Infection Prevention and Control is an effort to ensure the protection for everyone toward the possibility of being infected by infection from sources to the community while receiving health services at various health facilities. It is hoped that the implementation of infection prevention and control at the health centers can be carried out efficiently and effectively by following the established policies and standard procedures. How is the implementation of Infection Prevention and Control in public health center.

**Materials/Methods**: This study is a quantitative study with a cross-sectional approach which was carried out to determine the effect of knowledge and support on the implementation of infection prevention and control in in public health center in Bengkulu Province. The population in this study is the health center staffs who carry out the service. The samples taken were 131 respondents. Data analysis was carried out through linear and multiple regression using SPSS 22 which aims to analyze the effect of knowledge and support on the implementation of infection prevention and control in public health center.

**Result:** From the results of the Chi-square test analysis, it can be seen that the effect of knowledge on the infection prevention and control application obtains a p-value of 1.0>0.5. From these results, it can be concluded that there is no effect of knowledge on the application of infection prevention and control. The attitude variable affects the infection prevention and control application which obtains 100% good results. The support variable has an effect on the infection prevention and control application which obtains a p-value of 0.021 < 0.5. From these results it can be concluded that there is an effect of support variable on the implementation of infection prevention and control. The officers' knowledge has not had an effect on the implementation of infection prevention and control at the health centers. Several factors that can affect the compliance and non-compliance of health workers with infection prevention and control steps are: knowledge, education and training, experience, and lack of equipment and materials supplies.

**Conclusion:** Officers need to increase their knowledge of IPC and be trained in firmness of attitude, maintaining support from the environment in order to maintain and improve their ability to apply IPC.

KEYWORDS: Knowledge, Support, Infection Prevention and Control.	Available on:
	https://iimscr.org/
	<u>-</u>

#### INTRODUCTION

Healthcare Associated Infections (HAIs) are health problems in various countries in the world include Indonesia. In the Asian Pacific Economic Committee (APEC) or Global Health Security Agenda (GHSA) forums, infectious diseases related to health services are on the agenda for discussion because the HAIs has a direct impact as a burden on the country's economy. In principle, the incidence of HAIs can actually be prevented if health care facilities consistently implement the IPC program. The Infection Prevention and Control is an

# An Analysis of Knowledge, Attitudes and Support Effects on the Implementation of Infection Control Prevention at the Public Health Center in Bengkulu Province

effort to ensure the protection for everyone toward the possibility of being infected by infection from sources to the community while receiving health services at various health facilities.

Strict implementation of infection prevention and control (IPC) program must be carried out increasingly in all health care facilities as the effort to prevent and control more complex infections. The implementation of IPC in health centers is expected to be carried out efficiently, and effectively by following established policies and standards and procedures. In the efforts to prevent and control infections in health care facilities, it is very important that officials and policy makers understand the basic concepts of infectious diseases. IPC understanding both the concept of procedures and mechanisms can be done by increasing the competence of human resources in health care facilities through training. IPC practice from patient, management, and healthcare worker perspectives can help develop a better understanding of the factors that affect adherence to IPC policies and guidelines. While increasing funds will obviously solve some of the problems mentioned above. It is important to note that many research results have explained interventions to support patient involvement in implementing IPC guidelines (1).

Training related to IPC for medical personnel, nurses and other health workers is held by the Ministry of Health, local governments, professional organizations or other organizations in accordance with statutory provisions. Infection prevention and control in public health center must be immediately implemented by officers, but not all officers have received training, so it is necessary to analyze knowledge and support for the implementation of prevention and control.

#### METHOD

The research method used is a quantitative method with a cross sectional approach with the aim of knowing the effect of knowledge and support on the implementation of infection prevention and control at the Bengkulu Province Health Centers. Knowledge and support are the independent variables, and the implementation of infection prevention and control at public health centers as the dependent variable. Data collection was carried out by using an instrument that contained a list of knowledge and support questions. The population of this study are health center officers who provided services, and the sample is 131 respondents.

Analysis of linear and multiple regression data using SPSS 22 to analyze the effect of knowledge and support on the implementation of infection prevention and control. The purpose of the Multiple Linear Regression Test analysis is to determine whether or not there is an effect of two or more independent variables.

#### Results

The results of the univariate analysis of the independent variable knowledge with a good average score (92.75%), attitude with a good average score (100%), support with a good average score (94.26). Application of IPC with a good average score (92.37%).

The results of the Chi-square test analysis aims to determine the effect of the independent variables Knowledge, Attitude and Support on the application of IPC can be seen in Table.1

Variables	IPC Implementation				Total		Value
	Good	Good Enough Good			Good Enough Good		
	N	%	N	%	N	%	
Knowledge							1.00
Good enough	0	0	2	100	2	100	
Good	10	7.25	119	92.75	129	100	
Attitudes							
Good enough	0	0	0	0			000
Good	10	7,67	112	92,37	131	100	
Support							0.021
Good enough	3	33.33	6	66,67	9	100	
Good	7	5,74	115	94.26	122	100	

#### Table 1. Chi-square Test Result

Source: Processed data

From the results of table 1 can be seen that the influence of knowledge on the application of infection prevention and control (IPC) with a p-value of 1.0 > 0.5. It can be concluded that there is no effect of knowledge on the application of IPC. Attitudes affect the application of infection prevention and

control, 100% good results are obtained. The effect of support on the application of infection prevention and control obtained a p-value of 0.021 <0.5. It can be concluded that there is an effect of support on the implementation of IPC. **DISCUSSION** 

# An Analysis of Knowledge, Attitudes and Support Effects on the Implementation of Infection Control Prevention at the Public Health Center in Bengkulu Province

Staff knowledge has not had an effect on the implementation of infection prevention and control at the health centers. Knowledge of infection prevention and control of health care workers except doctors and nurses is still relatively low; and the role of other health workers in dealing with infections that occur in every patient who is in the process of nursing care (Healthcare Associated Infections/ HAIs) is very important. This condition is due to the low level of academic education and training on infection prevention in health workers out of doctors or nurses. (2)(3).

