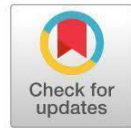


The Effectiveness Of Health Education Through Instagram In Increasing Knowledge About Early Marriage



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ABSTRACT

Early marriage is a reproductive health problem that risk adolescents whose increased significantly during this pandemic. Seeing the various impacts, promotive and preventive efforts need to be done the increasing of early marriage, one of which is health education. Health education can be done by utilizing technological developments, including social media Instagram. This study aims to determine the effectiveness of health education through Instagram in increasing adolescent knowledge about early marriage. This type of research is a pre-experimental with one group pre-test and post-test design. The sample was 80 students of class XI SMK Negeri 1 Saptosari with purposive sampling technique. The study was conducted in July 2022 and data collection was carried out online using a google form questionnaire and then data analysis using the wilcoxon test. The results showed that there was a difference in the average value of adolescent knowledge before (pre-test) and after (post-test) given health education about early marriage through Instagram, which was 61.14 before being given the intervention and increased to 82.95 after being given the intervention. With the Wilcoxon test results obtained a value of 0.000 ($p < 0.05$), which means that health education through Instagram can increase adolescent knowledge about early marriage.

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INTRODUCTION

According to WHO, early marriage is a marriage between a couple or one of the partners who is still a child's or teenagers under 19 years of age.¹ The COVID-19 pandemic has the potential to increase the incidence of early marriage and hinder efforts to end early marriage in the world.² Factors causing early marriage include lack of knowledge among teenagers, low education of children and families, economic status and culture in the surrounding environment.³ Based on research on factors related to the incidence of early marriage among women in Gunungkidul Regency 2020, the most dominant factor what was found was the respondent's level of knowledge.⁴

The knowledge index of teenagers in DIY regarding reproductive health is still low, namely 64.4%. This is one of the problems as evidenced by the increasing incidence of early marriage.⁵ In 2018 there were 331 cases of early marriage and there were 696 cases in 2020.⁶ One of the largest contributors to the incidence of early marriage is Gunungkidul



Regency. Based on data obtained from the Gunungkidul Regency Ministry of Religion Office, in 2019 there were 55 cases and this increased to 152 cases in 2020.⁷ This shows a very significant increase during this pandemic.

Early marriage had a long-lasting impact on the newly formed family, both in terms of physical and mental health.⁵ Problems of early marriage must be prevented with promotive and preventive approaches. This prevention is very dependent on individual knowledge, where the higher the individual's knowledge about the consequences caused by a disease, more higher prevention efforts carried out.⁸ For this reason, promotive and preventive efforts carried out can be in the form of education about early marriage in order to increase individual knowledge.

Selection of methods and media that suit the target group and the message to be conveyed in health education influences the effectiveness of delivering health information.⁹ Media development has many innovations, including social media as a means of communication and information in utilizing technological advances. The urgency of the COVID-19 pandemic is that internet use is increasing rapidly due to restrictions on community activities. Based on research results from We are social Hootsuite, total number of social media users as of January 2021 was 4.2 billion of the total world population. The increase in social media use in 2018 was 8.3%, in 2019 it was 7.2%, and 13.2% in the last year, this increase is much different from the year before the pandemic. Of the total 274.9 million people in Indonesia, 170 million of them have used social media or around 61.8% of the total population of Indonesia and 99% of users use mobile phones.¹⁰

Instagram is a social media for sharing photos and videos, with various features such as feeds, Instagram stories, direct messages, IGTV and reels. The percentage of access to Instagram by all social media users in Indonesia in 2020 was 79%.¹¹ Looking at the various features on Instagram, it has the potential to become a promising platform for delivering health information. A study shows that health education using digital visuals via social media can increase knowledge about adolescent reproductive health.¹² Numerous comparable studies have demonstrated how health education media can effectively raise public awareness of early marriage. Lilis (2022) discovered that educating teenagers on early marriage with flipcharts and the Youth Health app had an equivalent impact. According to Sutioningsih's (2021) research, social media—more especially, WhatsApp—may be used to educate people about reproductive and sexual health, which has a good effect on the attitudes and knowledge of potential spouses. Anisah (2021) demonstrated how university students' health literacy increased when they used the Instagram social media platform. Last but not least, Mukti (2021) emphasized how social media marketing helps the Center for Indonesia's Strategic Development Initiatives (CISDI) by enticing viewers to learn about and support the cause. Nevertheless, prior studies' findings have not provided a comprehensive explanation for how social media sites like Instagram can effectively raise public awareness of early marriage and accompanying health issues.

