



Factors Affecting Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

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Abstract: This study discusses about factors affecting spitting behavior on betel consumers in applying PHBS public places in Pasar Raya Simalungun Regency. This research is a descriptive study to describe factors affecting spitting behavior on betel consumers in applying phbs public places. This research is conducted at Pasar Raya Simalungun Regency. The time for conducting the research starts from the beginning of November 2018 until completion. The result shows Respondents are more well-informed, namely 44 people (43%), more respondents with shelter availability of spit consuming betel, namely 55 people (63.2%). More respondents with poor health support, 68 people (78.2%).

Keywords: spitting behaviour; betel consumers; applying PHBS; Simalungun Regency

I. Introduction

One of the efforts made to improve the degree of public health through health promotion strategies was formulated at the Ottawa Charter conference. This strategy aims to develop a healthy public policy create an enabling environment, strengthen the action movement or community movement (strengthen community action for health), develop individual skills and reorienting health services (reorients health services) (Ministry of Health, 2017).

This strategy can be realized through the application of Clean and Healthy Living Behavior (PHBS) so that each individual in the community group can prevent and resolve health problems that arise, develop and organize community-based health efforts and utilize health services. This can be achieved by empowering individuals, families and community groups, fostering a supportive environment to create a healthy lifestyle of the community and advocating for decision makers and policy makers as well as other interested parties. Therefore PHBS is an important part in the implementation of health development in Indonesia (Swarjana, 2017).

National health promotion policies to support efforts to improve healthy behavior are stipulated in accordance with the Minister of Health's Regulation No. 2269 / MENKES / PER / XI / 2011 concerning "Guidelines for the promotion of clean and healthy behavior (PHBS)". Clean and healthy living behavior is strongly influenced by the processes that occur in other social settings, namely the order of educational institutions, workplace order, public place order and health facility order.

According to the Indonesia Health Profile in 2018, that only 57.78% of districts / cities that meet the quality of environmental health which includes educational institutions (67.52%), workplaces (59.15%), public places (61.30%), health facilities (77.02%) and other facilities (62.26%). This shows that the development of PHBS in other non-household settings, namely in the order of educational institutions, workplace arrangements, public place

settings and health facility arrangements, has also not proceeded properly (Ministry of Health, 2019).

The market occupies a strategic position in efforts to promote health, because many people interact therein, making it vulnerable to disease transmission due to unhealthy market sanitation conditions. In the market order, the priority problem is found that there are many traders who spit carelessly. Preliminary survey results show that > 50% of traders who betel throw betel saliva carelessly. Indiscriminate spitting is unhealthy behavior that can pollute the environment and risk transmission of disease. Spitting behavior can occur due to the habit of whitening. This betel process will produce red saliva that is formed from the chemical reaction of a mixture of betel leaves, areca nut and lime which is chewed in the mouth. Each time you spit can be done 5-6 times. Betel can be done up to 15 times a day. This makes the frequency of spitting on the betel nut more than non-betel nut. Uncontrolled betel behavior such as throwing betel leaf carelessly can cause a dirty environment and can be risky in transmitting various diseases (Wambrauw, 2014).

The application of PHBS on the market is carried out to create a healthy market that must be supported by the community who apply clean and healthy life behaviors such as not throwing betel spit carelessly. The behavior of disposing betel saliva that is good and right can be overcome by storing betel saliva into a closed container and adding disinfectant material (lisol) then after finishing the betel throw it into a closed sewage (Kemenkes, 2011). This can reduce the risk of transmitting diseases such as tuberculosis that can be transmitted through saliva or sputum TB sufferers to other people who are nearby.

II. Review of Literature

2.1 Definition of Behavior

Behavior is an action or human activity that can be directly or indirectly observed (Notoatmodjo, 2007). Skinner in Notoatmodjo (2007) states that behavior is a response or reaction related to stimulus from outside the individual. According to Kwik in Sunaryo (2004) defines behavior as the actions of an organism that can be observed and studied.

Blum (2005) states that very large and dominant health problems are influenced by human behavior factors that are also difficult to overcome. Human behavior contributes greatly to health, therefore the behavior of clean and healthy living must always be raised in everyday life to avoid disease.

Type of behavior. Types of behavior are classified into two based on the reaction given to the stimulus, namely:

Closed behavior. Closed behavior is an individual reaction in the form of attention to a thing, perceptions of it, individual knowledge, and individual attitudes that cannot be clearly observed by other individuals.

Open behavior. Open behavior is an individual reaction in the form of tangible actions or practices that can be clearly observed by other individuals.

