



## Research Article

### The Effect of Health Promotion on Adolescents' Knowledge of Reproductive Health

Evi Sonjati<sup>1\*</sup>, Gita Arisara<sup>1</sup>, Dini Afriani<sup>1</sup>, Tiara Khoirunnisa<sup>1</sup>

<sup>1</sup>Faculty of Health, Universitas Sebelas April, Kabupaten Sumedang kecamatan Sumedang utara 45352, Indonesia

#### Article Information

Received: 26 September 2024

Revised: 15 December 2024

Accepted: 20 July 2025

Available online: 29 July 2025

#### Keywords

The Effect ; adolescents; reproductive health; health promotion; knowledge

#### Correspondence\*

Phone: (+62) 95365842321

E-mail: [evisonjati@unsap.ac.id](mailto:evisonjati@unsap.ac.id)

#### Website

<https://journal.umtas.ac.id/index.php/healthcare/index>

#### Doi

<https://doi.org/10.35568/healthcare.v7i2.6465>

#### ABSTRACT

Adolescence is a transition period between childhood and adulthood and has relatively not reached the stage of mental and social maturity so that they have to face conflicting emotional and social pressures. Reproductive health is a complete physical, mental, and social act. Health promotion refers to efforts aimed at encouraging communities to take initiative in maintaining and improving their health. Knowledge serves as a key component in shaping open and informed behavior. This study aimed to examine the impact of health promotion on adolescents' knowledge regarding reproductive health at SMP 11 April Sumedang in 2024. The research employed a quantitative approach using a Pre-Experimental method with a One Group Pretest-Posttest design. The sampling technique applied was total sampling, involving 74 participants. A reproductive health knowledge questionnaire was utilized as the data collection instrument. Data analysis was conducted using the Wilcoxon signed-rank test. The findings revealed a significant effect of health promotion on adolescents' reproductive health knowledge at SMP 11 April Sumedang in 2024, with a p-value of 0.000 ( $p < 0.05$ ). Therefore, health promotion plays a crucial role in enhancing adolescents' understanding of reproductive health. Keyword : The Effect; adolescents; reproductive health; health promotion; knowledge

©The Author(s) 2025

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International License

## INTRODUCTION

In 1984, the World Health Organization (WHO) revived health education with the term health promotion. If health education is delivered as an effort to change integrity, then health promotion is not only about changing integrity but also about changing the environment that encourages such behavior change. In addition, health promotion increasingly focuses on developing healthy living capabilities, not just healthy behaviors. In 1980 there was a debate about the use of the terms health promotion and health education. In a broad sense, health education in health programs has the same goal, which is to improve health or achieve better health (Imelda et al., 2023). Health promotion in Indonesia plays a vision and an accurate scheme as contained in the Regulation of the Minister of Health of the Republic of Indonesia. 1193/2004 related to the National Health Promotion Authority. The vision and mission are aligned with other health programs to advance health expansion with a healthy paradigm towards the vision of a Healthy Indonesia (Draini et al., 2023). One of the reproductive health problems is the Maternal Mortality Rate (MMR) which is closely related to teenage pregnancy, making adolescents very vulnerable to reproductive health problems. According to the Central Statistics Agency (BPS), the number of youth in Indonesia reached 42 million people in 2005, equivalent to 19.34% of the country's total population. Adolescents, i.e. those aged 10 to 19, make up one-fifth of Indonesia's approximately 1.2 billion young generation and about one-fifth of the world's population. Adolescence is a period of rapid expansion and rapid physical, mental, and intellectual development. Adolescents are not always a healthy group. Risk behaviors that contribute to adolescent health problems include growth and development (physical and psychosocial alterations), nutrition, substance abuse, and reproductive health, classified as sexually

transmitted diseases/SRI and HIV/AIDS. The development of adolescent reproductive health is carried out in order to convey news and knowledge related to adolescents' healthy lifestyle habits in addition to overcoming existing problems. With the right knowledge and motivation for healthy adolescents' lives, it is hoped that adolescents will be able to maintain their health so that they can enter family life through healthy births. (Prabawati, 2019)

Adolescent reproductive health has become a global issue today. Reproductive health is a state of complete physical, mental, and social health, not only free from diseases or defects related to the reproductive system, function, and process. (Fitriana et al., 2018)

Indonesia is a developing country whose society consists of various age groups, one of which is teenagers. Adolescence is a period of transition from childhood. Adolescence is a transitional phase leading to adulthood, marked by changes in physical, mental, and psychosocial aspects. According to the World Health Organization (WHO), individuals aged between 10 and 19 years are classified as adolescents. It is very important for them at this age to educate and prepare them to make their more intelligent reproductive health decisions (Sasanti, 2019).

