



CORRELATION BETWEEN KNOWLEDGE AND ATTITUDES TO THE BEHAVIOR OF PERSONAL HYGIENE FOOD HANDLERS IN NUTRIENT DEPARTEMENT (Study at UNS Hospital Surakarta)

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ABSTRAK

Personal hygiene penjamah makanan di instalasi gizi rumah sakit memiliki peran dalam menjaga kualitas makanan untuk menunjang perbaikan kondisi pasien. Perilaku hygiene yang baik dapat mengurangi resiko kontaminasi pada makanan. Perilaku personal hygiene dapat dipengaruhi oleh pengetahuan dan sikap. Tujuan penelitian ini adalah untuk mengetahui hubungan tingkat pengetahuan dan sikap terhadap perilaku *personal hygiene* penjamah makanan di Instalasi Gizi RS UNS Surakarta. Jenis penelitian menggunakan rancangan penelitian *cross sectional*. Total populasi adalah seluruh tenaga pengolah makanan di Instalasi Gizi RS UNS Surakarta sejumlah 22 orang. Data pengetahuan dan sikap menggunakan kuesioner. Data perilaku menggunakan formulir checklist. Analisis data menggunakan uji *Chi Square*. Hasil penelitian menunjukkan bahwa mayoritas responden adalah perempuan (59,1%) dengan golongan umur dewasa (68,2%). Tingkat pendidikan terbanyak yaitu SMA/SMK (81,8%), lama bekerja terbanyak yaitu golongan lebih dari 2 tahun (54,5%) dengan penghasilan 1.000.000-2.000.000 (100%). Tingkat pengetahuan penjamah makanan, sikap penjamah makanan dan perilaku penjamah makanan tergolong baik dengan masing- masing 81,8%; 72,7%, dan 59,1%. Uji statistik menunjukkan bahwa tidak ada hubungan antara pengetahuan dengan perilaku *personal hygiene* penjamah makanan ($p= 1,000$) dan tidak ada hubungan antara sikap dengan perilaku *personal hygiene* penjamah makanan ($p= 0,178$).

Kata Kunci : Pengetahuan, Sikap, Perilaku, *Personal Hygiene*, Penjamah makanan

ABSTRACT

Personal hygiene food handlers at the hospital nutrition department is very important to control the quality of food and to improve patient condition. The presence of good hygiene behavior can reduce the risk of contamination in food. Personal hygiene behavior can be influenced by knowledge and attitude. The purpose of this study to determine the correlation between knowledge and attitudes towards personal hygiene behavior food handlers in nutrition department, UNS Hospital Surakarta. The type of research was cross sectional research design. The total population was used. Twenty two food handlers at Nutrition Department, UNS Hospital Surakarta to be the samples. Knowledge and attitude data were obtained by questionnaire. The behavior data was collected by checklist form. Chi Square test was used for analyzing. The results showed that the dominant gender of the study is female at 59,1%. The highest age group is adult at 68,2%, the highest level of education was SMA /SMK 81,8%, the length working time was more than 2 years at 54,5% and the income range is 1.000.000-2.000.000. The level of good food handlers knowledge is 81,8%, good food handlers attitude is 72,7% and good food handlers behavior is 59,1%. There were no correlation between knowledge and personal hygiene behavior of food handlers ($p= 1,000$) and between attitudes and personal hygiene behavior of food handlers ($p = 0,178$).

Key words : Knowledge, Attitude, Behavior, Personal Hygiene, Food Handler

BACKGROUND

Food management hygiene and health are the basic principles of managing food in hospitals (Almatsier, 2010). Hospital food service management demand principle, so the quality of food can be controlled and not harm patient by transmission diseases for humans who consume these foods (Fatmawati, et al.,2013). Therefore, hygiene and sanitation are one of important things that must be considered in processing quality food to ensure the food safety (Rapiasih, 2010).

