

The concept of Health Belief Model (HBM) in relation to Personal Hygiene Behavior during Menstruation in Junior High School Students

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Abstract: Personal hygiene that is not maintained during menstruation will have an impact on women's reproductive health problems, including reproductive tract infections, urinary tract infections, and has been linked to the risk of HIV infection, cervical cancer, pregnancy which has an adverse impact on the growth and development of the fetus and can even cause death in the long term. mother and baby. Considering that the negative impact of personal hygiene during menstruation is so important, it is necessary to carry out further research with the aim of research to identify the causes of low personal hygiene from the Health Belief Model concept. The research population was all female students at SMPIT Al-Fikri with a total of 56 people. The sampling technique used the total sampling method. Data analysis consisted of univariate, bivariate using the Chi-Square test and multivariate using multiple logistic regression with the backward method. The research results show a relationship between 7 variables related to personal hygiene behavior during menstruation with a p value <0.05, namely knowledge, current age, self-efficacy, cue to action, perceived barriers to action, perceived benefits to action, perceived severity. The final model produces an R-Square value of 0.708, which means that around 70.8% of personal hygiene behavior during menstruation is related to these 7 variables, and the remainder (29.2%) is influenced by other factors. Therefore, it is necessary to increase the implementation of education and broad outreach activities in schools to increase female students' understanding of the issue of personal hygiene during menstruation in relation to the HBM concept.

Keywords: Health Belief Model, Personal Hygiene, Menstruation, Adolescents

INTRODUCTION

Personal hygiene is the act of maintaining cleanliness to avoid possible health risks. Personal hygiene is very important, especially with regard to the reproductive organs, especially hygiene during menstruation in young women. The portrait of personal hygiene during menstruation is still very bad according to the results of research by Solehati (2018) where 100% of respondents had insufficient knowledge with attitudes that did not support care during menstruation as much as 78%. Yusiana, Simanjuntak and Siagian's research also found that personal hygiene during menstruation was poor due to the respondents' low knowledge (Yusiana, 2016; Simanjuntak, 2020).

Various studies have been conducted regarding factors related to personal hygiene behavior during menstruation in adolescents, so it can be concluded that these factors include the lack of education by parents of adolescents regarding personal hygiene during menstruation (Upashe, 2019; Mutairi, 2021), the lack of counseling by teachers in schools, especially Guidance and Counseling teachers, health workers who do not show a role in counseling at the Youth Information and Counseling Center, information media and access are lacking, latrines in schools are not clean and access to clean water is not optimal, school facilities are less supportive, such as unavailability of medicines anti-menstrual pain and sanitary napkins in School Health Units (Bulto, 2021; Michael, 2020; Belayneh, 2019; Sommer, 2016; Chinyama, 2019; Mahfuz, 2021, Habtegiorgis, 2021; Alfiaz, 2021, Kansime, 2020; Suryani, 2019; Andani, 2021).

Personal hygiene that is not maintained during menstruation will cause various women's reproductive health problems, including reproductive tract infections, urinary tract infections, vulvar pruritus and has been linked to the risk of HIV infection, cervical cancer, and pregnancy which has an adverse impact on fetal growth and

development. The social impact of reproductive tract infections is that friends will shun them because of the fishy smell caused by the infection, reduced self-confidence, and hampering daily activities (Rizwan, 2021). Research conducted by Hubaedah found a significant relationship between knowledge and behavior about vulva hygiene during menstruation and the incidence of vulvar pruritus (Hubaedah, 2019). According to research results from UNICEF Indonesia, 1 in 6 Indonesian children do not go to school because of a lack of knowledge about menstruation (UNICEF, 2017).

Considering that the negative impact of personal hygiene during menstruation is so important for the survival of future generations, it is necessary to carry out further research with the aim of research to identify the causes of low personal hygiene from the concept of the Health Belief Model (HBM). HBM comes from psychological and behavioral theories as two components that form the basis of a person taking health actions with the desire to avoid disease or treat disease and the belief that these actions will prevent or cure disease. The concept underlying the HBM is that health behavior is determined by personal beliefs or perceptions about disease and the strategies available to reduce its occurrence (Hochbaum, 1958).

So far there has been no discussion of the concept of HBM which is related to personal hygiene during menstruation so this is one of the novelties in this research. The factors studied in the HBM concept are 1) perceived susceptibility (perception of the risk/susceptibility of disease), 2) perceived severity (perception of the seriousness or severity of illness and disease), 3) perceived benefits of action (perception of the benefits of action to reduce /curing disease), 4) perceived barriers to action (perceptions of barriers to taking health action such as high medical costs, side effects, unpleasant and uncomfortable conditions), 5) cue to action (cue to action is internal (pain threshold)) and external (mass media news, advice and experiences of other people, illnesses of family members, articles, etc.), 6) self-efficacy (level of self-confidence in one's ability to successfully carry out a health behavior/perceived benefits). Therefore, researchers are interested in conducting research with the title Health Belief Concept Model of its Relationship to personal hygiene behavior during menstruation among female students at SMP IT AL-Fikri Pekanbaru.