Behavioral domain. Domains of behavior according to Bloom (1908) in Notoatmodjo (2010) are classified in three domains, namely:

Knowledge. Someone is said to have knowledge after he becomes aware of the object after someone sees, hears, or reads the object. According to cognitive science, knowledge is divided into six levels, namely: knowing (know), understanding (comprehension), applying

(aplication), analyzing (analysis), synthesizing (synthesis), evaluating (evaluating).

Attitude. Attitudes are also classified as the response of someone who is still closed when reacting to an external stimulus. In general, emotional factors and opinions such as a person's choice to agree or disagree with a matter is a form of response to one's attitude. Based on the level of one's acceptance or choice of an object, attitude responses are grouped against four levels, namely:

Receiving is the process when someone is willing to accept the stimulus or stimulus provided.

Responding is the process of responding is the time when someone gives a response or an answer from something that was asked of him.

Valuing is the process of valuing is the time when someone gives good value to a given stimulus, discussing the stimulus with another person, until the stage someone discusses, encourages or influences others to respond to the given stimulus.

Responsible is the highest level of attitude. Attitudes are also seen when someone will be willing to face the risk of something that becomes his belief.

III. Research Methods

This research is a descriptive study to describe factors affecting spitting behavior on betel consumers in applicating phbs public places. This research is conducted at Pasar Raya Simalungun Regency. The time for conducting the research starts from the beginning of November 2018 until completion. Reasons for conducting research locations in Pasar Raya Simalungun Regency are found by many people who throw saliva betel carelessly resulting in poor market sanitation conditions so that they are vulnerable to disease transmission and research of the factors that have not affected spit behavior in the application of public places in the Market Raya Simalungun Regency. This research is conducted at Pasar Raya Simalungun Regency.

IV. Discussion

4.1 Univariate Analysis Results

a. Characteristics of Respondents

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics of Respondents	n	%
Age		
Late teens (Ages 17-25)	2	2,3
Early adulthood (Ages 26-35)	4	4,6
Late adulthood (Ages 36-45)	25	28,7
Early elderly (Ages 46-55)	34	39,1
Late elderly (Ages 56-65)	19	21,8
Elderly (Ages 65 and above)	3	3,4
Education		
Low/ high (SD/SMP)	42	48,3
Intermediate (SMA)	40	46,0
High (D3/S1)	5	5,7
Frequency of consuming betel		
≤ 3 times a day	15	17,2

> 3 times a day	72	82,8
Using time of consuming betel		
≤ 5 years	36	41,4
> 5 years	51	58,6

b. Knowledge

Table 2. Frequency Distribution of Respondents' Knowledge of Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

Knowledge	n	%
Good	44	50,6
Bad	43	49,4
Total	87	100,0

c. Shelter Availability of Spit Consuming Betel

Table 3. Frequency Distribution of the Shelter Availability of Spit Consuming Betel Respondent of Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

Shelter availability of spit consuming betel	Yes		No	
	n	%	n	%
Shelter availability of spit consuming betel	32	36,8	55	63,2

d. Health Workers Support

Table 4. Frequency Distribution of Health Workers Support Respondent of Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

Health Workers Support	n	%
Good	19	21,8
Bad	68	78,2
Total	87	100,0

4.2 Bivariate Analysis Results

a. Knowledge

Table 5. Frequency Distribution of Knowledge with Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

Knowledge	Spitting Behaviour						<i>p</i>
	Not carelessly		Carelessly		Total		
	n	%	n	%	n	%	
Good	29	65,9	15	34,1	44	100,0	0,0001
Bad	3	7,0	40	93,0	43	100,0	

b. Shelter Availability of Spit Consuming Betel**Table 6.** Frequency Distribution of Relationship between Shelter Availability of Spit Consuming Betel and Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

Table 1. Prevalence of Spitting Behaviour in Pasar Raja Singaperbangsa Regency							
Shelter Availability of Spit Consuming Betel	Spitting Behaviour						<i>p</i>
	Not carelessly		Carelessly		Total		
	n	%	n	%	n	%	
Available	25	78,1	7	22,9	32	100,0	0,0001
Not Available	0	0	55	100,0	55	100,0	

c. Health Workers Support**Table 7.** Frequency Distribution between Health Workers Support and Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

Health Workers Support	Spitting Behaviour						<i>p</i>
	Not carelessly		Carelessly		Total		
	n	%	n	%	n	%	
Good	20	29,4	48	70,6	68	100,0	0,015
Bad	12	63,2	7	36,8	19	100,0	

4.3 Multivariate Analysis Results**Table 8.** Test Results of Multiple Logistic Regression Analysis

Variable	B	P (<i>Sig</i>)	Exp (B)
Knowledge	3,813	0,0001	8,227
Shelter availability of spit consuming betel	0,211	0,997	1,690
Health workers support	-0,495	0,517	0,610
<i>Constant</i>	-2,842	0,0001	0,058

4.4 Discussion**a. Applying PHBS Public Places in Pasar Raya Simalungun**

The results showed that respondents who had good knowledge were 44 people (50.6%) and not good knowledge were 43 people (49.4%). Even though in this study the level of knowledge of the respondents was more well-informed, but respondents who behaved carelessly also spilled a lot, namely 55 people (63.2%). This is supported because most of the respondents have low education (elementary / junior high) as many as 42 people (48.3%), while the rest are middle educated (high school) and highly educated respondents.

