

EMPOWERING YOUTH IN CONTROLLING COVID-19 INFECTION AT THE IRMA AL-KAUTSAR MOSQUE SENOPATI HOUSING, CIKANDE, SERANG REGENCY

Salma Talitha¹, Hadi Pratomo^{1*}, Ditya Fahlevi Safitri¹, Imelda Sussanti Nailius¹, Muhamad Ridwan¹, Dzul Fahmi Afriyanto¹, Wendy Nidsy Revita¹

¹Postgraduate Program, Department of Health Promotion & Behavioral Sciences, Faculty of Public Health, Universitas Indonesia, Depok, Indonesia

Correspondence address: Hadi Pratomo

Email: pratomohadi@gmail.com

ABSTRACT

Introduction: Since the WHO has stated that the COVID-19 is a pandemic, education and empowerment regarding COVID-19 in youths is needed. The purpose of this study is to explain the effect of providing online education on behavior and the process of empowering the youth of the Irma Al-Kautsar Mosque regarding the COVID-19 prevention protocol. **Method:** A mixed method was conducted in this study. Case study design was used for qualitative method and quasi-experimental design for quantitative. Total sampling was used on the population, which was youths aged 14-18 years (N=10). The data collection and retrieval techniques are group discussions and questionnaires about behavior. **Results:** The study showed that the group discussion resulted in three big themes, namely related to the COVID-19 prevention and education program, the needs of youth for education about COVID-19, and effective methods of disseminating COVID-19 information for youths. It showed a change in the frequency and percentage of behavior regarding COVID-19 and the prevention of infection in youths. The paired t-test showed that the knowledge domain had a significance value $p < 0.05$ and for the action and attitude domain was $p > 0.05$. **Conclusions:** There was a significant influence between providing education with knowledge improvement related to COVID-19 and prevention of infection among youth, while the attitudes and actions of youths were not significantly influenced by education intervention. Youth actively participated in empowerment activities for disseminating information related to COVID-19 on social media.

Keywords: COVID-19, education, empowerment, online, youth

INTRODUCTION

Coronaviruses are a group of viruses transmitted zoonoses (between animals and humans) and can cause mild to severe symptoms. Previously, there was a new type coronavirus known to cause disease in humans, Severe Acute Respiratory Syndrome (SARS-CoV) (Ministry of Health Indonesia, 2020). On 11 February, 2020, the WHO announced the official name of this new disease, namely as "COVID-19" (Coronavirus Disease 2019) which is listed in the International Classification of Diseases (ICD). COVID-19 infection in humans causes symptoms of acute respiratory distress such as fever, cough and out of breath. In severe cases, this disease can cause pneumonia, acute respiratory syndrome, kidney failure, and

even death. Symptoms of this disease can appear within 2-14 days after exposure to the virus (Ministry of Health Indonesia, 2020).

According to the Banten Province Corona Info, the incidence of COVID-19 cases in Banten Province has reached 13,339 confirmed cases and 395 deaths as of 29 November, 2020. It experienced a significant increase when compared to the number of first confirmed cases on 8 April, 2020, which reported 152 cases. According to Gugus Tugas Penanganan COVID-19 in Serang Regency, the incidence of COVID-19 cases has reached 922 confirmed cases and 27 deaths as of 29 November, 2020. In Cikande District, the incidence of COVID-19 cases has reached 104 confirmed cases and one death as of 29 November, 2020.

Cite this as: Talitha, S., Pratomo, H., Safitri, D.F., Nailius, I.S., Ridwan, M., Afriyanto, D.F & Revita, W.N. (2023). Empowering Youth In Controlling COVID-19 Infection At The Irma Al-Kautsar Mosque Senopati Housing, Cikande, Serang Regency, 18(1), 82-92. <https://doi.org/10.20473/ijph.v18i1.2023.82-92>

©2023 IJPH. Open access under CC BY NC-SA. License doi: 10.20473/ijph.v18i1.2023.82-92 Received 18 January 2021, received in revised form 5 February 2022, Accepted 8 February 2022, Published online: April 2023. Publisher by Universitas Airlangga

The WHO recommends prevention by diligently washing hands with soap in flowing water, keeping a distance from people when talking, and not touching face with dirty hands. The WHO also prompts to wear the mask and cover the nose and mouth with a tissue or bent elbow when coughing (WHO, 2020).

