THE CORRELATION BETWEEN VISITORS KNOWLEDGE ABOUT HANDWASHING WITH VISITOR HANDWASHING PRACTICE AT ARIFIN ACHMAD GENERAL HOSPITAL

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Abstract

Every year, the incidence of nosocomial infection in Arifin Achmad general hospital is increases significantly. This kind of infection could be transmitted from the patient to visitor or from visitor to the patients. One of the way to decrease nosocomial transmission is through increasing visitor handwashing behavior. The aim of this study is to identify the correlation between visitor knowledge about handwashing with visitor handwashing habits. This study is correlational design with total sampling method. The sample are 64 visitors from medical ward Arifin Ahmad general hospital. Data obtained from questionnaires as research instruments. The results of this study show that 84,4% visitors have high knowledge about handwashing procedure and 54,6% visitors can practice handwashing properly. Fisher test show p value 1.00 which means there is no correlation between visitor knowledge with hand washing behavior in order to prevent nosocomial infection. Based on this study, it is need to re-asses another factor that influence nosocomial infection. And the nurse need to socialize proper handwashing procedure to visitors through health education urgently and increase the discipline of the visitor to do right handwashing procedure.

Keywords: behavior, hand washing, nosocomial infection

BACKGROUND

Each year the incidence of nosocomial infections in hospital is increasing. About 88000 deaths annually as a result of this nosocomial infection (Ducel, 2002). Although research on microbiology and infection risk has grown rapidly, but can not stem the increased rates of nosocomial infections. This is because as many germs that have undergone antibiotic resistance as well as the increasing of patients who are compromised diseases. Additionally germs in hospitals are also more dangerous and resistant to antibiotics than the bacteria that exist in the community (Harri, 2006).

Base on the results of a descriptive study by Suwarni (2001) in all hospitals in Yogyakarta in 1999 showed that the proportion of the incidence of nosocomial infections ranged from 0.0 % to 12.06 %, with an average of 4.26 %. To the average duration of treatment ranged from 4.3 to 11.2 days, with the average of 6.7 days (Suwarni, 2001).

Other data indicate that the nosocomial infection is also prevalent throughout the

world both in Europe, Middle East, Southeast Asia and the Pacific. But the highest figure indicated by Southeast Asia as much as 10 % (Ducel, 2002). Data from the World Health Organization (WHO) shows that 10 percent of hospitalized patients experience nosocomial infections, and Indonesia suffered a 9.8 percent infection (WHO,2002).

Nosocomial infections occur because of germs, and hospitals became one of the place for germs to develop. This transmission process can occur through a variety of mechanisms. Nosocomial infections can be reduced by simple handwashing (Suwarni, 2001). To reduce the risk of nosocomial infections, handwashing in hospitals need to know five important moments according to WHO reference. For visitors in family or relatives should do the handwashing before a hospital environment, after come into contact with a patient's body and leaving the patient's environment. A research result in a national private hospital in Jakarta obtained that nosocomial infections can be controlled or improved by handwashing (Eka Hospital,2013). Other research suggests that nosocomial infection is less than 1.5 percent by doing handwashing practice.

Hand hygiene includes hand washing hand disinfection as the primary and preventive measure. Washing hands is also a prosedure most important prevent nosocomial infections. Centers for Disease Control (CDC) also recommends washing as an effort to prevent nosocomial pneumonia. Wash hands be one effective way to break the chain of transmission of infection , so that the incidence of nosocomial infections can be reduced (Schaffer, 2000).

Wash hands throughly with an adequate amount of water and soap remove more than 90 % transient flora . Antimicrobial soap will reduce the transient flora, but only if it is used for a few minutes. Washing hands with soap (non-medicated) important when hands are dirty and should be routinely after physical contact with the patient (Rotter, 1991).