Research Questions

Based on the description above, this research aims to determine the relationship between the health belief model and menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru. The description of the research question is as follows:

1. What is the relationship between perceived susceptibility (perception of risk/susceptibility to disease) and menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru?
2. What is the relationship between perceived severity (perception of the seriousness or severity of illness and disease) on menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru?
3. What is the relationship between perceived benefits of action (perceptions about the benefits of action to reduce/cure disease) on menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru?
4. What is the relationship between perceived barriers to action (perceptions of barriers to taking health action such as high medical costs, side effects, unpleasant and uncomfortable conditions) on menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru?
5. What is the relationship between cue to action (internal cues to action (pain threshold) and external (mass media news, advice and experiences of other people, family members' illnesses, articles, etc.) on menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru?
6. What is the relationship between self-efficacy (level of self-confidence in one's ability to successfully carry out a health behavior/perceived benefits) on menstrual personal hygiene behavior among female students at SMP IT Al-Fikri Pekanbaru?

METHODOLOGY

This type of quantitative research has an analytical cross sectional study design where the dependent and independent variables are measured at one time with the aim of finding out the statistical relationship between the two variables. The research population was all female students at SMPIT Al-Fikri classes VII, VIII and IX with a

total of 65 female students. The research sample used total sampling with a total of 65 people. Data collection was carried out using a questionnaire that had been tested for validity and reliability.

RESULT AND DISCUSSION

The results of this research have been analyzed using univariate, bivariate and multivariate analysis. Univariate analysis showed that the Health Belief Model (HBM) variable consisted of 6 factors, namely Perceived Susceptability in the negative category, namely 27 respondents (41.5%), Perceived severity in the serious category, namely 30 respondents (46.2%), Perceived benefits. to action in the not useful category, namely 32 respondents (49.2%), Perceveid barriers to action in the unsupportive category, namely 40 respondents (61.5%), Cue to action in the no action category, namely 40 respondents (61.5%) , and Self efficacy with the category of not being confident 38 respondents (58.5%). Meanwhile, the knowledge variable in the low category is 47 respondents (45.6%), the current age of the respondents is inappropriate (<13, >15 years) namely 25 respondents (38.5%), Menarche age is in the abnormal category (<12 years) namely 31 respondents (47.7%), History of Desminore in the never experienced category, namely 35 respondents (53.8%). Meanwhile, the independent variable Personal Hygiene Behavior during Menstruation was in the poor category, namely 38 respondents (58.5%).

The results of bivariate analysis using the Chi-Square test showed that all dependent variables (10 variables) were statistically related to the independent variable (personal hygiene behavior during menstruation) with a P value <0.05. The highest POR value is the knowledge variable (8.817 (2.538-30.626)) and the Perceived severity variable (8.462 (2.600-27.533)).

The results of the multivariate analysis were carried out after first carrying out a bivariate selection test on the research variables (10 variables). Provided that if the pvalue is <0.25 then the variable is a candidate in the multivariate test. In this study, all variables are candidates (see attachment). Multivariate analysis using multiple regression tests has fulfilled six requirements, namely existence assumption test, independence assumption test, linearity assumption test, homoscedasticity assumption test, normality assumption test, multicollinearity assumption test. The multivariate test used is multiple linear regression using the backward method. From the test results, a final model was obtained with 7 variables related to personal hygiene behavior during menstruation with a p value <0.05, namely knowledge (0.000), current age (0.000), self-efficacy (0.002), cue to action (0.003), Perceveid barriers to action (0.003), Perceveid benefits to action (0.0049), Perceived severity (0.025). The final model produces an R-Square value of 0.708, which means that around 70.8% of personal hygiene behavior during menstruation is related to these 7 variables, and the remainder (29.2%) is influenced by other factors. The complete multivariate test analysis can be seen in Table 1.

Tabel 1. Analisis Multivariat

Model Stage	Standardized Coefficients	t	Pvalue	R	R Square
Model 1					
<i>Perceived susceptability</i>	0,144	1,806	0,076	0,857	0,735
<i>Perceived severity</i>	0,171	2,172	0,034		
<i>Perceveid benefits to action</i>	0,138	1,792	0,079		
<i>Perceveid barriers to action</i>	0,272	3,469	0,001		
<i>Cue to action</i>	0,154	1,966	0,054		
<i>Self efficacy</i>	0,200	2,503	0,015		
Knowledge	0,248	3,191	0,002		
Current Age	0,293	3,865	0,000		
Menarche Age	0,134	1,675	0,100		
History of Desminore	0,074	0,917	0,363		
Model 2					
<i>Perceived susceptability</i>	0,149	1,874	0,066	0,855	0,731
<i>Perceived severity</i>	0,164	2,096	0,041		