Preventive actions should be carried out in line with the support of social media contributions as public education about COVID-19 during a pandemic. Through social media measures, it can be given to prevent infection with COVID-19 (Sampurno et al., 2020). Mass media communication, in this case, is social media, which is a fundamental component of many health promotion strategies designed to change health risk behavior (Alber et al., 2016).

The effort to provide knowledge to the broader community regarding action to prevent the spread of COVID-19 is through online education. Online education can support the learning process to become formal by using technology (Bower, 2019). Distance learning processes and methods have become a new habit that can provide summaries through a computer or smartphone screen (Fantini & Safari Tamba, 2020). To carry out research and empowerment during the COVID-19 pandemic, several researchers in Indonesia conducted research using technology, such as Zoom, WhatsApp, and social media such as Instagram and Facebook (Rahmayanti et al., 2020; Sugiyarto, 2020).

Youth at Al-Kautsar Mosque, Senopati Housing, Cikande, Serang Regency is one of the youth groups whose members can access social media and online media. According to the initial assessment interview, it is found that their behavior is still lacking in following health protocols. The reasons also vary, namely the low awareness of COVID-19 prevention, and feeling bored with complying with health protocols. Besides, it is found that these youths have never

received education about COVID-19 from a trusted source.

Not only do youths get information about COVID-19 prevention from online media and social media, but they also have the potential to spread the information they get about education from health workers, through these media. The results of the initial assessment also show that the Al-Kautsar Mosque Youth are interested in disseminating accurate information about COVID-19 through social media. Therefore, the information they get can reach other groups of youth.

METHOD

The research was a mixed method research that combined two forms of research approaches: case study design was used for qualitative method and quasi-experimental design for quantitative with a one-group pre-post survey approach. In this design, respondents were given educational interventions to the Irma Al-Kautsar Mosque Youth, Cikande, Serang Regency. The research sample was total sampling: ten respondents.

Data collection and retrieval techniques were group discussions and filling out questionnaires related to behavior. In the preparation stage, the study implementer determined the primary topic of the study, conducted literature and literature studies, and conducted an initial assessment of the Irma Al-Kautsar Mosque Youth. The data collection of the Irma Al-Kautsar Mosque Youth, aged 14-18 years, was conducted before the implementation stage. The data collection aimed to find out youths' readiness and willingness to carry out empowerment activities to prevent COVID-19.

The implementation phase of the youth empowerment study activity consisted of four activities: group discussion activities, providing education about COVID-19 and behaviors to prevent infection of COVID-19, training in making information media, and disseminating

information of COVID-19 media through social media. The activities were carried out from 8 December, 2020 to 31 December, 2020. All stages of the activity were carried out through online media.

Behavioral data on the prevention of COVID-19 infection was carried out twice, before and after educational activities, and using the same questionnaire. The evaluation of information dissemination activities was reported independently by the youth, accompanied by a study implementer through a self-report form. Data collection in this study was carried out using primary data sources through distributing questionnaires directly to respondents. The data collected were then processed in several stages.

Univariate data that had been collected using qualitative data were analyzed using four stages of analysis: transcripts of discussion results and self-reports, data reduction, data presentation, and providing conclusions. The processed quantitative data were analyzed using descriptive statistical analysis. The bivariate data analysis used the Paired T-test analysis test to test whether there were differences in knowledge, attitudes, and behavior due to COVID-19 prevention education in the Irma Al-Kautsar Mosque Youth. Data distribution was tested through Kolmogorov-Smirnov test. The result is shown in Table 2. The test provided a probability value (p-value), then compared to α value = 0.05 (95% confidence level).

The data used and all activities in this study were part of a final examination assignment in the Community Organizing and Development course. Due to that matter, funding support and ethical clearance for the article were not provided and required. However, the article fulfilled the ethics research stipulated in the World Medical Association.

The statement was confirmed by Dean of Faculty of Public Health University of Indonesia through a Letter of Confirmation Regarding Ethical Clearance

and Funding. The Letter Number is S-1815/UN2.F10.D/PDP.04.00/2021

RESULT

Respondents' Characteristics

The characteristics of the respondents identified in this study include demographic data, including gender, age, current education and occupation. Table 1 shows that gender composition was divided equally into men (50%) and women (50%). The education level of respondents was dominated by high school level (70%) and had never worked (90%). The average age of the Irma Al-Kautsar Mosque Youth who became the study respondents was 16.7 years old with a standard deviation of ± 1.494 or could be explained in the range 15.20 - 18.19 years.

