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## THE EFFECT OF HEALTH EDUCATION ON PERSONAL HYGIENE BEHAVIOUR IN PREVENTING VAGINAL DISCHARGE

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## **ABSTRACT**

**Background:**As 75% of women experience vaginal discharge once in their life phase and as many as 45% experiences recurring conditions. Lack of knowledge about personal hygiene especially vaginal hygiene is the main cause of vaginal discharge.

**Aims:** The purpose of this research is to find the effect of health education about personal hygiene to a behavior of preventing vaginal discharge.

**Methods:** The study employed a Quasi Experiment with Nonequivalent Control Group Design. Sampling technique by Probability Sampling with Cluster Sampling. A sample of 136 from 206 students were involved anddivided into two groups; control and experimental group. The instrument used was questionnaire related to vaginal hygiene. Independent-t tests were used to analyze data to differences between experimental and control groups. And then paired t-test is used to see the difference between pretest and postest of each group.

**Results:**From the results, Lavene's test has the same or homogeneous variation with a score of sig 0.771 (sig> 0.05). Then p-value of t-test test obtained sig. 0.000 (sig> 0.05), which indicates a significant difference between groups treated with health education about personal hygiene behavior to preventing vaginal discharge with untreated groups.

**Conclusion:** The conclusion is there was an effect of health education on personal hygiene to student's behavior of preventing vaginal discharge in Wikarya Karanganyar Vocational High School.

Keywords: Health Education, Personal Hygiene, Vaginal Discharge, Behavior, student

### INTRODUCTION

Vaginal discharge is probably the most common complaint and gynaecological symptom in pubertal girls and can often be the cause of repeated visits to the general practitioner [1, 2]. It has been known, 75% women experiences vaginal discharge, sometimes called as *flour albus or leucorrhoea*, once in their life phase, and almost half experience recurring conditions [3, 4]. The data above shows the incidence of vaginal discharge in women is quite high. Shame when experiencing vaginal discharge often makes women not consulted to the practitioner, whereas vaginal discharge can be an indication of a disease [1].



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Almost every woman has experienced vaginal discharge and thinks it is normal, but it should be seen the symptoms and causes after menstrual disturbance [5]. Vaginal discharge disorder causes an imbalance of female genital defense system as well as immunity imbalance. If the defense system is weak enough, the infection will occur frequently.

Vaginal discharge is physiological (normal), which occurs one week before and after menstruation, or not at the menstrual cycle, usually yellow/ greenish gray, smells fishy/ rotten, thick, large amounts and cause itchy complaints on the genitalia [7]. Actually, the vaginal discharge problem can be prevented earlier so as not to interfere with one's comfort. Prevention includes a healthy lifestyle, keeping the private area clean, cotton pants, wearing loos clothing, avoid tights, bottom wiping vagina from front to the back, avoiding the use of vaginal cleaning fluids and no perfumed, do not used panty liner for a long time, keeping the menstrual hygiene, and maintain menstrual hygiene and environment, so that vaginal discharge does not continue to malignancy [3, 5, 8–11].

A preliminary study was conducted at Wikarya Karanganyar Vocational High School, involved 80 students, on March 3<sup>rd</sup>, 2012 with a questionnaire related to the behavior to prevent vaginal discharge. Out of 80 students, almost all girls (98%) have experienced vaginal discharge, and only 2 students (2%) have never experienced vaginal discharge where 60 students (75%) admitted never used vaginal cleansing fluid. This study is to know the effect of health education about personal hygiene on students' behavior in preventing vaginal discharge at Wikarya Karanganyar Vocational High School.

#### **METHODS**

This research is a quasi-experiment with nonequivalent control group design approach to analyze the effect of health education about personal hygiene to preventing vaginal discharge behavior. Healy education as an independent variable and preventing vaginal discharge behavior as dependent variable. A total of 136 students from Wikarya Karanganyar Vocational High School was selected using cluster sampling method [12] on May to June 2012, and divided equally into 2 groups; control and experimental groups. The students were in seven class of X grade, entering their transition to enter their puberty. In experimental group, the students were given health education related to personal hygiene, while there was no intervention at control group. Students who refused to follow the instruction and absence during the observation were excluded from the study. Independent and Paired t-test were done to assess the mean difference. While Pearson test was used to find the correlation between the two variables, Alpa Cronbach's was tested to test the reliability [13, 14].