The National Family Planning Coordinating Board (BKKBN) stated that reproductive health problems in adolescents are increasing from time to time. One of the impacts of promiscuity is unwanted pregnancy. Pregnancy can result in early marriage or the possibility of abortion (Rachmadianti, 2019).

The limited access to information for Indonesian adolescents regarding reproductive health, which includes sexuality, is due to the fact that Indonesian society still thinks that sexuality is taboo and not worthy of being talked about openly. Parents are usually uneasy to explain reproductive and sexuality issues to their teenage children, and teenagers are also

more likely to feel embarrassed to ask their parents(Rani et al., 2022).

In 2018 in Indonesia. Around 33.3% of adolescent girls and 34.5% of adolescent boys start dating when they are not yet 17 years old, There is concern that during this stage, adolescents may lack sufficient life skills, which puts them at greater risk of engaging in unhealthy dating behaviors, including having premarital sex.(Riset Kesehatan Dasar (Riskesdas), 2018) is a period of search for identity accompanied by a great sense of curiosity accompanied by the presence of increasingly sophisticated technology and information, causing adolescents to have unhealthy behaviors and 3 at risk of being affected by the Three Basic Threats of Reproductive Health (TRIAD KRR)(Depkes RI, 2018).

Teenagers in Indonesia are dating for the first time at the age of 12 years and 92% of teenagers hold hands during dating, 82% kiss, 63% touch petting. These behaviors will trigger teens to have sex. An important event during adolescence is puberty, a rapid morphological and physiological change from childhood to adulthood, including the maturation of the reproductive system.(Dinkes Kabupaten Sumedang, 2019)

Adolescents are an age group that is particularly vulnerable to various reproductive health risks due to a lack of adequate knowledge. Data shows that there are still many adolescents who do not understand the basic concepts of reproductive health, such as the puberty process, how to maintain the cleanliness of the reproductive organs, and the prevention of sexually transmitted infections. This lack of information is exacerbated by a strong taboo culture in discussing reproductive issues and the lack of access to accurate and scientific sources of information. Health promotion is an important strategy in efforts to increase adolescent knowledge, but its effectiveness still needs to be studied in depth which is an urgency in this study.

Research on the influence of health promotion on adolescents' knowledge of reproductive health is important to fill this gap. The results of this research are expected to be the basis for the development of more targeted reproductive health education and promotion programs, both in the school environment and in the community.

## **METHOD**

Methods section provides sufficient details to allow the work to be reproduced by an independent researcher. Methods are already published should be summarized and indicated by a reference.(Sugiyono, 2019) If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described. Indicate the participants observed, including demographic data, number of respondents, the rationale of respondents selection, etc. (Hardani, Helmina Andriani, Jumari Ustiawaty, Evi Fatmi Utami, Ria Rahmatul Istiqomah, Roushandy Asri Fardani, Dhika Juliana Sukmana, 2020)Describe the design of the experiment, such as the experiment procedures, surveys, interviews, observation characteristics, etc. Write the complete research procedure. Be sure that explanations made in the article will allow other researchers reproduce the work, or make future work out of it. Equations must be presented using consecutive numbers starting with Continue the numbering until the end of the article including appendices. The number must be made inside parenthesis and right aligned. You also need to put spacing before and after an equation. Nomenclature for your equations must be presented after the References section of your article.(Rachmadianti, 2019)

## **RESULTS**

This study employed a quantitative approach using a pre-experimental research design, specifically the One Group Pretest-Posttest

format.(Abdul Mukhyi, 2023) The sampling method applied was total sampling, involving a total of 74 respondents(Rashid, 2022) A questionnaire assessing knowledge of reproductive health was used as the research instrument. Data were analyzed using the Wilcoxon signed-rank test.