Table 1. Demographics of the Irma Al-Kautsar Mosque Youth (N = 10)

Characteristics	f	(%)	Mean	SD
Gender				
Male	5	50		
Women	5	50		
Education				
Junior High School	2	20		
Senior High School	7	70		
College	1	10		
Occupation				
Not yet working	9	90		
Factory workers	1	10		
Age			16.7	1.49

Group Discussion Results Data

The results of the discussion of the Irma Al-Kautsar Mosque Youth group produced an overview of the knowledge and behavior of youths about COVID-19 and its infection prevention. The group discussion developed three major themes: the COVID-19 prevention and education program, the need for youth for education

about COVID-19, and methods for disseminating information on COVID-19 that were effective for youths.

On the theme of the COVID-19 prevention and education program, respondents stated that COVID-19 prevention programs such as using disinfection, staying at home, wearing masks, and washing hands in the respondent's environment only started at the beginning of the COVID-19 pandemic. Obedience to health protocols did not last long, for example, when youths and the public were asked to wear masks when going to the mosque, some even removed the masks when talking with others.

"... When the Covid-19 pandemic was announced, many people obeyed health protocols. But now it is no longer..." (Respondent 1)

Besides, respondents argue that youths' non-compliance with COVID-19 prevention protocols was caused by their low awareness of the dangers of COVID-19. Another reason was that respondents felt tired and uncomfortable when carrying out health protocols, especially wearing a mask.

"... In my opinion, people or friends feel tired of obeying to health protocols. Then, wearing a mask when talking is uncomfortable ..." (Respondent 3)

Respondents received information about COVID-19 through television and online information sources such as social media: Instagram and Facebook, and messenger applications: WhatsApp. Instagram was the source most used by respondents in accessing information about COVID-19. A lot of information about COVID-19 had been circulating, but the credibility was still doubtful.

"... Usually from Instagram, Facebook, television, WhatsApp group. But most often from Instagram..." (Respondent 2)

"... From people who can provide reliable health information ..." (Respondent 7)

Direct counseling or education, specifically regarding COVID-19, had never been carried out in the respondent's

environment. The information available was only an announcement by the mosque regarding an appeal to use masks.

"... It has not been. Sometimes there is information, but if someone provides counseling, it has never been done ..." (Respondent 6).

Respondents felt doubtful because some were afraid to convey inaccurate information, but they were enthusiastic if they were previously provided with information and education. Respondents stated that information about COVID-19 from peers could be accepted if reliable sources of information were included.

"... I am ready and enthusiastic to share knowledge but also hesitate because I am worried about conveying incorrect information ..." (Respondent 8)

"... it does not matter to me if I get education from peers as long as the information source is reliable and valid ..." (Respondent 10)

Youth Behavior Related to COVID-19 Infection Prevention

In the description of the Irma Al-Kautsar Mosque Youth Behavior on Prevention of COVID-19 Transmission before and after education on COVID-19 which explained the comparison, there was an increase in the average score in each domain of COVID-19 prevention behavior after education, except in the domain of action. Data results were normally distributed, as shown in Table 2.

The mean score of knowledge about COVID-19 and prevention of infection, both pre-test and post-test, were 10.5 and 12.2, respectively. The average score of attitudes toward COVID-19 and infection prevention, both pre-test and post-test were 20.9 and 22.8. The domains of action toward COVID-19 and infection prevention do not significantly differ in the pre-test and post-test sessions.

The distribution of the knowledge domain category of the Irma Al-Kautsar Mosque Youth about COVID-19 and prevention of infection before and after

education are shown in Table 3. The table shows an increase in frequency and percentage for knowledge about COVID-19 and prevention of infection in the high category before and after education.

Knowledge about COVID-19 and prevention of infection in the pre-test session was dominated by the low knowledge category (70%), while the post-test session was dominated by the high knowledge category (80%).

Table 3 shows the distribution of the attitude categories of the Irma Al-Kautsar

Mosque Youth about COVID-19 and the prevention of infection before and after education. The table explains a change in the frequency and percentage of attitudes about COVID-19 and the prevention of infection by youths in the positive attitude dominated by the negative attitude category (60%) category after education. COVID-19 and prevention of infection are attitudes about before the education was carried out; the attitude category was dominated by positive attitude (70%) after education.