#### RESULTS

In the beginning, of 68 students, there were 36 (47%) and 38 (56%) students, respectively in the experimental and control group, have good behavior in preventing vaginal discharge. After giving health education about personal hygiene, number of students who have good behavior in preventing vaginal discharge increased from 36 to 39, while in the control group the number decreased to only 37 students in the observation day (posttest). The data suggests that the 60-minutes health education by the power point media and leaflet given to students are useful to provide information of preventing vaginal discharge.

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posttest control
pretest control
posttest exsperiment
pretest experiment
0 10 20 30 40
Number of students

Figure 1. Students' personal hygiene behavior in preventing vaginal discharge

From the observations made through the two groups, the pretest score shows the results was not much different. Table 1 provides the personal hygiene score in preventing the vaginal discharge among the participated students. The study observed with no expose to information, the score may fall, however, providing students the health education will significantly increase their score from 15.62 to 21.04, and the increase was found significant (p value < 0.001) if compared each other.

Table 1. Personal hygiene behavior score on vaginal discharge prevention

Groups		Personal Hygiene score			
	Pre		Post		P value
	Mean	SD	Mean	SD	
Experiment	15.62	2.522	21.04	2.522	0.000
Control	15.87	2.556	15.65	2.590	0.133

### **DISCUSSION**

The results indicate that the health education about personal vaginal hygiene influence adolescent behavior in habit and lifestyle. Surely this is related to knowledge that affects behavior so that it becomes aligned. A study among women who did not consider vaginal discharge as a serious problem that needs the medical examination shows that health information given significantly increased their knowledge related to abnormal vaginal discharge and in using reusable sanitary pad and [15].

The data shows health education about personal hygiene increased students' knowledge and improve students' behavior in preventing vaginal discharge. The better the knowledge, the better the handling and



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prevention of vaginal discharge. Knowledge is the result of knowing, and it occurs after the person senses a particular object (the sense of sight, hearing, smell, taste, and touch) is then manifested in behavior [12].

In this present study, most of teenagers do not know their behavior in daily, and the others have good knowledge in personal hygiene. A study reported the use of materials directly to vagina which can affect the vaginal normal flora and causes the appearance change, including, but not limited, douching (25%), feminine sprays (29%), feminine wipes (27%), and yeast creams (19%) [8]. Advices on vaginal discharge management include using cotton pants and loose clothing, avoiding tights, non-biological washing powder, bubble bath and scented soaps, having regular bathing with thorough drying, bottom wiping front to back, maintaining menstrual hygiene or menstrual pad, and using panty liner not for a long time [5, 8, 16, 17].

From the independent test, a significant mean difference of the personal hygiene behavior score on vaginal discharge prevention between the control and intervention group was found at the level of less than 0.001. This indicates that there is a change of student behaviour in preventing vaginal discharge after getting a health education about personal hygiene. The data suggests that the provided health education successfully achieved its fundamental goal in improving self vaginal discharge prevention [19].

The information was given by class lecture and leaflet. An organized lecturing by slide power point and audiovisual extends activities with the students audiovisual activity on the extension participants. The leaflet was given for continuous learning, seeing and repeating or rereading material from home. That extension involves listening, talking, and seeing activities, thus making this method effective. The information given through health education plays a role in supporting behavior change a person., and it can be obtained through print, electronic, education/counselling, and books [18, 20].

Limitations in this study: (a) Research was difficult to prevent the contamination both experiment and control group because they are in one school area. (b) The intervention of this study was giving health education about personal hygiene on preventing vaginal discharge behavior using lectured method. It should be better if the intervention used demonstration or simulation activities. (c) The Intelligence every student was different so the information is absorbed by different in each student and will influence post test result.

## **CONCLUSIONS**

There is a differences on preventing vaginal discharge behaviour at experimental group and control group after giving health education about personal hygiene. The health education presents effect on preventing vaginal discharge behavior of teenagers. Recommendation was extended for the cooperation of the Public Health Center, Public Health Office, and School Institution that routinely make programs and disseminate information related to reproductive health especially about personal hygiene at Senior High School or Vocational High School students level. The Public Health Center can coordinate with school to plan extension program through Health Care Unit in School at least every 3 months. Then students are expected to be able to utilize the health education about personal hygiene that has given, thus, to prevent the occurrence of vaginal discharge in order to realize a better and healthier generation.

## **CONFLICT OF INTEREST**

There is no conflict of interest.

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