


The Influence of Health Promotion Through Social Media Whatsapp on the Knowledge of Adolescent Girls About Personal Hygiene with Vaginitis Symptoms

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Article Info	ABSTRACT
<p>Keywords: Health Promotion, Personal Hygiene, Teenagers, WhatsApp Social Media</p>	<p>Young women are susceptible to vaginitis if they do not maintain vaginal hygiene. Vaginitis occurs in women who have entered puberty or will enter menopause with risk factors such as lack of hygiene, unprotected sexual intercourse, with multiple partners, sexually transmitted diseases and others. Personal hygiene needs to be considered because it is related to the incidence of genital infections. The most common vaginitis is bacterial vaginosis, trichomoniasis and vulvovaginal candidiasis. This study aims to determine whether there is an effect of health promotion through social media whatsapp on the knowledge of ninth grade female adolescents about personal hygiene with symptoms of vaginitis at SMP Negeri 02 Class IX Panyabungan Mandailing Natal Regency in 2025. The type of research used is Pre-Experimental research. The population in the study were all ninth grade female adolescents at SMP Negeri 02 Class IX Panyabungan Mandailing Natal Regency in 2025. The sampling technique used purposive sampling with a sample size of 41 people. using the Wilcoxon test. The results of the study obtained an average knowledge before (7,561) and after (12,048). The results of the Wilcoxon test obtained a p value = 0.000 < 0.05 which indicates that there is an effect after being given health promotion through WhatsApp social media about personal hygiene in adolescents at SMP Negeri 02 Class IX Panyabungan Mandailing Natal Regency in 2025. WhatsApp social media can be used as a reference for modern learning in conveying information to provide health promotion about personal hygiene with symptoms of vaginitis in adolescents to increase knowledge so that adolescents are prevented from vaginal diseases.</p>
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INTRODUCTION

Young women are susceptible to vaginitis if they do not maintain vaginal hygiene. Vaginitis occurs in women who have entered puberty or are about to enter menopause with risk factors including lack of hygiene, unprotected sexual intercourse, multiple partners, sexually transmitted diseases and others (Wiyata, 2022).

Menstruation is a component of a woman's journey through puberty, where many women face social and self-confidence limitations, which can contribute to both mental and physical health. During menstruation, *Personal Hygiene* This needs to be considered because it is related to the occurrence of genital infections. The most common vaginitis is bacterial vaginosis, trichomoniasis, and vulvovaginal candidiasis (Andalas, 2019).

According to *World Health Organization* (WHO) (2018) teenagers rarely pay attention to the cleanliness of their external genitalia organs. This can cause problems with their reproductive health, such as abnormal vaginal discharge which causes vaginitis. 75% of women in the world suffer from vaginitis once in their lifetime and 10% to 55% of them do not know that they have vaginitis (Aulia, 2019).

The results of the epidemiological study of vaginitis in women of childbearing age in the United States found that the most common cause was bacterial vaginosis, namely around 7.4 million new cases of vaginitis (Alfiani, 2020).

A health data survey found that 62% of women in Indonesia experience vaginal infections caused by viral vaginitis due to a lack of knowledge about maintaining reproductive hygiene. (Sciences, 2022). Approximately 75% of Indonesian women who experience vaginal discharge have bacterial vaginosis (BV), which is the most common cause of pathological vaginal discharge (40%-50% of vaginal infection cases). (Hikamah, 2022). Knowledge about reproductive health is also likely still low among adolescents, thus influencing their behavior in maintaining vaginal hygiene. Research results from a study in Jakarta found that 30.7% of 492 women experienced bacterial vaginitis (Medika, 2019).

In Padang, the relationship between personal hygiene attitudes and vaginitis symptoms among female students at SMPN 1 was at a low level of knowledge. The majority, 85 respondents, had moderate knowledge, with 17.6% experiencing vaginitis symptoms. Meanwhile, the majority of respondents at SMPN 23 had moderate knowledge of personal hygiene, 80 students, and 35% of them had experienced vaginitis symptoms (Khatib, 2019).

As healthcare professionals, this phenomenon is a crucial issue that must be addressed immediately. The approach taken to changing these established habits will undoubtedly adapt to the current era, where, for Indonesians, especially teenagers, social media has become a habit that is difficult to break.

In 2016, a survey by Statistics Indonesia (APJII) showed that internet users in Indonesia reached 132.7 million people (51.5%) of the total population. Of this number, 95% used the internet to access social networks. Internet users in Indonesia were predominantly young, with 75.5% of the population aged 10–24 (APJII, 2016).