Table 2. Distribution of Youth Behaviors Related to Prevention of COVID-19 Transmission (N = 10)

The Domain of Behavior in COVID-19 Prevention		Min	Max	Mean	SD	p-value*
Knowledge of COVID-19 and prevention of infection	Pre-Test	8	13	10.5	1.841	0.302
	Post-Test	10	14	12.20	1.229	0.319
Attitudes of COVID-19 and prevention of infection	Pre-Test	17	27	20.90	3.573	0.992
	Post-Test	17	27	22.80	3.994	0.486
Action of COVID-19 and prevention of infection	Pre-Test	21	34	27.40	3.777	0.295
	Post-Test	20	34	27.40	4.719	0.651

**)Kolmogorov-Smirnov Test: data are normally distributed if p-value > 0.05*

The distribution of healthy and unhealthy categories against COVID-19 and prevention of infection are shown in Table 3. The table shows changes in the frequency and percentage of actions regarding COVID-19 and prevention of infection in the category of healthy measures, before and after education.

The percentage of healthy action category before education was 20%, but after education, the percentage increased to 30%. The category of unhealthy actions still dominated both before education (80%) and after education (70%) but there was a decrease of 10%.

Table 3. The Behavior of the Irma Al-Kautsar Mosque Youth about COVID-19 and the Prevention of Infection (N = 10)

Variable	Pre Test		Post Test	
	n	%	n	%
Knowledge				
High	3	30	8	80
Low	7	70	2	20
Attitudes				
Positive	6	60	3	30

Variable	Pre Test		Post Test	
	n	%	n	%
Negative	4	40	7	70
Action				
Health	4	40	7	70
Not Health	6	60	3	30

The Impact of Education on Youth Behavior Related to Prevention of COVID-19 Infection

The effect of education on youth behavior related to the prevention of COVID-19 infection is presented in Table 4. The table presents that the average difference in the score of knowledge before and after education was 1.70 (\pm 2.263). The results of the paired T statistical test showed that the 2-Tailed significance value was 0.042 or $p < 0.05$. The conclusion was that there was a significant influence between providing education and increasing

knowledge about COVID-19 and preventing infection in the Irma Al-Kautsar Mosque Youth. The paired T statistical test results showed that the 2-Tailed significance value on the attitude and action variables respectively was 0.152 or $p < 0.05$ and 1,000 or $p > 0.05$.

The conclusion was that education can improve youth attitudes about COVID-19 and infection prevention behavior, but not significantly. Meanwhile, the actions of youths regarding COVID-19 and their infection prevention behavior were not significantly influenced by education.

Table 4. The Impact of Education on Youth Behavior Related to Prevention of COVID-19 Infection

Behavior of Prevention COVID-19 Infection	Post-Test – Pre-Test			
	Mean	SD	Std. Error Mean	Sig. (2-tailed)*
Knowledge of COVID-19 and prevention of infection	1.70	2.263	0.716	0.042
Attitudes of COVID-19 dan prevention of infection	1.90	3.843	1.215	0.152
Action of COVID-19 and prevention of infection	0.00	3.621	1.145	1.000

*)Confidence Interval: 95%. Significant if sig. (2-tailed) < 0.05

Self-Report Data on the Dissemination of COVID-19 Information by the Irma Al-Kautsar Mosque Youth

Respondents carrying out activities to disseminate COVID-19 information through social media were reported through self-report sheets. Table 5 shows the conclusions of the COVID-19 information dissemination activities by respondents. Respondents used the internet for an average of 9.25 hours (\pm 0.957) each day by spending an average internet quota of 20

GB (\pm 7,071). The most frequently used social media by respondents was Instagram, and the most used messenger application was WhatsApp.

The spread of COVID-19 information was carried out by respondents by uploading COVID-19 educational information on their social media. Respondents had uploaded information related to COVID-19 once in the past week since the task of disseminating the information was given. All respondents

used the respondent's personal Instagram as a medium to disseminate this information.

Educational information related to COVID-19 uploaded by respondents via social media was a poster containing information regarding the ethics of sneezing

and coughing in public places and myths and facts about COVID-19. The posters had been uploaded on social media for 1-2 weeks, counting from the time teenagers were assigned to disseminate information on COVID-19.