Saptosari is one of the sub-districts in Gunungkidul Regency with the highest incidence of early marriage, namely 16 cases in 2020. Saptosari area are at risk of facing various reproductive health problems. SMK Negeri 1 Saptosari is the only vocational school in Saptosari. Based on the results of interviews with the student affairs section, it is known that the average student is originally domiciled in Saptosari and the results of the preliminary study show that the description of the knowledge of 25 students regarding early marriage is 68% in the sufficient category, 8% poor, and 24% good. Apart from that, it is known that 88.5% have an Instagram account where Instagram is the most frequently accessed social media than Facebook, Twitter and TikTok.

The aim of this research is to determine the effectiveness of health education via Instagram in increasing teenagers' knowledge about early marriage. It is hoped that this research will bring various benefits to students of SMK Negeri 1 Saptosari, managers of

SMK Negeri 1 Saptosari, health educators, and future researchers who will conduct research on similar topics.

METHOD

This type of research is quantitative using a pre-experimental method with a one group pre-test and post-test design. The sample in this study was 80 class XI students of SMK Negeri 1 Saptosari, Gunungkidul taken using a purposive sampling technique. This research was carried out online in July 2022. The independent variable in this research is health education about early marriage via the social media Instagram, while the dependent variable is the level of knowledge of teenagers about early marriage.

The type of data used in the research is primary data obtained directly from respondents using an instrument in the form of an online written test questionnaire using a google form which is filled in before and after being given health education about early marriage. The data collection technique was carried out by providing an explanation of the research procedural standards to be carried out to respondents, then giving a pre-test questionnaire before being given health education, conducting health education using the Instagram account @bincangkespro media that had been created by the researcher, then measuring knowledge again after the intervention was carried out using a post-test questionnaire.

The media created by researchers is content on the Instagram account @bincangkespro which contains material about early marriage which has been tested by material and media experts. The research questionnaire contains instructions for filling out the questionnaire, the identity of the respondent, and a questionnaire regarding early marriage. Researchers carry out validity tests of questionnaires simultaneously with data collection in the field or use try-out validity tests. The results of the validity test stated that of the 30 questions that had been created by the researcher, there were 22 valid questions and 8 invalid questions so that the question items and answers to these questions were removed and the questions were rearranged in order from number 1 – 22. After carrying out the validity test, the researcher carried out a reliability test with the result of a Cronbach Alpha value of 0.707 which shows that the questionnaire in this study is valid and reliable.

The analysis used in this research is univariate analysis to determine the frequency and percentage distribution of each variable studied and presented in the form of a frequency distribution table as well as bivariate analysis to determine the effect of providing health education on increasing knowledge about early marriage. Hypothesis testing was carried out using the Wilcoxon Signed Rank Test because after carrying out the normality test using One Sample Kolmogorov Smirnov the data was found to be not normally distributed.

RESULTS

The characteristics in this study consist of age, gender, exposure to information and information sources. Based on Table 1, it can be seen that the majority of respondents were 16 years old, namely 49%. The majority of respondents were female at 57.5%. Of the 80 respondents who took part in this research, 73.8% of them stated that they had been exposed to information related to early marriage. The main source of information obtained by respondents came from teachers, namely 30%

Table 1. Frequency Distribution of Respondents Based on Characteristics at SMK N 1 Saptosari

Characteristics	Frequency (f)	Percentage (%)
Age		
16 Years old	49	61,3%
17 Years old	27	33,8%
18 Years old	4	5,0 %
Total	80	100%
Gender		
Male	34	42,5%
Female	46	57,5%
Total	80	100%
Information Exposure		
Have been exposed	59	73,8%
Never been exposed	21	26,3%
Total	80	100%
Information Source		
Parents	6	7,5%
Teachers	24	30%
Friend	16	20%
Discussion forums/ counseling	13	16,3%
Total		100%

The level of knowledge of teenagers about early marriage before and after being given health education via Instagram is known from the results of filling out the pre-test and post-test questionnaires with the results interpreted into 3 categories, namely good (76% - 100%), sufficient (56% - 75 %), and poor (<56%).