In this study, *WhatsApp* WhatsApp is the social media platform of choice for health promotion. WhatsApp was chosen because it is considered more efficient and simpler than other instant messenger apps. Data from We Are Social indicates that WhatsApp is a popular social media platform among Indonesians. 83% of Indonesians use WhatsApp, meaning approximately 125 million people in Indonesia already use it (Hootsuite, 2019).

Based on research conducted by Khaleda Sananingrum in 2019 with the title "The Influence of Health Promotion with Different Media Applications" *WhatsApp* Regarding the Level of Knowledge of WUS About Cervical Cancer in RW 10 Puduk Payung Village, the results showed that the level of knowledge of WUS about cervical cancer before being given the intervention was mostly in the poor category in the three groups, and after being given

health promotion through the WhatsApp application about cervical cancer, the majority of respondents' knowledge was in the good knowledge category of 47.3% and respondents had sufficient knowledge of 39.7% of the three groups. This study shows that there is a difference in WUS's knowledge about cervical cancer before and after being given health promotion through the WhatsApp application (Sananingrum, 2019).

Based on the description above, the researcher is interested in examining the influence of health promotion through WhatsApp social media on the knowledge of ninth grade female adolescents about personal hygiene with vaginitis symptoms at SMP Negeri 02 Panyabungan, Mandailing Natal Regency in 2025.

METHODS

This research is quantitative, using a pre-experimental approach. The aim is to determine the symptoms or effects that arise as a result of a particular treatment. A one-group pretest-posttest design is used. This research paradigm assumes that a group is given a treatment and its results are then observed. However, before the treatment is administered, a pre-test is conducted to determine the initial conditions. The sample in this study was 41 female adolescents.

RESULTS AND DISCUSSION

Research result

Univariate Analysis

The univariate analysis in this study examined the characteristics of the respondents and their average knowledge scores before and after the intervention was administered to the students. The explanation is as follows:

Table 1 Description of Adolescents' Knowledge Before and After Being Given Whatsapp Social Media

No	Knowledge Question Items About Personal Hygiene with Vaginitis Symptoms	Before (%)		After (%)	
		Wron g	Corre ct	Wron g	Corre ct
1	Hygiene of the feminine area	48.8	51.2	2.4	97.6
2	Irritation in the female genital area	63.4	36.6	24.4	75.6
3	Water to clean the vaginal area	51.2	48.8	19.5	80.5
4	How to clean the vaginal area	73.2	26.8	29.3	70.7
5	Antiseptic liquid for cleaning the feminine area	53.7	46.3	29.3	70.7
6	Drying the vaginal area	80.5	19.5	19.5	80.5
7	Change sanitary napkins daily	2.4	97.6	43.9	56.1
8	Change underwear every day	73.2	26.8	2.4	97.6
9	Pants material made of cotton and nylon	19.5	80.5	26.8	73.2
10	Signs of irritation	48.8	51.2	9.8	90.2
11	Use of Pantyliners	29.3	70.7	7.3	92.7
12	Underwear washing liquid	22.0	78.0	19.5	80.5

No	Knowledge Question Items About Personal Hygiene with Vaginitis Symptoms	Before (%)		After (%)	
		Wron g	Corre ct	Wron g	Corre ct
13	Cleaning hair in the feminine area	51.2	48.8	34.1	65.9
14	How to wash the vaginal area	65.9	34.1	22.0	78.0
15	Discharge of fishy-smelling fluid	61.0	39.0	4.9	95.1

Based on Table 1. The results of the study found that of the 15 knowledge question items, the most incorrect answers were found in questions 8, 14, 4, and 2, namely about changing underwear daily, how to clean the feminine area, and irritation in the feminine area. However, there was a change after being given treatment, the incorrect answers decreased from question 8 previously from 73.3% to 2.4%. Question 14 previously from 65.9% to 22.0% and question 4 previously from 73.2% to 29.3%. and question 2 previously from 63.4% to 24.4%.

Table. 2 Average Knowledge of Teenagers Before and After Being Given WhatsApp Social Media

Variables	N	Mean	Elementary School	Min	Max
Knowledge					
Before	41	7,561	2,793	300	14.00
After	41	12,048	1,883	800	15.00

Based on the results of table 2, it was found that the average knowledge before being given WhatsApp social media was 7,561 with a standard deviation of 2,793, a minimum value of 300 and a maximum of 14.00. While the average knowledge after being given intervention with WhatsApp social media was 12,048 with a standard deviation of 1,883, a minimum value of 12.00 and a maximum value of 15.00.