Table 1. Frequency distribution of pretest-posttest knowledge

Intervention	N	Mean	Median	Standard Deviation	Min	Max
Pre-test	74	61.67	56	13.824	48	100
Post-test	74	87.62	92	10.006	68	100

Source: Primary Data, 2025

Based on Table 1, the pre-test results for the average score are 61.67 with a minimum score of 48 and a maximum score of 100. Then the post-test results for the average score are 87.62 with a minimum score of 68 and a maximum score of 100. From the data above, it means that there is an increase in the average value of adolescent knowledge after the intervention from 61.67 to 87.62.(Dini Afriani & Kes, 2019) In interpreting the contents of a table or chart, do not be trapped to re-read the contents of the table or chart, but focus on conclusions that can be drawn, such as tendencies, majority, patterns, directions, and so on.(Mesra, 2016)

Table 2. The Effect of Health Promotion on Adolescents' Knowledge of Reproductive Health

Intervention	N	Mean	Standard Deviation	P-Value
Pre-test	74	61.68	13.825	.000
Post-test	74	87.62	10.066	.000

Source: Primary Data, 2025

Based on Table 2. After the Wilcoxon test was carried out, it was found that the average score of 74 adolescents had an increase in score. The above results show that the results (P-Value = 0.000 < (0.05), it can be concluded that there is a significant influence between adolescents' knowledge

of the intervention provided, namely health promotion about reproductive health (Ngatno, 2015).

DISCUSSION

The results of this research include the implementation of the research, description of the results of the research and data analysis. This study produced data on the results of pretest & posttest. on "The Effect of Health Promotion on Adolescent Knowledge. The implementation of this research is divided into 3 stages, namely the preparation stage, the implementation stage and the final stage of research, namely the 1st stage: carrying out several processes, namely preparing questionnaire research instruments and taking care of research permits, 2nd stage: The implementation to the research location begins with an introduction and the intention of the researcher's goal to conduct research, providing informant concent and fill out a letter of approval to be a respondent. The next implementation is to provide a pre-test questionnaire which is to find out adolescents' initial knowledge about reproductive health. Then carry out intervention activities in the form of health promotion about reproductive health with power point media and video media . The material presented was about the definition of reproductive health, how to maintain the health of the reproductive organs, free sex, sexually transmitted diseases (STIs), how to transmit sexually transmitted diseases and their dangers. After the material was delivered, it was continued by providing a post-test questionnaire about adolescents' knowledge about reproductive health to see a comparison of adolescents' knowledge before the intervention and after the intervention. The 3rd stage is after the research is completed, namely research data on reproductive health knowledge either before the intervention or after the intervention on the effect of health

promotion on adolescent knowledge The data is then processed using frequency distribution tables and data normality tests. The results of the normality test, both *pre-test* and *post-test* in this study, were distributed abnormally, so the wilxocon test was used with the SPSS application on the computerized system (Rachmadianti, 2019). Based on the analysis of data from a questionnaire given to 74 respondents in June, The results of the statistical analysis using the Wilcoxon signed-rank test showed a p-value of 0.000, indicating that the p-value was less than 0.05. Therefore, the alternative hypothesis ( $H_a$ ) was accepted while the null hypothesis ( $H_o$ ) was rejected, suggesting a significant effect of health promotion on adolescents' knowledge regarding reproductive health (Mahmudah et al., 2016). Information greatly affects knowledge, by obtaining a lot of information, a person will understand and understand better. In addition, a person will gain more knowledge and be able to respond to the conditions that occur to the person themselves. Information obtained from various sources affects a person's level of knowledge.(Aisyah & Fitria, 2019)

Knowledge is a result of a sense of curiosity through sensory processes, especially in the eyes and ears of a particular object. Knowledge is an important domain in the formation of open behavior (Siswanto & Lestari, 2020).

Health Promotion is an effort made to the community so that they are willing and able to maintain and improve their own health Health promotion is a process that allows people to increase control and improve their health(D Afriani et al., 2023).