Hygiene and food sanitation problems are closely related to the incidence of infection. Nosocomial infection which is estimated to be quite high is found in the management of foods that do not meet health requirements, one of which is the lack of food sanitation and personal hygiene (Rapiasih 2010;Fajriyati 2016). Personal hygiene is very significant because it is an individual's self-care behavior to maintain his health (Wartono, 2004)

The previous studies stated that the hospital hygiene in Indonesia is still lacking in hygiene and sanitizing behaviors towards food including RSUP of DR. M. Djamil Padang by 37,2% personal hygiene food handlers are not clean, 39,2% knowledge of food handlers is low, it is known that there is a significant relationship between knowledge and the application of personal hygiene (Fatma,2013). RSUD Demak 69,23% the handler does not use a mask and gloves, 25,64% the handler always talks when processing food (Sonia, 2013).

Tanaiyo (2018) in RSJ Prof. Dr. Soerojo Magelang the level of hygiene knowledge on food handlers hygiene behaviors shows weak correlation strengths. This explains that the higher knowledge of food handlers does not have a significant influence on the food handlers' hygiene behavior and according to research results Mulyani (2014) in RS Umum

H. Abdul Moeloek province Lampung attitude towards personal hygiene behavior no significant relationship. This illustrates that attitude is not always related to behavior.

Maintenance of hospital food is a series of activities ranging from menu planning to food distribution to consumers (Rotua, 2015), consisting of planning food needs, planning budget expenditures, procurement of food ingredients, receipts and storage, cooking of food ingredients, distribution and recording, reporting and evaluation with the of providing quality food according to nutritional needs, cost, safe and acceptable to consumers for achieve optimal nutritional status (RISKESDAS, 2013). Food handlers who have personal hygiene is good, seen from the experience of researchers on several things such are washing raw vegetables with running water, put on clean clothes while performing food processing using tools (tongs food), use a cloth napkin clean the food equipment, no long nails and wounds, and do not smoke while to do food processing (Syahrizal, 2017). Food handlers is an important factor in the provision of food and beverages because handlers unclean also potentially becomes a place of germ. Food Handlers hygiene is the key to success in the processing of safe and healthy food. Hygiene handlers are not good cause transmission incidence of foodborne disease was more pronounced (Nuraini and Susanna, 2014).

The UNS Hospital Surakarta there are teaching, research and service hospital which is still 5 years old, has collaborations with various universities in Indonesia, for example, female students can conduct field work, research, etc. Based on subjective observations made at the Nutrient Department of UNS Hospital Surakarta there are some food handlers who do not use Personal protective equipment (APD)is hand gloves and masks when touching food.

Based on the description above the

influence of food for patients, especially in their recovery process and as a future evaluation for the hospital in dealing with things that are not desirable, it is necessary to study hygiene and sanitation in food processing of food handlers. Therefore the need for research on the correlation between the level of knowledge and attitudes towards the behavior of food handlers' personal hygiene behavior at the UNS Hospital Surakarta.

RESEARCH METHODS

This study used quantitative observation with cross sectional study design. Twenty two food handlers to be respondents. The independent variabel in this study were knowledge and attitude of personal hygiene in food handlers. Dependent variabel in this study behavior food handlers. Data collection techniques interviews were conducted used a questionnaire list with a view know knowledge and attitudes, a checklist form to find out personal hygiene behavior, this study also conducted observations for personal hygiene behavior.

RESULTS AND DISCUSSION

Based on Table 1 distribution frequency characteristics of respondent from 22 respondent the gender of the food handlers at the Nutrient Departement of the UNS Hospital Surakarta most of the respondents were female, namely 13 respondent which consists of receiving raw food, storage, preparation, food processing, serving and waiters. Based on the age group most of the respondents age 17-25 years and at least those age 46-55 years, namely 1 person. The average age of respondents who are in the nutrient departement is around 25-26 years, with the lowest age of 21 years and the highest age of 46 years. Based on the level of education most of the respondents graduation from SMA/SMK namely as many as 18 people, served as non-nutritional profession. Based on the length of work most of the respondents work >2 years as many as 12 people and at least work 7 months 1 year as many as 4 people. The average length of work is 2-3 years. With the lowest working time of 1 year and the highest working time of 5 years. Based on the income of 100% of respondents with the same income 1.000.000-2.000.000.