Chi Square test results showed that more respondents with good knowledge did not spit carelessly (65.9%), while respondents with bad knowledge more spit carelessly (93.0%) with $p = 0.0001 < 0,05$ means that there is a relationship of knowledge with spitting behavior in betelers in the application of PHBS in public places in Pasar Raya Simalungun Regency.

The results of this study were in accordance with Susanti (2016) research stating

that there is a relationship between respondents' knowledge and spitting behavior in the community in the Work Area of the Sangkrah Community Health Center in Surakarta with a value of $p = 0.011 < 0.05$. The results of this study are strengthened by Sariani (2019) who concluded that there is a relationship between knowledge and pulmonary TB transmission at Penanggalan Health Center and Jontor Health Center, one of which is caused by the low knowledge of pulmonary TB patients who throw saliva or sputum carelessly.

Based on the multiple logistic regression test showed that there was a significant influence between knowledge ($p = 0.0001$) on spitting behavior on betel in Raya market. Referring to the results of the analysis obtained that the better the respondent's knowledge, the respondent will behave not spit carelessly. Exp value (B) obtained is 8.222 meaning that respondents who have good knowledge are eight times more likely not to behave carelessly with poor knowledge.

Notoatmodjo (2012) said that people with low education will behave ignorantly towards the development of knowledge around them, so that people do not care about information or something from outside. The low level of education of a person or the community is very influential on improving the degree of health. The attitude of the people who are not yet open to new things or innovations will experience obstacles in the absorption of information so that knowledge is lacking which can have an impact on their lives.

Knowledge will influence health behavior, especially in the application of PHBS, not spitting carelessly. The lower the education the less knowledge in the field of health, both relating to food intake, handling families who suffer from illness and other preventive efforts. A low level of knowledge can influence one's attitudes and actions in healthy behavior including in preventing TB disease (Razher, 2013).

The level of knowledge of a person can influence the health behavior he does especially in preventing the transmission of diseases such as indiscriminate spitting behavior. Based on data from the Public Health Office of Lumajang District (2017) that (66.7%) the results of the PHBS assessment of the market order are at an unhealthy level. This happens because of the lack of public knowledge about the benefits of applying clean and healthy living behaviors (PHBS) in the market order so that there are still many people who still throw littering, smoking and spitting carelessly.

The degree of public health can be improved through the quality of human resources (HR) by conducting socialization about the application of clean and healthy living behaviors (PHBS) in the market order. In addition to improving the degree of public health, the creation of a healthy market is one indicator in the achievement of a healthy district.

This is different from what happened in Pasar Raya where the Public Health Office Simalungun Regency has not yet conducted an assessment of clean and healthy living behaviors (PHBS). The priority of the Public Health Office Simalungun Regency is still on achieving the PHBS target for households that is still below the strategic plan target by the end of 2021, which is 60 percent. The PHBS assessment should not only be done on the household structure. Public places such as markets are also one place that is very

vulnerable in the transmission of disease for people who move in it.

The risky behavior that most respondents do in Pasar Raya is indiscriminate throwing of consuming betel. This behavior not only makes the market environment dirty, but the most feared risk of transmitting the disease is high. The degree of public health and the quality of human resources (HR) can be improved through market sanitation inspections and regular counseling about spitting behavior in the application of clean and healthy living behaviors (PHBS) in public places. So that market conditions can be realized that are healthy, comfortable and clean and avoid the danger of infectious diseases.

b. Effect of Shelter Availability of Spit Consuming Betel on Spitting Behavior on the Betelizer in the Application of PHBS Public Place in Pasar Raya Simalungun Regency

The results showed that more respondents with the availability of betel saliva shelters were not good namely 55 people (63.2%) and as many as 32 people (36.8%) who had good availability of betel saliva shelters. This happened because respondents considered careless betel venting could not be a source of disease transmission.