Table 2. Frequency Distribution of Respondents Based on Level of Knowledge About Early Marriage before Being Given Health Education via Instagram

Knowledge Level	Frequency (f)	Percentage (%)
Good (76% - 100%)	19	23,8%
Sufficient (56% - 75%)	24	30%
Poor (<56%)	37	46,3%
Total	80	100%

Based on Table 2, it is known that before being given health education, the majority of respondents had a level of knowledge about early marriage in the poor category, namely 46.3%.

Table 3. Frequency Distribution of Respondents Based on Level of Knowledge About Early Marriage after Being Given Health Education via Instagram

Knowledge Level	Frequency (f)	Percentage (%)
Good (76% - 100%)	58	72,5%
Sufficient (56% - 75%)	22	27,5%
Total	80	100%

Based on Table 3, the results showed that after being given health education, the majority of respondents had a level of knowledge about early marriage in the good category, namely 72.5%.

Bivariate analysis in this study was carried out using the Wilcoxon test, but a data normality test was carried out first before carrying out this test. The normality test was carried out with the aim of finding out whether the sample data obtained in this study was normally distributed or not. The normality test was carried out using the Kolmogorov Smirnov test with a p-value < 0.05 so it can be seen that the data is not normally distributed, so research data analysis was carried out non-parametrically using the Wilcoxon test.

Table 4. Mean Knowledge Scores for Teenagers Before and After provided Health Education via Instagram

Treatment	Minimum	Maximum	Mean	p-value
Before	27	95	61,14	.000
After	64	100	82,95	

Table 4. Shows the results of statistical tests using the Wilcoxon test which were carried out to analyze the difference in average knowledge of teenagers before and after the health education intervention via Instagram. The table shows that the majority of respondents experienced an increase in their scores, with an average score before 61.14, namely at a moderate level of knowledge, increasing to 82.95, namely at a good level of knowledge after being given health education about early marriage via Instagram, with a p-value value 0.000. From these results it is known that the p-value is <0.05, meaning H_0 is rejected, this proves that there is an influence of the intervention provided and health education via Instagram is effective in increasing teenagers' knowledge about early marriage.

DISCUSSION

The respondents in this research were 80 students at SMK Negeri 1 Saptosari. Subject recruitment is determined by inclusion and exclusion criteria. The age characteristics of the respondents in this study were mostly 16 years old, 49%, this was because the respondents were taken from class XI, whose age range was around 16-18 years. The majority of respondents were female teenagers at 57.5%. Of the 80 respondents who took part in this research, 73.8% of them stated that they had been exposed to information related to early marriage. The main source of information obtained by respondents came from teachers, namely 30%. Respondent characteristics show several factors that influence knowledge, including education, age, experience, and information or mass media.¹⁴

The data found regarding exposure to the information that has been obtained, there are still 26.2% of the 80 respondents who stated that they had never been exposed to information about early marriage. 30% of the 73.8% of respondents who stated that they had been exposed to information about early marriage, the main source of information was teachers. This uneven distribution of information is one of the impacts of the Covid-19 pandemic, where the delivery of health education during this pandemic cannot yet be carried out comprehensively. This shows that not all students have the same and adequate platform to obtain health information about early marriage, especially at school as their place of learning.

From the results of the pre-test questionnaire which was filled out via the google form provided by the researcher, data was obtained on the respondent's level of knowledge before being given the intervention. Based on the results of research conducted, it shows that 80 respondents had a good level of knowledge about early marriage before being given intervention using Instagram social media, with a good level of knowledge of 19 (23.8%), a sufficient level of knowledge of 24 (30%) and a level of poor knowledge of 37 (46). .3%).

From the results of data processing, it was also obtained that the average value of knowledge before being given intervention via Instagram was 61.14 with a minimum value of 27 and a maximum of 95, this is due to the lack of reproductive health education carried out, especially regarding early marriage.

