



The Effect of Health Promotion on Prevention of Covid-19 Transmission Using Audio Visual Media on Changes in People's Behavior

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ABSTRACT

Covid-19 is a disease caused by the corona virus that has become a pandemic throughout the country. Adhering to health protocols by implementing 6M has proven to be one of the efforts to prevent the transmission of Covid-19. This study aims to determine the effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in people's behavior. The research design used is a pre-experiment with a One-Group Pre-Post Test Design approach. The sample in this study were 40 respondents who were determined by simple random sampling technique. The research instrument used was a closed questionnaire sheet. After the data was collected, it was analyzed using the Wilcoxon Signed Rank Test for the Pre-Post Test. The results showed that there was an effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in people's behavior with a significance value of $0.002 < (0.05)$. Prevention of Covid-19 by implementing 6M can be a good way to always use a mask when doing activities outside the home, washing hands with soap and running water or using hand sanitizer regularly, avoiding touching the face area when outside the house, avoiding oneself from crowds, reduce mobility and maintain distance from other people. Compliance with the implementation of the 6M health protocol will help the program to break the chain of transmission and spread of COVID-19 in Indonesia

Keywords: Health Promotion; COVID-19: Preventive Behavior; Health Protocol

Article history :

Received: 4 Juni 2021

Received in revised form: 15 Juni 2021

Accepted: 18 Juli 2021

Available online: 1 Desember 2021



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INTRODUCTION

The current Covid-19 pandemic has plagued various countries in the world, including Indonesia. Health promotion is an effort to improve the ability of the community through self-learning by and for the community so that they can help themselves, as well as develop community-based activities according to local socio-cultural and supported by health-oriented public policies (Tuwu, 2021).¹ Increasing the number of cases Confirming the uncontrolled COVID-19, one of which is influenced by the behavior of people who do not comply with the 6M health protocol (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area while in the office). outside the home, avoiding crowds, reducing mobility and keeping a distance from other people) in accordance with government recommendations during the covid-19 pandemic (Karyono et al, 2020).²

Many people pay less attention to their behavior by not applying 6M (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area when outside the house, avoiding crowds, reducing mobility) and keep a distance from other people). While doing activities. According to the World Health Organization on January 13, 2021, the number of Covid-19 cases worldwide reached 90 million cases, to be exact, reaching 90,054,813 cases. According to the Indonesian Covid-19 Task Force (2021) the latest data reported on January 12, 2021 at 12.00 WIB The development of COVID-19 in Indonesia the number of positive confirmed cases to 846,765 cases with 695,807 recovered and 24,645 died.³ Based on data obtained from the District Health Office Mojokerrto, the number of confirmed Covid-19 cases until mid-January 2021 is 1,657. The results of a preliminary study conducted by researchers on 15 residents of Tunggal Pager Village, Pungging District, Mojokerto Regency, 12 respondents stated that they did not believe in the existence of covid-19 that was happening and only 3 respondents stated that they believed in the existence of covid-19. From the results of further interviews conducted by researchers, only 3 respondents tried to comply with health protocols in accordance with government recommendations, namely applying 6M (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizer regularly, avoiding touching face area when outside the house, avoiding crowds, reducing mobility and keeping distance from other people) in their daily lives. This indirectly shows that the tendency of the community in Tunggal Pager Village, Pungging District, Mojokerto Regency to behave positively in the application of health protocols.

Corona virus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people who contract COVID-19 will experience mild to moderate symptoms, and will recover without special treatment. However, some people will experience severe pain and require medical assistance. The virus can be spread from the mouth or nose of an infected person through tiny fluid particles when the person coughs, sneezes, talks, sings, or breathes. These particles can range from larger droplets from the respiratory tract to smaller aerosols. A person can get infected when they breathe air that contains the virus if they are in close proximity to someone who is already infected with COVID-

19. A person is also at risk of infection if they frequently touch their eyes, nose, or mouth after touching contaminated surfaces. The corona virus is more easily spread indoors and in crowded places (Pratiwi, 2020).⁴ Until now there has been no appropriate medical action that can be given to patients who have confirmed COVID-19. However, quality care and efforts to increase body immunity are efforts made by the medical team to get healing from corona virus infection (Yunawati et al, 2021).⁵

The best effort that can be done as a preventive effort to prevent the transmission of COVID-19 is by implementing health protocols. However, this is not without obstacles considering that there are still many people who do not believe and do not know about COVID-19 itself. One solution in an effort to increase information regarding preventing the spread of Covid-19 can be obtained through health education, health promotions carried out by health workers due to maintaining distance, then promotions are carried out using media to provide health information. Such as posters, leaflets, audio visuals. By using audiovisual media, it is hoped that it can provide easily accepted information about the implementation of preventing the spread of Covid-19 with 6M (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area while in the office). outdoors, avoiding crowds, reducing mobility and keeping a distance from other people). This study aims to determine the effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in community behavior in Tunggal Pager Village, Pungging District, Mojokerto Regency.