These findings are also consistent with previous research, which demonstrated a change in the level of knowledge. in the good category of 74% in respondents before being given health promotion while in respondents who had been given good category health promotion was 83% and obtained a value of p

= 0.000 (p less than 0.05). In conclusion, the provision of reproductive health promotion has an effect on the level of knowledge of adolescents (Hardani, Helmina Andriani, Jumari Ustiawaty, Evi Fatmi Utami, Ria Rahmatul Istiqomah, Roushandy Asri Fardani, Dhika Juliana Sukmana, 2020).

Sourced from the results of a study conducted that health promotion affects adolescents' knowledge, namely reproductive health. Health promotion is a strategy to ensure that people have the will and ability to maintain and improve their own health. The main purpose of health promotion is to convey information to increase public awareness of government programs. Health promotion is able to reduce the burden on the health system together to support the community to implement a healthy lifestyle. Preventing disease can significantly reduce total doctor visits, hospitalizations, and the use of other health care resources. Health promotion is a science that aims to realize behavioral changes in society, organizations and the environment (physical, social, cultural, political, and others) (Angle, 2014).

Health promotion helps people maintain and improve their health by practicing healthy behaviors that can prevent disease, protect themselves from health problems, and support the health of individuals and communities. The importance of health promotion in adolescents' knowledge of reproductive health is that puberty is the most appropriate time to develop good habits, the importance of maintaining cleanliness which is a long-term asset that is very mandatory for adolescent girls. Basically, adolescents need knowledge about reproductive health. Providing the right information in this discussion not only helps maintain the health and function of these organs but can also prevent adolescents from doing unwanted things. Maintaining the health of the reproductive system is important because it is related to how we

ensure human survival from generation to generation so that the next generation can be of better quality than the current generation (Rachmadianti, 2019).

Many factors in this cycle trigger reproductive health, including poverty, low social status, discrimination, lack of health services and services, low levels of education, and early pregnancy. Knowing about the reproductive process can help teens act more responsibly and avoid early pregnancy. Teen pregnancies are more risky and complications during pregnancy contribute to maternal mortality, according to a study. Factors that trigger reproductive health include socioeconomic and demographic implications (poverty, lack of education, knowledge related to sexual development and reproduction, living together in remote areas) (Afriani & Kes, 2019).

## CONCLUSIONS AND RECOMMENDATION

Based on the results and discussions of researchers conducted at SMP 11 April Sumedang in 2024, it can be concluded as follows:

1. The overview of adolescent knowledge before health promotion was obtained (61.68) with a P-Value (0.000).
2. Overview of adolescent knowledge after health promotion was obtained (87.62) with P-Value (0.000)
3. There was an effect of health promotion on adolescent knowledge in junior high school April 11 where the result was P-Value (0.000).

Various studies with this literature review conveyed the results, namely that health promotion triggers adolescents' knowledge related to reproductive health. Adolescent reproductive health is a healthy situation that affects the organs, functions, and reproductive efforts of an adolescent. What is meant by health here is not only freedom from disease or disability, but also mental, social, and cultural health. Adolescents have a high risk of various sexual and reproductive

health problems, including the risk of unwanted pregnancy, the risk of sexually transmitted infections (STIs), classified as HIV/AIDS, unsafe abortion, and sexual violence. The author hopes that parents will be able to deliver reproductive health education in line with the needs of their adolescents, schools are able to organize information center activities and adolescent counseling. and health services, especially health centers, are able to encourage schools to organize activities PIKR.