<i>Perceived benefits to action</i>	0,151	1,994	0,051		
<i>Perceived barriers to action</i>	0,293	3,930	0,000		
<i>Cue to action</i>	0,160	2,065	0,044		
<i>Self efficacy</i>	0,216	2,782	0,007		
Knowledge	0,260	3,411	0,001		
Current Age	0,298	3,945	0,000		
Menarche Age	0,126	1,587	0,118		
Model 3					
<i>Perceived susceptability</i>	0,109	1,426	0,159	0,848	0,718
<i>Perceived severity</i>	0,169	2,128	0,038		
<i>Perceived benefits to action</i>	0,156	2,045	0,046		
<i>Perceived barriers to action</i>	0,322	4,372	0,000		
<i>Cue to action</i>	0,141	1,813	0,075		
<i>Self efficacy</i>	0,243	3,164	0,003		
Knowledge	0,287	3,809	0,000		
Current Age	0,323	4,328	0,000		
Model 4					
<i>Perceived severity</i>	0,183	2,305	0,025	0,841	0,708
<i>Perceived benefits to action</i>	0,154	1,998	0,049		
<i>Perceived barriers to action</i>	0,338	4,615	0,003		
<i>Cue to action</i>	0,150	1,919	0,003		
<i>Self efficacy</i>	0,249	3,212	0,002		
Knowledge	0,299	3,958	0,000		
Current Age	0,347	4,727	0,000		

The HBM concept consists of 6 variables, statistically in this study only 5 variables were related to personal hygiene behavior during menstruation among female students at SMP IT Al Fikri Pekanbaru class VII-IX. The variable is Perceived severity (perception of the seriousness or severity of illness and disease). This is related to students' perceptions regarding the severity of disease symptoms experienced during menstruation, such as itching in the vaginal area, irritation of the reproductive organs, perceptions of the severity of infections experienced if the vagina is itchy and smells.

Apart from that, the Perceived benefits of action variable (perception of the benefits of action to reduce/cure disease). This is related to the perception of female students that they will take actions related to reducing and curing the symptoms of the disease they feel, such as diligently maintaining the cleanliness of reproductive organs, especially during menstruation, diligently changing sanitary napkins at least 3 times/day, not using sanitary napkins with chemicals that are allergens, washing vagina from front to back to reduce the risk of infection and use disposable sanitary napkins.

Perceived barriers to action variable (perception of barriers to taking health action such as high medical costs, side effects, unpleasant and uncomfortable conditions). This is related to students' perceptions that they find it difficult to change sanitary napkins 3 times/day while at school because they are embarrassed to bring sanitary napkins, they feel that the water in school toilets is not clean enough for personal hygiene, special reproductive organ cleaning soap is difficult to buy because it is expensive. Cue to action (cue to action is internal (pain threshold) and external (mass media news, advice and experiences of other people, illness of family members, articles, etc.)). This is related to seeking information about the conditions and circumstances experienced at the time. menstruation. For example, students experience itching and irritation during menstruation, then the students ask their guidance and counseling teacher, colleagues, or even look for information on online media so they can choose what action is appropriate.

Self-efficacy (level of self-confidence in one's ability to successfully carry out a health behavior/perceived benefits). This is related to female students' self-confidence to take positive action to overcome itching or pain in the

reproductive organs during menstruation. Furthermore, variable characteristics are also related to female students' personal hygiene behavior during menstruation, namely the variables of knowledge and current age of female students. This is related to the ability of brain development according to age to describe or interpret or analyze information read or received regarding personal hygiene during menstruation.

The results of this research are in line with research by Efendi and Khotimah (2020) who examined 101 female students at SMPN 244 in North Jakarta to determine several factors related to menstrual hygiene behavior through the Health Belief Model (HBM). The research was carried out using a cross sectional approach with the result that the bivariate statistics of menstrual behavior were significantly related to the variables of knowledge, perceived threat and perceived benefit where respondents focused more on information regarding the threat of disease related to menstrual hygiene behavior and the direct benefits felt by teenagers regarding personal hygiene.

The results of this research are also supported by research conducted by Wahyudi et al (2018), the variable knowledge about hygiene during menstruation is influenced by information from peers and there is no relationship between age of menarche and personal hygiene among female students. In line with the research results of Hastuti et al (2019) that there is also a correlation between sanitation facilities in schools and personal hygiene of female students when they are menstruating, the menstrual conditions of some female students often experience verbal harassment. Apart from that, it was also found that menstruation and menstruation cause decreased concentration, participation and attendance of students at school. Therefore, extensive education and outreach activities are needed to increase female students' understanding of the issue of personal hygiene during menstruation.

CONCLUSION

The research results show a relationship between 7 variables related to personal hygiene behavior during menstruation with a p value <0.05 , namely knowledge (0.000), current age (0.000), self-efficacy (0.002), cue to action (0.003), perception of barriers to action (0.003), Perceived benefits to action (0.0049), Perceived severity (0.025). The final model produces an R-Square value of 0.708, which means that around 70.8% of personal hygiene behavior during menstruation is related to these 7 variables, and the remainder (29.2%) is influenced by other factors. Therefore, it is necessary to increase the implementation of education and broad outreach activities in schools to increase female students' understanding of the issue of personal hygiene during menstruation in relation to the HBM concept.

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