

**BEHAVIORAL PREVENTION OF HEPATITIS A IN PANDAN JAYA HEALTH
CENTER AREA, TANJUNG JABUNG TIMUR REGENCY, JAMBI**

*Perilaku Pencegahan Hepatitis A di Puskesmas Pandan Jaya, Kabupaten Tanjung Jabung
Timur, Jambi*

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ABSTRACT

Hepatitis A outbreaks were recorded in 2012 and 2014 in Geragai Subdistrict, Tanjung Jabung Timur Regency, Jambi. The highest outbreak occurred in 2014. The purpose of this study was to analyze the behavior of prevention of Hepatitis A disease including knowledge, attitude, immunization, sharing of drinking and eating equipment, eating and drinking practice together, and hand washing with soap at Pandan Jaya Health Center Tanjung Jabung Timur Regency. Cross-sectional study design was performed with a sample size of 103 respondents, sample was taken by simple random sampling. A total of 53 people with Hepatitis A positive in 2016 was observed in this study. There was 61.2% of respondents had a good knowledge about Hepatitis A, 58.3% of respondents had a positive attitude, 44.7% of respondents got Hepatitis A immunization. A total of 45.6% of respondents use cutlery and drinking together, 41.7% of respondents consume food and beverages together and 35% of respondents washed hands with soap. There was a correlation between hand washing with soap with the incidence of Hepatitis A (P -value = 0,022, and OR = 0,386), while knowledge, attitude, immunization, sharing and drinking practices, eating and drinking practice together were not associated with the cases of Hepatitis A. Hand washing with soap was a variable having a significant relationship to the incidence of Hepatitis A disease. Pandan Jaya Health Center should make efforts to increase the public knowledge about the dangers of Hepatitis A, practice of clean and healthy life behavior, particularly to promote the culture of hand washing with soap.

Keywords: Infectious disease, hepatitis A, healthy behaviour, hand wash

ABSTRAK

Kejadian Luar Biasa (KLB) Hepatitis A tercatat pada tahun 2012 dan 2014 di Kecamatan Geragai, Kabupaten Tanjung Jabung Timur, Jambi. KLB tertinggi terjadi pada tahun 2014. Tujuan penelitian adalah untuk menganalisis perilaku pencegahan penyakit Hepatitis A termasuk pengetahuan, sikap, imunisasi praktik penggunaan alat makan dan minum bersama, praktik konsumsi makan dan minum bersama dan mencuci tangan dengan sabun di Puskesmas Pandan Jaya Health Kabupaten Tanjung Jabung Timur. Desain penelitian *cross-sectional* dilakukan dengan sampel 103 responden, sampel diambil dengan *simple random sampling*. Sebanyak 53 orang dengan Hepatitis A positif pada tahun 2016 diamati dalam penelitian ini. Sebanyak 61,2% responden memiliki pengetahuan yang baik tentang Hepatitis A, 58,3% responden memiliki sikap positif tentang Hepatitis A, 44,7% responden mendapat imunisasi Hepatitis A. Sebanyak 45,6% responden menggunakan alat makan dan minum bersama, 41,7% responden mengonsumsi makanan dan minuman bersama dan 35% responden mencuci tangan dengan sabun. Terdapat hubungan antara pencucian tangan dengan sabun dengan kejadian Hepatitis A (p -value = 0,022, dan OR = 0,386), sedangkan pengetahuan, sikap, imunisasi, berbagi dan praktik minum, makan dan minum bersama tidak terkait dengan kasus Hepatitis A. Mencuci tangan dengan sabun adalah variabel yang memiliki hubungan signifikan dengan kejadian penyakit Hepatitis A. Puskesmas Pandan Jaya harus melakukan upaya untuk meningkatkan pengetahuan masyarakat tentang bahaya Hepatitis A, praktek perilaku hidup bersih dan sehat, khususnya untuk mempromosikan budaya mencuci tangan dengan sabun.

Kata kunci: Penyakit infeksi, hepatitis A, perilaku sehat, cuci tangan

INTRODUCTION

Hepatitis A is an infectious disease with a global distribution. Hepatitis A infection characterized by the presence of anti-HAV antibodies. It are particularly closely related to health and sanitation standards of an agency or region. Hepatitis A Virus (HAV) is common in areas with inadequate sanitation and limited access to clean water. In highly endemic areas (such as parts of Africa and Asia), a large proportion of adults in the population are immune to HAV, and epidemics of Hepatitis A are uncommon. In areas of intermediate endemic (such as Central and South America, Eastern Europe, and parts of Asia), childhood transmission is less frequent, more adolescents and adults are susceptible to infection, and outbreaks are common. In areas of low endemic (such as the United States and Western Europe), infection is less common, but disease occurs among people in high-risk groups and as community wide outbreaks ⁽¹⁾.