METHODS

This study uses a pre-experimental research design with a one group pre-post test design approach. In this study, a group before being treated (pre-test) will be observed using a questionnaire. Furthermore, respondents will be given interventions in the form of health promotion to prevent the spread of COVID-19 through the application of the 6M health protocol (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area when outside the home). , avoiding crowds, reducing mobility and keeping a distance from others) through audio-visual. After being given treatment, each respondent will be observed again with the same questionnaire (Post-test). In order to determine the effect of health promotion on preventing the transmission of COVID-19 using audio-visual media on changes in community behavior in Tunggal Pager Village, Pungging District, Mojokerto Regency, the Wilcoxon comparative test with a significance of (0.05) was used. The results of further research are presented in the form of a frequency distribution.

RESULT

Table 1. General data distribution of research respondents

| Characteristics of respondents | n | % |
|----------------------------------|----|--------|
| Gender : | | |
| Man | 7 | 17,5 |
| Woman | 33 | 82,5 |
| Age : | | |
| 20-35 years old | 26 | 65,0 |
| 36-50 years old | 14 | 35,0 |
| Education : | | |
| Graduated from elementary school | 29 | 72,5 |
| Graduated Middle School | 5 | 12,5 |
| High school graduate | 5 | 12,5 |
| Diploma/Bachelor | 1 | 2,5 |
| Work : | | |
| Trader | 4 | 10,0 |
| Farmer | 11 | 27,5 |
| Not working / IRT | 25 | 62,5 |
| Total | 40 | 100.00 |

From the results of the study, it was found that most of the respondents in this study were women, as many as 33 respondents (82.5%), most of the research respondents aged 20-35 years, namely 26 respondents (65.0%), most of the respondents had educational backgrounds. graduated from elementary school as many as 29 respondents (72.5%), and most of the respondents in this study were unemployed / IRT as many as 25 respondents (62.5%)

Table 2. Distribution of respondents' behavior in implementing the 6M health protocol before being given health education interventions using audio-visual media

| Behavior to prevent the spread of covid-19 | n | % |
|--|----|--------|
| Good behavior | 1 | 2,5 |
| Bad behavior | 39 | 97,5 |
| Total | 40 | 100.00 |

Dari hasil penelitian (pre-test) didapatkan hampir seluruh responden dalam penelitian berperilaku tidak baik dalam penerapan perilaku pencegahan covid-19 yaitu sebanyak 39 responden (97,5%)

Table 3. Distribution of respondents' behavior in implementing the 6M health protocol after being given health education interventions using audio-visual media

| Behavior to prevent the spread of covid-19 | n | % |
|--|----|--------|
| Good behavior | 22 | 55,0 |
| Bad behavior | 18 | 45,0 |
| Total | 40 | 100.00 |

From the results of the research (post-test) it was found that more than half of the respondents in the study behaved well in the application of covid-19 prevention behavior, namely as many as 22 respondents (55.0%)

Table 4. The effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in community behavior in Tunggal Pager Village, Pungging District, Mojokerto Regency

| Behavior to prevent the spread of covid-19 | Pre-test | | Post-test | |
|--|----------|--------|-----------|--------|
| | n | % | n | % |
| Good behavior | 1 | 2,5 | 22 | 55,0 |
| Bad behavior | 39 | 97,5 | 18 | 45,0 |
| Total | 40 | 100.00 | 40 | 100.00 |
| Signifikasi | 0,002 | | | |

From the results of the Wilcoxon test with a significance of (0.05) obtained a sig 2 tailed value of $0.002 < (0.05)$ so it can be concluded that there is an effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in people's behavior in Tunggal Pager Village, Pungging District, Mojokerto Regency

DISCUSSION

1. The behavior of implementing the 6M health protocol before being given health education interventions using audio-visual media