Table1. Frequency Distribution

No	Characteristics	Frequency (n)	Persentase (%)	(Min-Max)
1.	Gender			
	Male	9	40,9	
	Female	13	50,1	
2.	Age			(21-46)
	17-25 Year	15	68,2	
	26-35 Year	6	27,3	
	36-45 Year	0	0	
	46-55 Year	1	4,5	
3.	Level of Education			
	SMA/SMK	18	81,8	
	D3	4	18,2	
4.	Long Working			(1-5)
	0-6 month	0	0	
	7 month – 1Year	4	18,2	
	>1-2 Year	6	27,3	
	>2 Year	12	54,5	
5.	Income			
	1.000.000-2.000.000	22	100	
	>2.000.000	0	0	

Based on results Table 1 characteristics respondent of female gender 59,1% more than the male gender 40,9%. This is line with research conducted by Muna (2016) namely amount of female food handlers is 63,1% compared to male gender with a percentage of 36,9% because female are identical with things related to cooking, in addition, female also have more knowledge about food security compared to male (Akonor dan Akonor 2013). Research result Indriani (2018) the percentage of female gender food handlers more than male, because female are more often employed so that they have good personal hygiene clean and healthy living behavior.

Based on Table 1 characteristics of food handlers according to age group are divided into four namely late adolescence, early adulthood, late adulthood, and early elderly (Kemenkes, 2013). This research is the most age group in late adolescence (17-25) with a percentage of 90,9%, which at this age the productive age category so that information is easily obtained. Younger respondent have good personal hygiene experience and knowledge (Tanaiyo ,et al., 2018). In line with research that has been done by Maghfirah (2018) the age category is 20-30 more with a percentage of 67,7% compared to age 31-40 (27,7%) and >40 (4,6%) because age can also describe work productivity and can increase patterns someone's thinking as well knowledge is gained wider. Age influences the formation of a person attitude and behavior. According research Pasanda (2016) Age affects the person comprehension and mindset.

Table 1 characteristics of the level education food handlers are SMA/SMK graduate with catering majors a percentage 81,8% namely as food processors, snack processors and waitresses because as technical implementers and D3 graduates with a percentage 18,2% as expert staff Nutritionist who has experience in the field of food administration, nutrition expert staff at UNS Hospital Surakarta contribution to supporting the success of nutrition servants

consumers, one of which was to participate in the presentation. Respondent graduate from SMA/SMK or equivalent will influence the knowledge and behavior of food sanitation hygiene. Inayah (2015) which states that education is one of the factors that influence one knowledge because education is need to obtain important information, the high level of education food handlers will affect knowledge so that the knowledge gained is more extensive and influences actions.

Table 1 characteristics length of work for food handlers are more in the >2 years category with a percentage of 54,5%, with an average length of almost 3 years the lowest working time minimum 1 year and maximum 5 years. The length of work is expected to increase knowledge information and experience of food handlers regarding food safety and sanitation hygiene (Muna, 2016).

Purwaningsih and Widyaningsih (2019) long period of work tenure are factors that influence a person has insight, broad experience and many in holding the role of shaping his behavior compared to people having less work experience, The length of work will affect the skills in carrying out the task. The longer the work, the skills will increase (Adam, 2011).

Table 1 characteristics according to the income of food handlers in the nutrient department of the UNS Hospital Surakarta are in the range of 1.000.000-2.000.000 terms of UMK in the city Surakarta. Specifications at the UNS Hospital Surakarta research did not ask further this is to discomfort and incivility factors, so researchers only describe based on UMK Surakarta. Based on interview results it is known that the income received has not been able to meet the total daily needs so based on the results of the interview there are 2 employes who have an online 1 employe has a side job catering services.