Hepatitis is a non-communicable disease through oral fecal path can be transmitted through food and drink contaminated with Hepatitis A virus. According to WHO (2012) in the world there are 1.4 million hepatitis patients each year⁽²⁾. Approximately 1.5 million clinical cases of Hepatitis A occur worldwide annually but the rate of infection is probably as much as ten times higher. The incidence rate is strongly related to socioeconomic indicators and access to safe drinking water: as incomes rise and access to clean water increases, the incidence of HAV infection decreases. The association of HAV infection risk with standards of hygiene and sanitation, the age-dependent clinical expression of the disease, and lifelong immunity determine the different patterns of HAV infection observed worldwide ⁽³⁾.

The HAV endemic level for a population is defined by the results of age-seroprevalence surveys; a systematic review on the global prevalence of HAV infection was recently published by the World Health Organization (WHO)⁽²⁾. HAV zero prevalence rates vary considerably among countries in Asia, with some continuing to have high rates and others making a transition to moderate or low incidence. In the moderate endemic countries, such as Korea, Indonesia, Thailand, Sri Lanka and Malaysia, the available data shows that the incidence rate may be decreasing, at least in urban areas, and the age at infection increases from very early to late childhood, which increases the risk of outbreaks. The number of cases of adult Hepatitis A has progressively been increasing during the last several decades in Korea. In addition, the pattern of age-specific seroprevalence of anti-HAV has changed with economic growth. The prevalence of anti-HAV in the 10-50 year age range has declined rapidly during the last 3 decades. As a result, this age group has a high risk for HAV infection and clinically overt Hepatitis A is increasing in adolescents and adults ⁽²⁾⁽⁴⁾⁽⁵⁾.

Indonesia is one of the endemic areas of Hepatitis A incidence. In 2013 there was a doubling of the number of people diagnosed with hepatitis in health care facilities when compared to 2007 data. Hepatitis A extraordinary occurrence was recorded in 6 provinces and 11 municipal districts with 495 case in 2013. Jambi Province is one of the provinces that is included in the area that experienced the outbreak ⁽⁶⁾.

In 2012 there were 176 outbreaks of Hepatitis A cases in Geragai Sub-district, Tanjung Jabung Timur Regency. In 2014 there is also an outbreak with 234 cases which is the highest case recorded in Pandan Jaya Village. While in the Year 2015, the occurrence of Hepatitis A disease was 53 cases, but did not cause outbreaks⁽⁷⁾.

Prevention of Hepatitis A disease can be done with behavioral change approach and improvement of adequate sanitation. Effort to prevention and reduce the spread of HAV can be held with adequate supplies of safe drinking water and proper disposal of sewage within communities, combined with personal hygiene practices, such as regular hand washing⁽⁷⁾. There was a marked reduction in virus transmission in most developed countries several decades ago due to improvements in living standards, better sanitation and environmental conditions. The same trend was observed during the 1990s in several developing countries with increasing economic prosperity. These changes occurred without a specific vaccination strategy, underscoring the critical importance of environmental and personal hygiene and

sanitation to prevent fecal-oral transmission of pathogens⁽⁸⁾. One of the efforts to prevent the transmission of Hepatitis A is by washing hands with soap. Many people who can do hand washing but not necessarily how to do it right. Hand washing habit is the most important factor in efforts to prevent the spread of Hepatitis A. Based on various research Hepatitis A disease is closely related to handwashing behavior. Thus in this research, it is necessary to analyze the prevention efforts that can be done in overcoming the incidence of Hepatitis A in Pandan Jaya Health Center, East Tanjung Jabung Regency, Jambi.

METHOD

Cross-sectional study design was performed with data collection conducted at one time only, and explained the attachment of independent variable (knowledge, attitude, and practice of prevention of Hepatitis A) with dependent variable (incidence of Hepatitis A). The population is the entire population in the working area of Pandan Jaya Health Center amounted to 3890 people with sample of 103 respondents was taken by simple random sampling.

The independent variables in this study consisted of knowledge, attitude, immunization, use of cutlery and joint drinking, joint food and beverage consumption, hand washing practice and the dependent variable is the occurrence of Hepatitis A. The variables in this study were measured using a questionnaire that was asked to each respondent.

This research used univariate and bivariate statistical analysis. Univariate statistical analysis was used to describe the variables of knowledge, attitudes, immunization, use of cutlery and joint drinking, joint food and beverage consumption, hand washing practices and the incidence of Hepatitis A. Chi-square statistical analysis was performed to explain the relationship between variables independent and variable dependent on the research.

RESULT

Pandan Jaya Health Center is located in District Geragai in Tanjung Jabung Timur Regeny, Jambi Province. The coverage of the working area of it is 3,159 people. Respondents in this study were households in the work area of Pandan Jaya Health Center as many as 103 households. Respondent was the head of household or household member who could be interviewed. Based on the result of univariate analysis the average age of respondents is 28.91 years. Distribution of respondents by sex in this study were as many as 43.7% of respondents was male and female respondents as much as 56.3%. 51.5% of respondents were positive for Hepatitis A, and 48.5% of negative.