Arifin Achmad general hospital in Pekanbaru, is a regional referral hospital that serves to organize the efforts of health and recovery of patients. Therefore, it required significant efforts to prevent the spread of infection that can increase the morbidity and mortality of patients . As one of the simplest ways to do is to increase the knowledge and the habit of washing hands on a patient visitors

The purpose of this study is to determine the correlation between visitor knowledge about handwashing with visitor handwashing practice in prevention of nosocomial infections

METHODS

This study is correlational design with total sampling method. The sample are 64 visitors from medical ward Arifin Ahmad general hospital. Data obtained from questionnaires as research instruments.

Data analysis consisted of univariate and bivariate analyzes. Univariate analysis using frequency distribution tables . Bivariate analysis used is chi-square test with a significance level () 0.05.

RESULTS

The number of respondents in this study were 64 visitors from patients treated in Arifin Achmad general hospital. The following table shows the frequency distribution associated with the characteristics of respondents

Figure.1 Characteristics of respondents

No	Characteristics of the contract of the contrac	F	%
1.	Age		
	<40 years	51	79,68
	> 40 years	13	20,32
2.	Gender		
	Male	36	56,2
	Female	28	43,8
3.	Education		
	Elementary	1	1,6
	Junior	9	14,0
	Senior	26	40,6
	Bachelor	28	43,8

Figure. 2
The frequency distribution of respondents by the level of knowledge of visitors

No	The level of	$\boldsymbol{\mathit{F}}$	%
	knowledge		
1.	High	54	84,4
2.	Low	10	15,6

Figure. 3
The frequency distribution of respondents by handwashing practice

No	Handwashing	F	%
	Practice		
1.	Do handwashing	35	54,7
	practice properly		
2.	Do not	29	45,32
	handwashing		
	practice properly		

Figure. 4
The correlation between the knowledge of visitors and visitor handwashing practice

Level of	Handw Prac	vashing ctice		P
knowled ge	Good	Bad	F	valu e
High	30	24	54	1,00
	(46,9)	(37,5)	(84,4)	0

Low	5	5	10
	(7,8)	(7,8)	(15,6)
Total	35	29	64
	(54,7%	(45,3%	(100
))	%)

DISCUSSION

Based on the results above from the figure 1 is known that the average visitors are young adult and male. The level of education mostly at the university.

Based on the figure 2 is known that he observation result showed that 84,4% visitors have high knowledge about handwashing procedure and 54,6% visitors can practice handwashing properly (Fig.3).

The results also show (p value= 1.00) which means there is no correlation between visitor knowledge with hand washing behavior in order to prevent nosocomial infection.

Hand washing is one of the behavior that can reduce the number of nosocomial infections. The procedure of hand washing properly was already governed by the Board of the World Health Organization (WHO), which is now known as the 5 principles correctly. Visitors are also encouraged to wash their hands before entering the hospital environment and out of the hospital environment and before contact with the patient.

From the observations that a large part of respondents wash their hands, but they do not know the standard of proper handwashing according to the WHO. This can be caused by a lack of socialization how to wash hands properly. Respondents wash their hands by their own understanding. This is need to be evaluated further because proper handwashing is one factor in eliminating germs hidden. Indirectly this may reduce the incidence of nosocomial infections in hospital. Hand washing is the most effective way to reduce the spread of infectious diseases, if done properly.

Based on observations the causes of the respondents do not wash their hands is maybe they have less information about dry hand washing or washing hands with disinfectant. During this time the visitors wash their hands by using running water so that when they do

not see the facilities and infrastructure such as hand washing sink and running water so they do not wash their hands.

Meanwhile, the facilities and infrastructure conditions at current hospital, available for hand washing with disinfectant because it is considered more practical. Hence the need for socialization from the hospital about how to wash hands properly and facilities provided by the hospital for the patient visitors to wash their hands. So that existing facilities can be utilized properly.

CONCLUSION

Based on the results of this study there is no correlation between visitor knowledge with hand washing behavior in order to prevent nosocomial infection. Based on this study, it is need to re-asses another factor that influence nosocomial infection. And the nurse need to socialize proper handwashing procedure to visitors through health education urgently and increase the discipline of the visitor to do right handwashing procedure.

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