Table 5. The COVID-19 Information Dissemination Data by the Irma Al-Kautsar Mosque Youth (N = 10)

Activity	Youth Practice
The average amount of internet usage per day	9.25 hours (\pm 0.957)
Average quota spent on internet usage per month	20 GB (<i>gigabyte</i>) (\pm 7.071)
Most used social media	Instagram and WhatsApp
Frequency: In the past week, how many times have you posted COVID-19 prevention information on your Social Media?	I uploaded information on COVID-19 prevention on Social Media 1 time in the past week
Social Media: What types of Social Media are used to spread COVID-19 prevention information	I use Instagram to spread COVID-19 prevention information
Form of Information: State the form of the uploaded information, for example, narrative, illustration, video, then describe the contents of the information	<i>"I use poster media to spread information about how to prevent COVID-19 by implementing Sneezing and Coughing Ethics in public places."</i> <i>"The information uploaded is a poster containing information about the facts and myths of COVID-19."</i>
Duration: In the past week, how long has each of the uploaded COVID-19 prevention information been on your Social Media?	1-2 weeks

DISCUSSION

Respondents in this study are ten youths aged 14-18 years and most of them are still in high school. Santrock (2003) explains that youth is defined as a period of developmental transition from childhood to

adulthood, which includes aspects of biology, cognitive, and social changes that take place between the ages of 10-19 years.

Research conducted by Upadhyay and Lipkovich (2020) examines the appropriateness of using websites to recruit and conduct cognitive interviews toward

youths in the United States using Zoom. In this study, Zoom is also used as an interactive discussion with the Irma Al-Kautsar Mosque Youth to produce an overview of the knowledge and behavior of youths about COVID-19 and the prevention of infection.

Mosque youths get information about COVID-19 through television and online information sources such as social media: Instagram and Facebook, and messenger applications. It is in line with the research conducted by Novianti and Listyandini (2020) which aims to make youths active and informative and happy to be involved in this useful activity as well as using online applications such as WhatsApp and Zoom.

In the era of the COVID-19 pandemic, the online learning method is the best method recommended by the government for education to youths and people who are at the education level in general, and the internet has succeeded in influencing all groups including teenagers. Youths can be a vulnerable group because, if they are not supervised, they can fall into adverse effects, so positive things are needed in using the internet.

According to Adhikari (2017) in a study entitled "Utilization Of Online Social Media For Health Promotions Among Adolescents Of Nepa, most respondents (63.7%) have inadequate knowledge of online social media for health promotion and 31.1% of respondents have moderate knowledge. Only 5.2% have sufficient knowledge in the use of online social media for health promotion.

Moreover, research by Park and Kwon (2018) entitled "Health-Related Internet Use by Children and Adolescents: Systematic Review" explains how youths seek information and support systems for their healthcare on the internet. Several studies show that the level of physical vulnerability youths against COVID-19 is relatively the same or lower than adults. However, the symptoms of the disease to youths often do not appear, so that they have

a higher risk of spreading the disease (de Oliveira et al., 2020; Viner et al., 2020; Walger et al., 2020).

The youths' role in the infection and spread of COVID-19 in the community is still unclear (Viner et al., 2020). However, several assumptions arise that youths can infect and spread the disease through many group activities and poor personal hygiene behavior (Walger et al., 2020).

From the educational activities using the discourse method through Zoom, it is found that the knowledge of the Irma Al-Kautsar Mosque Youth about preventing the spread of COVID-19 had increased. In conclusion, there is a significant influence between providing education and increasing knowledge about COVID-19 and preventing infection in the Irma Al-Kautsar Mosque Youth.

It is in line with the research of Rahmayanti et al. (2020), which educated youths with the lecture and question and answer method using Zoom. The result was an increase in participants' understanding and ability to understand the material presented about maintaining health during the COVID-19 pandemic. Sariyani et al. (2020) found that educational methods using Google Meets are effective in increasing youth knowledge about reproductive health. Also, Febriyanti et al. (2020) state that education and discussion through Zoom can provide new information and raise awareness about nutritional issues during the COVID-19 pandemic.

Another research conducted by Sari and Efni (2020) also states that WhatsApp as a medium for discussion in learning has been proven effective in increasing youth knowledge from 50.2% to 85.5%. The same thing happened in Sugiyarto's (2020) research that health counseling through Zoom and WhatsApp groups to youth organizations increased knowledge of youth organizations from 73% to 95% after health education was carried out. Those showed that online health education activities are effective in increasing knowledge.