Table 1 described that as many as 61.2% of respondents had good knowledge about Hepatitis A disease and as many as 38.8% of respondents had a bad knowledge about Hepatitis A disease. 58.3% of respondents had a positive attitude about Hepatitis A and 41.7% of respondents had negative attitudes about Hepatitis A disease. Respondents got Hepatitis A immunization as much as 44.7%, and the rest of 55.3% of respondents are not immunized. A total of 45.6% of respondents used eating and drinking equipment together, and 54.4% of respondents did not. Respondents consume food and beverages together 41.7%, and 58.3% of respondents did not. As many as 35% of respondents washed hands with soap, and 65% of respondents did not wash their hands with soap.

Bivariate analysis in this study was conducted by Chi-Square test to examine the association among independent variables (knowledge, attitude, immunization, sharing and drinking practices, using cutlery and drinking together, hand washing with soap) with the cases of Hepatitis A. Table 1 showed that there was a correlation between hand washing with soap with the incidence of Hepatitis A (p -value = 0,022, and OR = 0,386), while knowledge, attitude, immunization, sharing and drinking practices, eating and drinking practice together were not associated with the cases of Hepatitis A.

Tabel 1. Result of the association among independent variables with Hepatitis A

Variables	Category	Hepatitis A						<i>p-value</i>	OR	CI 95%
		Positive		Negative		Total				
		N	%	n	%	n	%			
Knowledge	Bad	19	35,8	21	42	40	38,8	0,522	0,722	0,349-1,707
	Good	34	64,2	29	58	63	61,2			
Attitude	Negative	25	47,2	18	36	43	41,7	0,251	1,587	0,720-3,498
	Positive	28	52,8	32	64	50	58,3			
Immunization	Yes	23	43,4	23	46	46	44,7	0,791	0,900	0,414-1,958
	No	30	56,6	27	54	57	55,3			
Use cutlery and drinking together	Yes	27	50,9	20	40	47	45,6	0,265	1,558	0,713-3,402
	No	26	49,1	30	60	56	54,4			
Consume food and beverages together	Yes	23	43,4	20	40	43	41,7	0,727	1,150	0,525-2,520
	No	30	56,6	30	60	60	58,3			
Hand washing with soap	Yes	13	24,5	23	46	36	35,5	0,022*	0,382	0,165-0,881
	No	40	75,5	27	54	67	65,5			

* The significance association (*p-value* < 0,05)

DISCUSSION

The results were consistent with the theory that the spread of Hepatitis A through the fecal-oral route, the Hepatitis A virus can be spread or infect a person through contaminated food and drink and replicates in the liver⁽⁹⁾⁽¹⁰⁾⁽¹¹⁾. HVA is associated with inadequate aspects of sanitation, food and beverage contamination and especially individual hygiene behaviors that are highly significant with the occurrence of Hepatitis A one of them is the habit of washing hands with soap. The results of this study were in accordance with various research that hand washing with soap can prevent Hepatitis A infection⁽¹¹⁾⁽¹²⁾⁽¹³⁾⁽¹⁴⁾.

In one meta-analysis to examine hand-hygiene interventions for the prevention of gastrointestinal and respiratory infectious illnesses, hand washing with soap has been shown to reduce diarrhea risk by 31 % and acute respiratory infection risk by 21 %⁽¹⁵⁾. Washing with soap is more effective at hand decontamination than washing with water alone⁽¹⁶⁾⁽¹⁷⁾. Rinsing with water does remove pathogens, but not as effectively as using soap⁽¹⁷⁾. Luby *et al.* (2011) suggest that hand washing is a particularly important opportunity to prevent childhood diarrhea, and that hand washing with water alone can significantly reduce childhood diarrhea, it can conclude that hand washing with water is good but much better hand washing with soap⁽¹⁸⁾.

But this habit is still much yet to do so in developing countries, more hand-washing habits simply by rinsing alone without using soap. Curtis *et al.* observed hand washing in 11 countries and found rinsing to be in the order of three times more common than hand washing with soap⁽¹⁹⁾. Research conducted by Mbithi *et al* (1993) to determine the effectiveness of the ability of several agents / types of soap used in health facilities include oCanada in reducing the presence of Hepatitis A and Polio virus at hand. The study showed that hand washing with some type of soap used in the experiment could reduce the lowest 77.96% to the highest of 92.04% of HAV and reduce 85.22% to 98.39% of the presence of polio virus in hand⁽²⁰⁾. So it can be concluded that hand washing with soap provides effective protection in an effort to reduce infectious diseases.

CONCLUSION

Hand washing with soap was a variable of behavior prevention that having a significant relationship to the incidence of Hepatitis A disease. Hand washing with soap was a protective factor that can prevent Hepatitis A at Pandan Jaya Community Health Center. While knowledge, attitude, immunization, sharing and drinking practices, eating and drinking practice together were not associated with the cases of Hepatitis A.

SUGGEST

The results of this study suggest that Pandan Jaya Health Center should make efforts to increase the prevention program of Hepatitis A by increasing the public knowledge about the dangers of Hepatitis A, effort to practice of clean and healthy life behavior, particularly to promote the culture of hand washing with soap.

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CONFLICT OF INTEREST

The authors have no conflicts interest for declare this study.

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