Tabel 2. Correlation Knowledge and Behavior

		Behavior				Total		RP (95% CI)	Score P
		Good		Enough		n	%		
		n	%	n	%				
Knowledge	Good	11	61,1	7	38,9	18	100	1,57 0,178-13,860	1000
	Enough	2	50	2	50	4	100		

Based on Table 2 known value (score) RP=1,57 this show that good knowledge has an effect of 1,57 times to have good behavior compared to enough knowledge. Chi-Square correlation test results with a 95% confidance level did not meet the requirements, because there were 2 or 50,0% cells that had an expected value of less than 5 and a p value 1,000 > p 0,05 was obtained.

Based on statistical test results obtained p value = 1,000, which means there is no significant relationship between the level of knowledge and personal hygiene behavior food handlers. This research is in line with the findings of Andika (2017) who conducted research at Dr. Soeharto Heerdjan Mental Hospital which stated that between knowledge and personal hygiene behavior there was no meaningful relationship, this showed that good knowledge did not affect good behavior in terms of food processing. This study is not in line with the research of Setyawaty and Kaharuddin (2017) which states there is a significant relationship between the level of knowledge with hygiene behavior of food handlers. In another study Tanaiyo (2018) stated that there is no relationship between knowledge and attitudes of food handlers, this explains that the high knowledge of food handlers does not have a significant relationship with food handlers behavior.

Based on the results of research, knowledge of food handlers at the Nutrient Departement of the UNS Hospital Surakarta in the good category, but seen from the behavior of food handlers by observation still do not pay attention to personal hygiene. The results showed the personal hygiene behavior of food handlers in the Nutrient Departement of the Surakarta UNS Hospital there were 13 respondents having good behavior but there were some food handlers having sufficient behavior, almost half of the total number of food handlers in the Nutrient Departements of the UNS Hospital Surakarta which were 9 respondents (40, 9%) who do not know about good food processing hygiene, such as not using head coverings, masks, and handgloves when processing food, talking when processing food, listening to music when processing food. The use of masks, handgloves, not talking when processing food directly is very important to prevent the spread of bacteria in food that comes from the mouth and hands (Erlina and Yuni, 2015).

Based on Table 3 known value (score) RP=4,4 this shows that good attitude has an effect of 4,4 times to have good behavior compared to adequate attitude. Chi-Square correlation test results with a 95% confidance level did not meet the requirements, because there were 2 or 50,0% cells that had an expected value of less than 5 and a p value 0,178 > p 0,05 was obtained.

Table 3. Correlation Attitude and Behavior

		Behavior				Total		RP (95% CI)	Score P
		Good		Enough		n	%		
		n	%	n	%				
Attitude	Good	11	68,8	5	31,2	16	100	4,4 0,596-32,501	0,178
	Enough	2	33,3	4	66,7	6	100		

Based on statistical test results obtained p value = $0,178 > 0,05$ which means there is no significant relationship between attitudes and personal hygiene behavior of food handlers. It can be concluded that the relationship between attitude and personal hygiene behavior of food handlers does not have an influence on personal hygiene behavior. In this study there are results that the age of respondents in the category 17-25 years with an average age at the Nutrient Department of the UNS Hospital Surakarta 25 years, age affects the formation of a person's attitudes and behavior. The more mature, steady in controlling emotions and appropriate in all his actions (Susanti et al., 2016).