Some factors that can affect the adherence and noncompliance of health workers to infection prevention and control are: knowledge, education and training, experience, lack of supplies (alcohol hand rub, nearest sink, soap or paper towels), working in the public hospitals, and working with patients exposed to blood or body fluids. Barriers to complying with IPC include: workload, insufficient time, professional category, and low patient to nurse ratio. It is strongly recommended that adopting a multi-factor approach to intervention strategies to improve infection prevention and control has been shown to reduce infections per patient in the care (Healthcare process of nursing Associated among Infections/HAIs), and increasing adherence healthcare workers with infection prevention and control (4).

Multiple approaches (such as: education, training, observation, feedback, easy access to hand hygiene supplies, dedication of financial resources, praise from superiors, strong hospital leadership, prioritizing infection prevention and control needs, marketing campaigns and active participation in institutional level) are strongly recommended to reduce infections that occur in every patient who is in the process of nursing care (Healthcare Associated Infections/HAIs) by increasing health care workers' adherence to infection prevention and control actioans (5).

Attitude and support have very good value, and affect the implementation of infection prevention and control. Nurses should be trained to maintain a positive attitude towards infection prevention and control, and make this as a priority. Nurses need to adhere to infection prevention and control strategies as this will help them stay safe and should be encouraged to attend seminars, workshops and educational programs related to infection prevention and control with the aim of increasing knowledge about infection prevention and control. The key factor identified hindering effective infection prevention and control practices is the unavailability of equipment (6). Factors that affect the utilization of infection prevention and control include the unavailability of relevant equipment (7). There is a significant relationship between the unavailability of equipment and the use of infection control practices. There is a relationship between the unavailability of equipment and the utilization of nurses with infection prevention and control strategies (8)(9).

The attitude of health workers in providing services at the Health Center is very supportive toward the implementation of infection prevention and control (IPC), firmness must be encouraged and trained in a proper and sustainable manner. IPC at the health centers has been supported by the environment and needs to be maintained and improved by always providing supporting equipment, increasing the knowledge and skills of officers about IPC.

#### CONCLUSION

Staffs' knowledge has not affected the application of IPC, while the attitude of officers and support in providing services strongly supports the implementation of infection prevention and control (IPC) at the health centers. Officers need to increase their knowledge of IPC and be trained in firmness of attitude, and maintain support from the environment in order to maintain and improve their ability in applying IPC.

#### REFERENCES

I. Abalkhail A., Alslamah T. (2022) Institutional Factors Associated with Infection Prevention and Control Practices Globally during the Infectious Pandemics in Resource-Limited Settings. Vaccines 2022, 10, 1811.

https://doi.org/10.3390/vaccines10111811.

- II. Cross S, Gon G, Morrison E, Afsana K, Ali SM, Manjang T, et al. An invisible workforce: the neglected role of cleaners in patient safety on maternity units. Glob Health Action.;12(1):1480085. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC63</u> <u>38282/pdf/zgha-12-1480085.pdf</u>
- III. Peters A, Otter J, Moldovan A, Parneix P, Voss A, Pittet D. Keeping hospitals clean and safe without breaking the bank; summary of the healthcare cleaning forum (2018). Springer; <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC62</u> 25655/pdf/13756 2018 Article 420.pdf
- IV. Alhumaid S, Mutair AA., Alawi ZA., Alsuliman M., Ahmed GY, Rabaan AA., Al-Tawfq JA., Omari AA. Antimicrob Resist Infect Control (2021) 10:86 https://doi.org/10.1186/s13756-021-009570.<u>https://aricjournal.biomedcentral.com/articl</u> es/10.1186/s13756-021-00957-0)
- V. Kingston L, O'Connell N, Dunne C. (2016) Hand hygiene-related clini- cal trials reported since 2010: a systematic review. J Hosp Infect.92(4):309–20.
- VI. Njovu, E. (2019). Factors affecting Compliance to Infection Prevention and Control guidelines, by Nurses at St. Dominic Mission Hospital, Ndola Copperbelt, Zambia. Journal of Hospital Infection, 73: 378-385.

https://www.texilajournal.com/nursing/article/583-factors-affecting-compliance

VII. Robinson-Bassey, G.C., Onyeabara, C.N. (2016) Infection Prevention and Control Life Saving Skills:

### An Analysis of Knowledge, Attitudes and Support Effects on the Implementation of Infection Control Prevention at the Public Health Center in Bengkulu Province

Practice among Midwives in University of Port Harcourt Teaching Hospital Rivers State. Obstet Gynecol Int J 4(4): 00119. https://medcraveonline.com/OGIJ/OGIJ-04-00119.pdf

VIII. Fashafsheh, A, Ayed A, Eqtait F and Harazneh L (2015). Knowledge and Practice of Nursing Staff towards Infection Control Measures in the Palestinian Hospitals. Journal of Education and Practice,6(4):79.

https://files.eric.ed.bgov/bfulltext/bEJ1083751.pdf

IX. Desta, M., Ayenew, T., Sitotaw, N., Tegegne, N., Dires, M., & Getie, M. (2018). Knowledge, practice and associated factors of infection prevention among healthcare workers in Debre Markos referral hospital, Northwest Ethiopia. BMC Health Services Research, 18(1), 465.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC60 06704/