From the results of the study (pre-test) it was found that almost all respondents in the study behaved badly in the application of covid-19 prevention behavior, namely 39 respondents (97.5%)

Operationally behavior can be interpreted as a response of an organism or a person to stimuli from outside the subject. Behavior can be interpreted as an action reaction of organisms to their environment. New behavior occurs when something is needed to cause a reaction, which is called a stimulus. Certain stimuli will produce certain reactions or behaviors. Behavior can also be interpreted as human activities that arise due to stimulation and response and can be observed directly or indirectly (Notoatmodjo, 2007 cited in Karo, 2021).⁶ According to Wawan (2011 cited in Mujiburrahman, 2021) Behavior is an action that can be observable and has a specific frequency, duration and purpose whether consciously or not. Behavior is a collection of various interacting factors.⁷

According to the researcher's assumptions, it is possible for the respondents to have bad behavior in this study because they are influenced by various factors such as their educational background and occupation. From the results of the study, it was found that most of the respondents had an elementary education background, as many as 29 respondents (72.5%). Education is a level of formal education that has been taken by an individual during his life. Through education, a person will be taught how to analyze a problem and then determine the response that the individual

will generate to a problem to be faced (Purnamasari and Raharyani, 2020).⁸ owned. This is because someone will get used to thinking critically about all kinds of problems, such as the implementation of the 6M health protocol to prevent the transmission of COVID-19. Someone who has an adequate educational background will help that person in determining the attitudes and behaviors that are taken to deal with the current COVID-19 pandemic. Someone with an adequate educational background will tend to behave positively or behave well in an effort to prevent the transmission of COVID-19 and vice versa. The higher the educational background, the better one's behavior in determining attitudes to deal with a problem

In addition to educational background, another factor that influences behavior is work activities. From the results of the study, it was found that most of the respondents in this study were unemployed/IRT as many as 25 respondents (62.5%). Work is all activities carried out by individuals to earn money that can be used to meet the needs of their lives and their families. In addition, the work that a person does, especially involving interaction with many people, will provide an opportunity for a person to obtain useful information for himself (Saputri and Huda, 2020).⁹ In this study, most of the respondents were housewives. The job of taking care of the household is basically a job done by a mother in the household. This job is a type of work that does not get paid. Someone who spends more time they have to complete the existing homework makes someone not have time to just socialize or get information that is useful for their health status. During the COVID-19 pandemic, PPKM (Enforcement of Restrictions on Community Activities) was implemented in Indonesia. With the implementation of this policy, all community activities are limited, including reducing mobility and community interactions. This indirectly makes the community unable to access various health facilities to simply get information about the ongoing COVID-19 situation. People tend to use television as a medium to get information about COVID-19. However, from the observations made by researchers, so far the information conveyed through television media is only information related to the number of confirmed cases of Covid-19, the number of patients being treated, the number of deaths due to Covid-19 and other information related to Covid-19. Although television also provides information about the application of health protocols to prevent the spread and avoid contracting COVID-19, almost no information is conveyed regarding the technical implementation of health protocols correctly. This of course has an impact on the knowledge possessed by the community regarding the application of the health protocol itself, so it is not uncommon to find people who tend to not comply with health protocols due to the absence of technical information that is conveyed to the public. The lack of knowledge possessed by the community makes people behave inappropriately as expected in order to control the spread of COVID-19

2. Behavior of implementing the 6M health protocol after being given health education intervention using audio-visual media

From the results of the research (post-test) it was found that more than half of the respondents in the study behaved well in the application of covid-19 prevention behavior, namely as many as 22 respondents (55.0%)

Health education is basically a planned and programmed effort carried out to provide information, increase knowledge, trigger behavior and attitude changes that are carried out both with individual targets, groups or communities that are intended to seek, maintain and improve the health status of individuals, groups or communities (Samidah et al, 2020).¹⁰