Based on the study results, the attitude category in the study is dominated by positive attitudes (70%). It is concluded that education can improve youth attitudes about COVID-19 and infection prevention behavior, but it is not significant. Meanwhile, the actions of youths regarding COVID-19 and their infection prevention behavior are not significantly influenced by education. It can be caused by many factors: the duration of the intervention, which is too short to measure and the small number of respondents which can bias the study results.

This research also provides education to the Irma Al-Kautsar Mosque Youth to improve COVID-19 prevention behavior in youths themselves. Besides, it also empowers youths to convey health messages that have been obtained to family and peers in various communication media directly or through online media and social media.

The empowerment can be carried out in four stages: problem identification, planning, implementation, and evaluation (Andrade et al., 2018; Effendy, 2015). Respondents not only receive education about COVID-19 prevention behavior but are also provided with a short training on making poster media using Canva. This activity is based on the background of the respondents' average internet usage of 9.25 hours per day, the most frequently used social media by respondents is Instagram and the most frequently used messenger application is WhatsApp.

As in the research of Andrade et al. (2018) which shows that social media can reach youth involvement in health education content, this research also shows that there is a respondent's involvement in spreading COVID-19 information to their family and peers by uploading COVID-19 educational information on the respondents' personal social media such as WhatsApp, Instagram, and Facebook status in the form of posters related to the ethics of sneezing and coughing in public places, and myths

and facts related to COVID-19 once a week since the education was given.

By involving youths in the dissemination of accurate information to debunk the myths and preventive behaviors of COVID-19, it will be beneficial not only for social media users who read messages shared by respondents but for youth respondents themselves. The benefit is in the form of satisfaction to explore the potential in create messages and share COVID-19 prevention information to more people using social media so that online technology is advantageous in providing education to youths and other social media users.

This study has several limitations. Attitudes and actions results related to COVID-19 transmission prevention were not significantly influenced by education. This can be due to many factors, such as the duration of the intervention that was too short to measure differences between the before and after education section. Furthermore, an insufficient number of respondents could bias the results of the study.

Other obstacles were found during the study process. The internet connection varies among audience and implementors so the communication and learning process did not run as properly as it should have. Several audiences experienced device error or unsupported devices, which disturbed the learning and empowering process.

CONCLUSION

The results of the study show that education to the Irma Al-Kautsar Mosque Youth in Serang Regency indicates that there is a significant influence between providing education and increasing knowledge. Meanwhile, the actions and attitude of youths about COVID-19 and their infection prevention behavior are not significantly influenced by the giving of education to the teenagers of the Irma Al-Kautsar Mosque.