According to Rahayu (2014) in Sari dan Halimatusa'diah research (2018) Attitude is a person response to an object that has not been shown in behavior. The attitude in question is a person emotional response to a stimulus or an external object. Emotional responses are judgments or evaluations of yourself (personal) to the stimulus. The formation of a person's attitude is influenced by internal factors (knowledge and attitudes) and external (environment, culture) (Arvalinda, 2017). Based on the attitude factor, it is known that attitude does not always affect someone's behavior because attitude is a reaction or response of someone who is still closed to a stimulus or object (Cecep and Mitha, 2015), where human attitude will move to act or act in an activity wherein act or do the necessary intentions that can shape a person's behavior in a situation or condition in the surrounding environment (Utami dan Prastika, 2015).

LIMITATIONS

This research has been carried out to the maximum extent possible in scientific procedures but this still has limitations. In conducting interview respondents are still less open so that the information obtained is limited, It is possible that there were error in answering the questionnaire the results of which were mostly

good but the truth was not in accordance with the results of observations made by researchers.

CONCLUSIONS AND SUGGESTIONS

Based on the results of research conducted at the Nutrition Installation of the UNS Hospital Surakarta There is no relationship between knowledge and behavior of food handlers ($p = 1,000$). There is no relationship between the attitude and behavior of food handlers ($p = 0,178$).

The next researcher are expected to study more sources and references related to personal hygiene, choosing hospitals with a larger number of samples so that the research results are better. The results of this study can be used as a hospital reference for monitoring and evaluating food handlers' personal hygiene. Besides that, it can be used to make policies regarding the importance of implementing food handlers' personal hygiene and a periodic inspection of food handlers at least twice a years.

REFERENCES

- Almatsier, S. (2010). *Prinsip Ilmu Gizi Dasar*. Jakarta: Gramedia Pustaka Utama.
- Andika, R (2017). Hubungan Tingkat Pengetahuan Terhadap Personal Hygiene Penjamah Makanan di Instalasi Gizi Rumah Sakit Jiwa Dr. Soeharto Heerdjan. *Skripsi*. Universitas Esa Unggul.
- Akonor PT, Akonor MA. 2013. "*Food Safety Knowledge : The Case of Domestic Food Handlers in Accra*". European Journal of Nutrition and Food Safety. Vol.3 No.3, p. 99-111.
- Avrilinda, S.M. (2016). "*Pengaruh Pengetahuan dan Sikap Terhadap Perilaku Higiene Penjamah Makanan di Kantin SMA Muhammadiyah 2 Surabaya*". Jurnal Boga. Vol. 4. No.2. p.1-7.
- Erlina, Yuni. (2015). *Buku Saku Personal Higiene*.

Nuha Medika. Yogyakarta.