An increase in the behavior of the respondents in this study is possible considering the age and occupation of the respondents in this study supports an increase in the behavior of the respondents. From the results of the study, it was found that most of the research respondents were aged 20-35 years, namely as many as 26 respondents (65.0%). Age is the elapsed time possessed by an individual which is calculated from the time the individual was born until now (Dewi, 2020).¹¹ The age of the individual will affect the individual's own ability to receive new information submitted (Zulyan dan Setiawan, 2021).¹² The age of 20-35 years is a productive age where individuals at this age will be optimally able to receive any new information submitted. This is because at productive age individuals are able to think critically and logically about health problems around them so that the provision of health education will increase the knowledge possessed by the community and will ultimately improve the behavior of the community itself. Providing health education using audio-visual media will indirectly attract the attention of the recipient of the message or communicant. Communicants who are given health education about the 6M health protocol using audio-visual media will benefit at least 2 times, namely seeing through pictures and writing and listening through sound. This combination of health education methods will be more effective to use when delivering health messages to the public. The more interesting the information conveyed, the higher the interest of the recipient of the message or communicant to pay attention to the material presented. The better the way the message is delivered by the message giver or communicator, the better the reception received by the recipient of the message or communicant.

3. The effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in people's behavior

From the results of the Wilcoxon test with a significance of (0.05) obtained a sig 2 tailed value of $0.002 < (0.05)$ so it can be concluded that there is an effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in people's behavior in Tunggal Pager Village, Pungging District, Mojokerto Regency

The results of this study are similar to the research conducted by Ramadania et al (2021) on the effect of health education on COVID-19 through audio-visual media on adolescent knowledge at Madrasah Aliyah Nurul Huda, Depok City in 2020. The results obtained a significance value (p-value) of 0.001. This means that the p-value < 0.05 ($\alpha = 5\%$), it can be concluded that there is an

influence of education about COVID-19 through audio-visual media in the form of videos on adolescent knowledge at Madrasah Aliyah Nurul Huda Depok City.¹³

The increase in the behavior of the respondents in this study is possible because health education is a process of transferring information intended to obtain something new and to be known and understood by the recipient of the message or communicant. In line with the government's efforts to increase the knowledge and behavior of the community in their participation in preventing and breaking the chain of the spread of COVID-19, the government is making efforts in the form of a behavior change communication strategy in preventing Covid-19 through health promotion, namely health education which aims to accelerate the improvement public knowledge to be able to prevent the risk and adverse effects of exposure to the corona virus during the covid-19 pandemic so that people can take quick and appropriate steps and actions to protect themselves and prevent the public from the risk of being exposed to the corona virus. The use of media in health education is very helpful in increasing individual/community knowledge. Increased knowledge, especially regarding the implementation of the 6M health protocol, will indirectly affect the behavior of individuals / communities in an effort to break the chain of spreading the corona virus.

Implementation of the 6M health protocol (using a mask when doing activities outside the home, washing hands with soap and running water or using hand sanitizer regularly, avoiding touching the face area when outside the house, avoiding crowds, reducing mobility and keeping a distance from other people) So far, what has been conveyed to the public has only been in the form of technical advice, but the correct implementation of the implementation of the 6M health protocol is rarely obtained by the community. Through the implementation of health education, the community will be taught about the correct implementation of health protocols. The use of masks when outside the home is the first effort in implementing the 6M health protocol (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area when outside the house, avoiding crowds, reduce mobility and maintain distance from others). The use of masks must follow the correct use of masks to obtain the expected results, such as how to install masks, how to remove masks and limits on the use of masks, both medical masks and cloth masks, as well as how to care for the mask itself. This is because not all people understand how to use masks correctly. It is still common to find people who often touch masks when they are used or put masks on the neck area when eating or drinking. This of course will reduce the effectiveness of using the mask itself. Washing hands with running water and soap or using an alcohol-based hand sanitizer will help reduce the risk of exposure to viruses that come from activities carried out by hands such as touching or handling objects. Washing hands with running water using soap itself is often underestimated by the community. Most people wash their hands with soap without adhering to proper hand washing. Many community members only use hand washing facilities without paying attention to proper

hand washing techniques. This is in addition to being ineffective in reducing the risk of virus transmission, it is also a waste of available health protocol tools.

During the COVID-19 pandemic, the whole community must take part in implementing the 6M health protocol (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area when outside the house, avoiding crowds, reducing mobility and keeping a distance from others). This is the best effort that can be done considering the covid-19 pandemic is caused by a virus where the virus cannot be overcome by giving antibiotics. Performing early protection properly and strictly and taking part in the covid-19 vaccination program will increase the body's immunity and provide self-protection against exposure to the virus that causes COVID-19. More and more people have good or positive behavior in implementing the 6M health protocol (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area when outside the house, avoiding crowds, reduce mobility and keep a distance from other people) then the risk of being exposed to covid-19 will decrease and the target of breaking the chain of spread of covid-19 can be achieved as expected