Bivariate Analysis

Before conducting a bivariate test, a data normality test was first carried out using the test *kolmogorof sminornov* and the results obtained showed that the data were not normally distributed, with a p-value <0.05. Because the data were not normally distributed, this study used the Wilcoxon test. The influence of health promotion through WhatsApp social media on the knowledge of ninth grade female adolescents about personal hygiene with vaginitis symptoms at SMP Negeri 02 Panyabungan. With the following data processing results:

Table. 3 The Influence of WhatsApp Social Media on the Knowledge of IXth Grade Female Adolescents about Personal Hygiene with Vaginitis Symptoms at SMP Negeri 02, Panyabungan District, Mandailing Natal Regency in 2025

Variables	N	Mean	Sig. (2-Tailed)
Knowledge	41	0,000	0.98

Based on the results of table 3, it was found that the influence of the use of WhatsApp social media obtained a p value = 0.000 < 0.05 using a 95% confidence level, which means there

isThe influence of health promotion through WhatsApp social media on the knowledge of ninth grade female adolescents about personal hygiene with vaginitis symptoms at SMP Negeri 02 Panyabungan.

Discussion

Adolescents' Knowledge of Personal Hygiene with Vaginitis Symptoms During Pretest and Posttest

Average analysis results It was found that the average knowledge before being given WhatsApp social media was 7,561 with a standard deviation of 2,793, a minimum value of 300 and a maximum of 14.00. While the average knowledge after being given intervention with WhatsApp social media was 12,048 with a standard deviation of 1,883, a minimum value of 12.00 and a maximum value of 15.00.

The questions most frequently answered incorrectly by junior high school students during the pretest were about how to clean the genital area, change underwear, treat vaginal irritation, and dry the genital area. Meanwhile, during the posttest, the questions most frequently answered incorrectly by junior high school students were about risk factors for disease prevention and prevention of vaginitis symptoms. This was due to some questions having similar answers, such as risk factors for prevention and prevention, and the use of scientific language that was difficult for students to understand..

Notoatmodjo (2018) states that knowledge is the result of knowing and occurs after someone senses a particular object. Sensing occurs through the five human senses, namely sight, taste, smell, taste, and touch. Knowledge can be obtained through education, including curricular, non-curricular, and extracurricular activities. Knowledge can also be obtained from the knowledge of others, such as hearing, seeing directly, and through communication tools such as television, radio, books, and others.

A strong desire can influence adolescents' access to appropriate sexual information. Increasing knowledge isn't solely achieved through formal education; it can also be achieved through non-formal education. A person's knowledge of an object consists of two aspects: positive and negative. These two aspects determine their attitudes; the more positive aspects of an object are known, the more positive attitudes they will develop toward that object (Noatmodjo, 2018).

Health promotion, like health education, can influence both knowledge and behavior. According to Wood, health education is a series of beneficial experiences that influence a person's habits, attitudes, and knowledge, and according to Nyswander, health education is a dynamic process of behavioral change (Fitriani, 2017).

This is in line with research (Maya, 2014) which showed a significant difference in knowledge about gastritis in adolescents before and after health education, namely during the pretest, 41.9% of respondents had good knowledge and during the posttest, this increased to 90.5%. Similarly, research (Alvian, 2019) showed a difference in knowledge during the pretest, 38.5% of respondents had good knowledge and during the posttest, 74.4% increased with health education. Research (Alvian, 2019) showed a significant influence on the level of knowledge about gastritis.

The Influence of Social Media WhatsApp on Personal Hygiene with Vaginitis Symptoms on Adolescents' Knowledge

The results of the statistical test with Wilcoxon at the level of knowledge obtained a p value = 0.000 ($p < 0.05$) which means there is an influence of health promotion through WhatsApp social media on the knowledge of ninth grade female adolescents about personal hygiene with vaginitis symptoms at SMP Negeri 02 Panyabungan s.

Health promotion provided through WhatsApp social media can have an influence on respondents' knowledge, because the information or material provided by researchers in the WhatsApp group that has been created can be understood by respondents because it is concise and clear.