Chi Square test results show that there is a relationship between shelter availability of spit consuming betel in applying PHBS public places in Pasar Raya Simalungun Regency with a value of $p = 0,0001$. This study is in line with Sariani's research (2019) which states that there is a relationship between sputum storage and pulmonary TB transmission at Penanggalan Health Center and Jontor Health Center.

Based on multiple logistic regression tests showed that there was no significant effect between shelter availability of spit consuming betel ($p = 0.997$) on the behavior of spitting on betel in Pasar Raya. Referring to the results of the analysis, it is obtained that the availability of a betel saliva shelter does not necessarily mean that the respondent will not behave carelessly. This is due to the lack of respondents' knowledge about the impact on health. Most respondents stated that throwing betel leaf carelessly would not cause disease but only cause environmental pollution due to the former stain of red stain.

The results of this study differ from theories which state that the habit of spitting carelessly is considered as one of the risk factors for disease transmission, especially in areas that are still vulnerable to infectious disease transmission. Saliva from people who are infected with a disease can transmit the disease to many people if carelessly discharged. Infectious disease microorganisms can move from saliva on the streets and into the nose, throat, and lungs of those around them (Rebmann, T, 2014).

The availability of facilities is a trigger for behavior that allows a motivation or action to be carried out (enabling factors), (Notoatmodjo, 2012). Basic sanitation facilities that support clean and healthy life behavior (PHBS) must also be balanced with knowledge, attitudes and actions regarding good PHBS, otherwise the application of good PHBS in public places cannot yet be realized.

c. The Influence of Public Health Office Support on Spitting Behavior on Betel Consumers in Applying PHBS Public Places in Pasar Raya Simalungun Regency

The results showed that more respondents received unfavorable support from health workers as many as 68 people (78.2%) and those who received good support from health

workers as many as 19 respondents (21.8%). This happened because most of the respondents, 65 people (74.7%) never received an explanation from the health workers about TB disease which could be transmitted through saliva which was disposed of as many as 57 people (65.5%). Support of health workers can influence the community to behave in a healthy manner both in their homes and in public places. Health workers are also considered a role model to practice healthy lifestyles in the midst of society.

The results of this study indicate that there is a relationship between health worker support and spitting behavior in betel consumers in applying PHBS public places in Pasar Raya Simalungun Regency with a value of $p = 0.015$. This study is in line with research conducted by Daniel (2018) in the work area of the Maripi Community Health Center in Manokwari Regency, West Papua which states that there is a relationship between the low support of health workers with indiscriminate spitting behavior in the work area of the Maripi Community Health Center with a value of $p = 0.016$. This study was strengthened by Sariani (2019) who concluded that there was a relationship between health worker support and pulmonary TB transmission at Penanggalan Health Center and Jontor Health Center.

The role of health workers is very large in providing education to the community to prevent various diseases arising from unhealthy behavior so that people have the power to maintain the health of themselves, their families and their environment. Support of health workers in preventing and avoiding spitting behavior carelessly for betel nut in public places including markets is considered very important (Katigbak, et al, 2015).

Health workers or Puskesmas workers have the role and responsibility to provide an explanation of the impact of unhealthy behaviors such as indiscriminate spitting behavior that can pollute the environment. In addition, health workers are also responsible for controlling clean and healthy living behaviors to create a clean and comfortable market environment.

Health workers can act as a health information communicator who provides clear information to the public. Provision of information is very necessary because communication is useful to correct the lack of knowledge and attitudes of the public in healthy behavior including spitting carelessly in public places. Health workers must also evaluate the community's understanding of the information provided, and also give messages to the community the impact that will be caused if they behave in an unhealthy manner, especially the behavior of throwing betel leaf carelessly (Mandriwati, 2014).

Based on RI Law No. 36/2009 article 62 states that health improvement can be done through counseling activities, information dissemination or other activities to support the achievement of a healthy life. This activity is carried out to reduce risks, problems and adverse effects due to disease. The lack of education by health workers in providing explanations about the application of PHBS especially how to remove healthy betel saliva resulted in the level of awareness of respondents in disposing of betel saliva is very less.

V. Conclusion

- a. Respondents are more well-informed, namely 44 people (43%), more respondents with shelter availability of spit consuming betel, namely 55 people (63.2%). More

respondents with poor health support, 68 people (78.2%).

- b. There is a relationship between knowledge ($p = 0.0001$), availability of shelter availability of spit consuming betel ($p = 0,0001$) and support of health workers ($p = 0.015$) with spitting behavior on the betel nut in applying PHBS Public Place in Pasar Raya Simalungun Regency.
- c. The results of multivariate analysis shows that knowledge is the most dominant factor influencing spitting behavior on betel consumers in applicating PHBS public places in Pasar Raya Simalungun Regency

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