After being given intervention in the form of health education about early marriage via Instagram, respondents filled out a post-test questionnaire using the google form provided by the researcher. Based on the data analysis carried out, it shows that 80 respondents had a good level of knowledge about early marriage after being given intervention via Instagram social media, with a good level of knowledge of 58 (72.5%) and a sufficient level of knowledge of 22 (27.5%) with an average value of 82.95 with a minimum score of 64 and a maximum of 100. Submission of information via Instagram social media is mostly demonstrated through content in the form of images or videos. Knowledge is created from the results of sensing, namely the senses of sight, hearing, smell, taste and touch, most of which are obtained through the senses of sight and hearing. Conveying information through educational images and videos will make message recipients increase their emotional response and interest in learning about specific learning topics. The formulation of good educational images and videos will have positive implications for message recipients in age segmentation.¹⁵

Based on the results of the Wilcoxon test which was carried out to determine the effectiveness of health education via Instagram in increasing teenagers' knowledge about early marriage, which was carried out by analyzing the difference in the average knowledge score of teenagers before and after the educational intervention, a p value of $0.000 < 0.05$ was obtained at the significant level 5%. There was a difference in the average knowledge score of teenagers before (pre-test) and after (post-test) being given the intervention, namely 61.14 before being given the intervention and increasing to 82.95 after being given health education about early marriage via Instagram. From these results it can be interpreted that Instagram social media is effective in increasing teenagers' knowledge about early marriage. This is in line with Ayu Nurdiantika Sari, et al (2020) showing an increase in knowledge of 5.5% after providing education to subjects on social media Instagram @bicarasehat.id.¹⁶ Other research conducted by Ervi Rachma Dewi & Lutfi Nihayani (2021) with the title "The Effectiveness of Instagram in Increasing Knowledge of BSE as Preventing Breast Cancer" also explains that Instagram social media is effective in providing educational information.¹⁷

Data analysis in this research was also carried out on each sub-question variable and question item from the research questionnaire used. This aims to find out in detail the sub-topic variables about early marriage that were most or least understood by respondents before being given the intervention. In the pre-test answers, the sub-variable questions that had the highest answers were the sub-variables on the relationship between premarital sexual behavior and early marriage, moderate answers on the sub-variable on the relationship between early marriage and adolescent reproductive health, and weak answers on the sub-variable on the impact of early marriage. Meanwhile, in the post-test answers, almost all sub-variable questions got high correct answers.

The calculation of the difference in correct answers between pre-test and post-test questions was analyzed to find out which question items the increase in correct answers could be maximum, then linked to the way education was delivered via Instagram. In calculating the difference between each question item, data was obtained that the question with the highest increase in correct answers was question item number 20, sub-variable about the impact of early marriage and question item number 8, sub-variable about the relationship between premarital sexual behavior and early marriage. Education on the sub-variable of the impact of early marriage is delivered using picture and writing media which is dominated by pictures or visuals, while the sub-variable of the relationship between

premarital sexual behavior and early marriage is delivered using video media containing pictures and writing posted via Instagram. It can be concluded that education carried out on Instagram will be easier to understand if it uses videos and media that are dominated by images. This can be taken into consideration when delivering education via Instagram, which can be dominated by images and videos.

The use of Instagram social media in increasing knowledge is effective because it can be read wherever and whenever they are. Presenting health information via Instagram, which is dominated by images and audiovisuals, also makes it easier for respondents to receive health information. In addition, Instagram has the potential for low costs and wider information reach, so it can be used as a media for communicating interesting reproductive health information to at-risk populations.¹⁸

CONCLUSION

Based on the results of research conducted regarding the effectiveness of health education using Instagram in increasing teenagers' knowledge about early marriage, it was concluded that health education using Instagram was effective in increasing teenagers' knowledge about early marriage.

Hoped that the results of this research can be used as a reference for health educators to be able to carry out health education about early marriage from the results of this research by using Instagram social media as a forum for providing health education to teenagers. For students of SMK Negeri 1 Saptosari, it is hoped that this research can increase knowledge about early marriage and for administrators of SMK Negeri 1 Saptosari, it is hoped that it can intensify reproductive health education information for its students, especially related to reproductive health education about early marriage in an effort to increase students' knowledge. with alternative media that can be used, namely Instagram. Recommendations for future researchers who will carry out research on the same topic are to design research with a control or comparison group, and measure the level of knowledge using a test method that ensures that the person answering the test is the respondent themselves/not someone else.

AUTHOR CREDIT STATEMENT

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