CONCLUSION AND SUGGESTION

From the results of the Wilcoxon test with a significance of (0.05) obtained a sig 2 tailed value of $0.002 < (0.05)$ so it can be concluded that there is an effect of health promotion on preventing the transmission of covid-19 using audio-visual media on changes in people's behavior in Tunggal Pager Village, Pungging District, Mojokerto Regency. It is hoped that the whole community can be more active in complying with the 6M health protocol (using masks when doing activities outside the home, washing hands with soap and running water or using hand sanitizers regularly, avoiding touching the face area when outside the house, avoiding crowds, reducing mobility and keeping distance from other people) as a form of community participation and participation in efforts to break the chain of the spread of COVID-19 and to accelerate economic recovery programs in Indonesia.

REFERENCES

1. Tuwu D. Kebijakan pemerintah dalam penanganan pandemi Covid-19. *Journal Publicuho*. 2020 May;3(2):267-78.
2. Karyono K, Rohadin R, Indriyani D. Penanganan Dan Pencegahan Pandemi Wabah Virus Corona (Covid-19) Kabupaten Indramayu. *Jurnal Kolaborasi Resolusi Konflik*. 2020 Aug 13;2(2):164-73.
3. Satgas Covid-19. Peta Sebaran. Diakses dari : <https://covid19.go.id/peta-sebaran>. 2021 Januari
4. Pratiwi AD. Gambaran Penggunaan Masker di Masa Pandemi Covid-19 Pada Masyarakat di Kabupaten Muna. *Prosiding Nasional Covid-19*. 2020 Jun 11:52-7.
5. Yunawati I, Karimuna SR, Dewi ST, Pratiwi AD. Upaya Promotif Kesehatan Dalam Menghadapi Pandemi Covid-19. *Prosiding Penelitian Pendidikan dan Pengabdian 2021*. 2021 Mar 27;1(1):841-

- 51.
6. Karo MB. Perilaku hidup bersih dan sehat (PHBS) strategi pencegahan penyebaran Virus Covid-19. InProsiding Seminar Nasional Hardiknas 2020 May 30 (Vol. 1, pp. 1-4).
 7. Mujiburrahman M, Riyadi ME, Ningsih MU. Hubungan Pengetahuan dengan Perilaku Pencegahan Covid-19 di Masyarakat. *Jurnal Keperawatan Terpadu (Integrated Nursing Journal)*. 2020 Dec 14;2(2):130-40.
 8. Purnamasari I, Raharyani AE. Tingkat pengetahuan dan perilaku masyarakat Kabupaten Wonosobo tentang Covid-19. *Jurnal Ilmiah Kesehatan*. 2020 May 31;10(1):33-42.
 9. Saputri OB, Huda N. Pengaruh Informasi Covid-19 Melalui Media Sosial Terhadap Perilaku Konsumen. *HUMAN FALAH: Jurnal Ekonomi Dan Bisnis Islam*. 2020 Dec 12;2(7).
 10. Samidah ID, Murwati M, Sulastri S. Pengaruh Pendidikan Kesehatan Dalam Melakukan Kepatuhan Protokol Kesehatan Covid-19 Di Desa Pondok Batu Kabupaten Mukomuko Tahun 2020. *Journal of Nursing and Public Health*. 2021 Jun 23;9(1):35-9.
 11. Dewi EU. Faktor-faktor yang Mempengaruhi Perilaku Masyarakat dalam Pencegahan Penularan COVID-19. *Jurnal Keperawatan*. 2020 Nov 24;9(2):21-5.
 12. Zulyan Z, Setiawan IS. Faktor-Faktor Penyebab Perubahan Perilaku Sosial Masyarakat Ditengah Pandemi Covid-19 (Studi Kasus di Kelurahan Semarang Kota Bengkulu). *JUPANK (Jurnal Pancasila dan Kewarganegaraan)*. 2021 Aug 19;1(2):210-21.
 13. Ramadania M, Agustina A, Wenny DM. Pengaruh Pendidikan Kesehatan tentang Covid-19 Melalui Media Audio Visual terhadap Pengetahuan Remaja di Madrasah Aliyah Nurul Huda Kota Depok Tahun 2020. *Jurnal Ilmiah Kesehatan Masyarakat: Media Komunikasi Komunitas Kesehatan Masyarakat*. 2021 Sep 7;13(3):126-32.