In line with research by Johnson et al (2015), education via WhatsApp has been proven to be beneficial for learning because it increases student participation in both face-to-face and distance contexts between students, other students, and educators. According to research by Hendrik (2016), education using WhatsApp has been proven to be beneficial for learning because it increases student participation in face-to-face and distance contexts between students, other students, and educators. *WhatsApp* has also been proven to improve critical thinking skills in students and WhatsApp Messenger as an integrated mobile learning that is effective to be applied in learning and improve critical thinking skills because WhatsApp social media makes students motivated and interested in participating in learning.

This is in line with research (Nehru, 2019), which shows an increase in average knowledge after being given intervention via WhatsApp social media, namely with an average knowledge score of 150.09 with a p value of 0.000 in the intervention group, which means that there is knowledge after being given education via WhatsApp. *WhatsApp*. While the average knowledge score in the control group was 134.57 with a p value of 0.004*, which means there was a change after being given an information link. Similarly, research (Aldo, 2019), showed that there was an increase in student knowledge that the average value of student knowledge before being given WhatsApp media treatment was 5.95 and after being given WhatsApp media treatment was 6.95, which means there was an increase in student knowledge after being given WhatsApp media treatment.

Based on the results of the discussion above, it can be concluded that providing WhatsApp social media has an effect on increasing adolescents' knowledge about *personal hygiene* with symptoms of vaginitis.

CONCLUSION

The average knowledge of adolescents before being given WhatsApp social media was 7,561. The average knowledge after being given intervention with WhatsApp social media was 12,048. There is an effect of health promotion through WhatsApp social media on the knowledge of ninth-grade female adolescents about personal hygiene with vaginitis symptoms at SMP Negeri 02 Panyabungan.

REFERENCE

Alfiani, D. F. (2020). *Vaginitis*. Diakses dari Alomedika: <https://www.alomedika.com/penyakit>
Arifianto, C. J. (2017). *Komunikasi di Era Digital*. Jakarta: Aswaja Persindo.

- Aulia. (2019). Hubungan Pengetahuan, Sikap, dan Perilaku Personal Hygiene dengan Gejala Vaginitis. Diakses dari Jurnal Kesehatan Andalas: <https://scholar.google.com>
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). (2016). *Penetrasi dan Perilaku Pengguna Internet Indonesia*. Jakarta: APJII.
- Fadli, D. (2022). *Vaginitis*. Diakses dari Halodoc: <https://www.halodoc.com/health>
- Hikamah, N. (2022). Pengetahuan Remaja Putri tentang Kebersihan Reproduksi saat Menstruasi. Diakses dari *Jurnal Kebidanan dan Kesehatan*: <https://scholar.google.co.id>
- Khalid, H. (2020). Faktor-Faktor yang Mempengaruhi Personal Hygiene. Diakses dari Environment Indonesia: <https://environment-indonesia.com>
- Khatib, A. (2019). Hubungan Pengetahuan, Sikap, dan Perilaku Personal Hygiene dengan Gejala Vaginitis. Diakses dari Jurnal FK Unand: <http://jurnal.fk.unand.ac.id>
- Kumpanan. (2022). *Personal Hygiene*. Diakses dari Kumpanan: <https://m.kumpanan.com>
- Maryam, S. (2015). *Promosi Kesehatan dalam Pelayanan Kebidanan*. Jakarta: EGC.
- Nasrullah, R. (2015). *Media Sosial: Perspektif Komunikasi, Budaya, dan Sosioteknologi*. Bandung: Simbiosis Rekatama Media.
- Notoatmodjo, S. (2018). *Promosi Kesehatan dan Ilmu Perilaku*. Jakarta: PT Asdi Mahasatya.
- Rohmadi, A. (2016). *Tips Produktif di Media Sosial*. Jakarta: Gramedia.
- Safitri, A. M. (2021). Bahan Alami untuk Membantu Mengobati Infeksi Jamur Vagina. Diakses dari Hello Sehat: <https://hellosehat.com>
- Sananingrum, K. (2019). *Pengaruh Promosi Kesehatan Menggunakan Media Aplikasi WhatsApp terhadap Tingkat Pengetahuan Wanita Usia Subur tentang Kanker Serviks di RW 10 Kelurahan Pudak Payung (Skripsi)*. Semarang: Poltekkes Kemenkes Semarang.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.
- Wijayata, J. K. (2022). *Vaginitis*. Diakses dari Google Scholar: <https://scholar.google.co.id>
- Ilmu Group. (2020). *Metodologi Penelitian*. Yogyakarta: Pustaka Ilmu Group.