## REFERENCES

- Abdul Mukhyi, M. (2023). *Metodologi Penelitian Panduan Praktis Penelitian Yang Efektif* (1).
- Afriani, D, Marcelina, S., & Sinyo, G. Y. (2023). Increasing Reproductive Health Knowledge in Adolescents. *ABDIMAS: Jurnal Pengabdian Kepada Masyarakat*, 6(2).
- Angle. (2014). Fluor Albus pada remaja. *Jurnal Muhammadiyah Semarang*, 2(2), 6–34.
- Afriani, Dini, & Kes, M. (2019). Determinan perilaku seksual beresiko pada siswa di smk ma 'arif nu cihaurbeuti ciamis tahun 2019 stikes sebelas april sumedang tahun 2019.
- Aisyah, S., & Fitria, A. (2019). Hubungan Pengetahuan dan Sikap Remaja tentang HIV/AIDS dengan Pencegahan HIV/AIDS di SMA Negeri 1 Montasik Kabupaten Aceh Besar. *Jurnal Bidan Komunitas*, 2(1), 1. <https://doi.org/10.33085/jbk.v2i1.4081>
- Depkes RI. (2018). Kementerian Kesehatan Republik Indonesia. *Kementerian Kesehatan RI*.
- Dinkes Kabupaten Sumedang. (2019). *Profil Dinas Kesehatan Kabupaten Sumedang Tahun 2019*. 1–248.
- Hardani, Helmina Andriani, Jumari Ustiawaty, Evi Fatmi Utami, Ria Rahmatul Istiqomah, Roushandy Asri Fardani, Dhika Juliana Sukmana, N. H. A. (2020). *Buku Metode Penelitian Kualitatif*. In *Revista Brasileira de Linguística Aplicada*

- (Vol. 5, Issue 1).
- Imelda, Susilawaty, Sari, Kusmaryati, & Andrian. (2023). Vaginal Discharge, Health Promotion Model Theory C. *Jurnal Imiah Obsgin*, 15(2).
- Mahmudah, M., Yaunin, Y., & Lestari, Y. (2016). Faktor-Faktor yang Berhubungan dengan Perilaku Seksual Remaja di Kota Padang. *Jurnal Kesehatan Andalas*, 5(2), 448–455.  
<https://doi.org/10.25077/jka.v5i2.538>
- Mesra, E. (2016). Pengaruh Teman Sebaya Terhadap Perilaku Seksual Remaja. *Jurnal Ilmiah Bidan*, 1(2), 34–41.
- Ngatno. (2015). *Buku Ajar Metodologi Penelitian Bisnis*. CV INDOPRINTING.
- Rachmadianti, F. (2019). Analisis perilaku pencegahan keputihan pada remaja putri berdasarkan teori HPM. In *Perpustakaan Universitas Airlangga Skripsi*.
- Rani, D. M., Dewi, Y. A., Puspita, R., & Widyaningrum, B. N. (2022). *Jurnal Mitra Pengabdian Farmasi Penyuluhan Kesehatan Reproduksi Pada Remaja*. 1(3), 76–79.
- Rashid, F. (2022). *Buku Metode penelitian Fathor Rasyid*.
- Riset Kesehatan Dasar (Riskesdas). (2018). Laporan Riskesdas 2018 Nasional.pdf. In *Lembaga Penerbit Balitbangkes* (p. hal 156).  
[https://repository.badankebijakan.kemkes.go.id/id/eprint/3514/1/Laporan Riskesdas 2018 Nasional.pdf](https://repository.badankebijakan.kemkes.go.id/id/eprint/3514/1/Laporan_Riskesdas_2018_Nasional.pdf)
- Sasanti, D. A. (2019). Determinan Perilaku Seksual Mahasiswa Akademi Kebidanan Borneo Medistra di Balikpapan Tahun 2015. *Bunda Edu-Midwifery Journal (BEMJ)*, 2(1), 40–48.  
<https://www.neliti.com/publications/277231/determinan-perilaku-seksual-mahasiswa-akademi-kebidanan-borneo-medistra-di-balik>
- Siswanto, Y., & Lestari, I. P. (2020). Pengetahuan Penyakit Tidak Menular dan Faktor Risiko Perilaku pada Remaja. *Jurnal Ilmiah Kesehatan*, 2(1), 1–6.
- Sugiyono. (2019). *Metode Penelitian Pendidikan: (Kuantitatif, Kualitatif, Kombinasi, R&D dan Penelitian Pendidikan)*. Alfabeta.
- Prabawati, J. (2019). Keputihan Pada Perempuan. *Polyekkesjogja.Ac.Id*, 13–39.
- Rachmadianti, F. (2019). Analisis perilaku pencegahan keputihan pada remaja putri berdasarkan teori HPM. In *Perpustakaan Universitas Airlangga Skripsi*.