REFERENCE

- Adhikari, B. (2017). *Utilization of Online Social Media for Health Promotions Among Utilization of Online Social Media for Health*. March. <https://doi.org/10.13140/RG.2.2.33218.61129>
- Alber, J. M., Paige, S., Stellefson, M., & Bernhardt, J. M. (2016). Social Media Self-Efficacy of Health Education Specialists: Training and Organizational Development Implications. *Health Promotion Practice*, 17(6), 915–921. <https://doi.org/10.1177/1524839916652389>
- Andrade, E. L., Evans, W. D., Barrett, N., Edberg, M. C., & Cleary, S. D. (2018). Strategies to Increase Latino Immigrant Youth Engagement in Health Promotion Using Social Media: Mixed-Methods Study. *JMIR Public Health and Surveillance*, 4(4), e71. <https://doi.org/10.2196/publichealth.9332>
- Bower, M. (2019). Technology-mediated learning theory. *British Journal of Educational Technology*, 50(3), 1035–1048. <https://doi.org/10.1111/bjet.12771>
- de Oliveira, W. A., da Silva, J. L., Andrade, A. L. M., de Micheli, D., Carlos, D. M., & Silva, M. A. I. (2020). Adolescents' Health in Times of COVID-19: A Scoping Review. *Cadernos de Saude Publica*, 36(8). <https://doi.org/10.1590/0102-311x00150020>
- Effendy, R. (2015). The Moral Values as the Foundation for Sustainable Community Development: A Review of the Indonesia Government-Sponsored National Program for Community Empowerment Urban Self Reliance Project (PNPM MP). *Journal of Economics and Sustainable Development*, 6(7), 1–23.
- Fantini, E., & Safari Tamba, R. (2020). Mediamorfosis Edukasi Informal Online Melalui Platform Digital Sebagai Peluang Bisnis Baru. *Majalah Ilmiah Bijak*, 17(1), 114–127. <https://doi.org/10.31334/bijak.v17i1.831>
- Febriyanti, E., Suryani, D., & Utami, R. Y. (2020). Edukasi Masalah Nutrisi Selama Pandemi Covid-19 Kepada Ikatan Remaja Masjid Al Rasyid (Ikrama) Bandar Khalipah Medan. *Jurnal Implementa Husada*, 1(2), 107. <https://doi.org/10.30596/jih.v1i2.5024>
- Ministry of Health Indonesia. (2020). *Situasi Terkini Perkembangan Novel Coronavirus (COVID-19)*. Ministry of Health of Republic of Indonesia.
- Novianti, J., & Listyandini, R. (2020). *Pembentukan Kader Remaja dengan Program Rekreasi Secara Daring*. 4(2). <https://doi.org/10.32832/pkm-p.v4i2.751>
- Park, E., & Kwon, M. (2018). Health-related internet use by children and adolescents: Systematic review. *Journal of Medical Internet Research*, 20(4). <https://doi.org/10.2196/jmir.7731>
- Rahmayanti, R., Wahyuni, F., Yazia, V., Handayani, D., & Hasni, H. (2020). Pentingnya Menjaga Kesehatan Di Masa Pandemi Covid-19 Pada Remaja Di Panti Aisyiyah Lubuk Minturun. *Abdimas Galuh*, 2(2), 158. <https://doi.org/10.25157/ag.v2i2.4057>
- Sampurno, M. B. T., Kusumandyoko, T. C., & Islam, M. A. (2020). Budaya Media Sosial, Edukasi Masyarakat, dan Pandemi COVID-19. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(5). <https://doi.org/10.15408/sjsbs.v7i5>

- [15210](#)
Santrock, J. W. (2003). *Perkembangan Remaja* (6th ed.). Erlangga.
- Sari, M. T., & Efni, N. (2020). Pendidikan Kesehatan tentang Remaja Sehat pada Adaptasi Kehidupan Baru di Kota Jambi. *Jurnal Abdimas Kesehatan (JAK)*, 2(3), 237. <https://doi.org/10.36565/jak.v2i3.139>
- Sariyani, M. D., Ariyanti, K. S., Winangsih, R., Istri, C., & Pemayun, M. (2020). *Edukasi Kesehatan Reproduksi Remaja Pada Masa Pandemi Covid-19 di Kabupaten Tabanan Tahun 2020*. 90–97. <https://doi.org/10.35473/ijce.v2i2.754>
- Sugiyarto, S. (2020). Pemberdayaan Karang Taruna dalam Pencegahan Penyebaran Covid-19 di Desa Wonokerto Kecamatan Wonogiri. *Jurnalempathy.Com*, 1(1), 35–41. <https://doi.org/10.37341/jurnalempathy.v1i1.5>
- Upadhyay, U. D., & Lipkovich, H. (2020). Using online technologies to improve diversity and inclusion in cognitive interviews with young people. *BMC Medical Research Methodology*, 20(1), 1–10. <https://doi.org/10.1186/s12874-020-01024-9>
- Viner, R. M., Mytton, O. T., Bonell, C., Melendez-Torres, G. J., Ward, J., Hudson, L., Waddington, C., Thomas, J., Russell, S., Van Der Klis, F., Koirala, A., Ladhani, S., Panovska-Griffiths, J., Davies, N. G., Booy, R., & Eggo, R. M. (2020). Susceptibility to SARS-CoV-2 Infection among Children and Adolescents Compared with Adults: A Systematic Review and Meta-analysis. *JAMA Pediatrics*, 1–14. <https://doi.org/10.1101/2020.05.20.20108126>
- Walger, P., Heininger, U., Knuf, M., Exner, M., Popp, W., Fischbach, T., Trapp, S., Herr, C., & Simon, A. (2020). *become less severely ill than do adults. The vast majority of infections*. 15, 1–18.
- WHO. (2020). *Health Promotion Track 1: Community Empowerment*. World Health Organization.