- Fajriyati, C.Y (2016). Gambaran Tingkat Pengetahuan dan Perilaku Higiene Sanitasi Pengolahan Makanan di Rumah Sakit Orthopedi Prof. Dr.R. Soeharso Surakarta. *Skripsi*. Universitas Muhammadiyah Surakarta.
- Fatmawati S, et al,. (2013). "*Perilaku Higiene Pengolah Makanan Berdasarkan Pengetahuan Tentang Higiene Mengolah Makanan Dalam Penyelenggaraan Makanan di Pusat Pendidikan dan Latihan Olahraga Pelajar Jawa Tengah*". Jurnal Pangan dan Gizi. Vol. 04 No. 08. p. 45.
- Inayah. (2015) Hubungan Pengetahuan Higiene dan Sanitasi Makanan Terhadap Sikap dan Perilaku Penjamah Makanan di Kantin Universitas Tanjungpura. *Skripsi*. Universitas Tanjungpura Pontianak.
- Indriani, L. (2018). Analisis Faktor Dominan Perilaku Higiene Sanitasi Penjamah Makanan dan Gambaran Lain Fisik Higiene Sanitasi Makanan di Instalasi Gizi Rumah Sakit X Tahun 2018. *Skripsi*. Depok : FKMUI.
- Kaharuddin dan Setyawaty N.F. (2018). Hubungan Pengetahuan dan Perilaku Hygiene Pada Penjamah Makanan di PT Aerofood Aero Catering Service Unit Balikpapan.
- Mulyani, R. (2014). "*Pengetahuan Sikap dan Perilaku Higiene Pengolah Makanan*". Jurnal Keperawatan. Vol. X. No. 1. p. 6-12.
- Muna, L.N (2016). Analisis Pengetahuan, Sikap dan Praktik Tentang Keamanan Pangan Penjamah Makanan Kantin Di Dalam Kampus Instituti Pertanian Bogor. *Skripsi*. IPB.
- Miranti E.A dan Adi A.C.(2016). "*Hubungan Pengetahuan Dengan Sikap dan Higiene Perorangan (Personal Hygiene) Penjamah Makanan Pada Penyelenggaraan Makanan Asrama Putri*". Media Gizi Indonesia. Vol. 11 No. 2. p. 120-126.
- Nuraini, P. dan Dewi S. (2014). Karakteristik dan Pengetahuan Penjamah Makanan Dengan Perilaku Tentang Higiene Perorangan Pada Proses Pengolahan Makanan di Katering "X" Jakarta. *Skripsi*.
- Pasanda, A. (2016). Perbedaan Pengetahuan, Sikap Dan Perilaku Penjamah Makanan Sesudah Diberikan Penyuluhan Personal Hygiene Di Hotel Patra Jasa Semarang. *Skripsi*.
- Rapiasih, N. P. (2010). "*Pelatihan Hygiene Sanitasi Dan Poster Berpengaruh Terhadap Pengetahuan, Perilaku, Penjamah Makanan Dan Kelaikan*". Jurnal Gizi Klinik Indonesia.Vol.7. No.2. p. 64-73.
- RISKESDAS. (2013). *Riset Kesehatan Dasar*. Jakarta: Balitbang Kemenkes RI
- Rotua, M. dan Siregar, R. (2015). *Manajemen Sistem Penyelenggaraan Makanan Institusi Dasar*. Jakarta: Penerbit Buku Kedokteran EGC.
- Sari, A.K dan Halimatusa'idah (2018). Analisis Personal Hygiene Penjamah dan Sanitasi Makanan Jajanan di Sekolah Dasar Kecamatan Gading Cempaka Kota Bengkulu.Vol 6. No.2. p.1-5.
- Sonia, V. K. (2013). Evaluasi Penerapan Higiene Dan Sanitasi Penyelenggaraan Makanan Di RSUD Sunan Kalijaga Kabupaten Demak. *Jurnal of Public Health Vol. 4 No.2*. p. 124-131.
- Susanti, et al., (2016). Profil Kepatuhan Higiene

- Perorangan Penjamah Makanan di Instalasi Gizi dan Tata Boga Rumah Sakit Penyakit Infeksi (RSPI) Prof. Dr. Sulianti Saroso. *Journal of Infectious Disease*. p. 19-28
- Syahrizal. (2017). Higiene Sanitasi Penjamah Makanan Terhadap Kandungan Escherichia Coli Diperalatan Makan Pada Warung Makan. *Aceh Nutrion Jurnal*. Vol. 2 No. 2. p. 132-136.
- Tanaiyo, S. E, et al,. (2018). Tingkat Pengetahuan dan Sikap Higiene dengan Perilaku Higiene Perorangan Pada Penjamah Makanan di Instalasi Gizi RSJ. Prof. Dr. Soerojo Magelang. *Journal Of Islamic Nutrition*. Vol. 1 No. 1. p. 18-25.
- Utami, V.D dan Prastika, M (2015). Hubungan Pegetahuan Tentang Dismenore Dengan Perilaku Pencegahannya Pada Remaja Putri Kelas X DAN XI di SMA Gajah Mada Bandar Lampung. *Jurnal Kebidanana*. Vol 1 No. 1. p 5-8.
- Wartonoh, T. D. (2004). *Kebutuhan Dasar Manusia Dan Proses Keperawatan*. Jakarta: Salemba Medika.