

Health Education In Order To Prevent And Transmit Covid-19 In The Elderly Through Audio Visuals

Fatimah¹, Iswenti Novera², Yenni Elfira³, Irwadi⁴, Ikhsan Amran⁵, Leo Agustino⁶
^{1,2,3,4,5,6} Anesthesiology Nursing Study Program, Baiturrahmah University Padang, West Sumatra, Indonesia

Received: August 08, 2024
Revised: August 30, 2024
Accepted: September 03, 2024
Published: September 10, 2024

Corresponding Author:
Author Name*: Fatimah
Email*:
fatimah@staff.unbrah.ac.id

Abstrak: *Coronavirus Disease 2019 (Covid-19) has caused health problems worldwide with increasing morbidity and mortality that can infect all age groups with the highest mortality rate of 95% in the vulnerable age group, namely the elderly with an age range of >60 years. The rapid increase and addition of deaths due to Covid-19 has had a negative impact on every aspect of life with changes in new habits from social, economic, religious and psychological aspects. One of the efforts that can be made to prevent the transmission of Covid-19 is to improve Clean and Healthy Living Behavior. Counseling on clean and healthy living behavior was carried out at the Tresna Werdha Sabai Nan Aluih Sicincin social institution on November 12, 2021 with elderly participants who were in the social institution. The counseling method used was using poster and leaflet media and conducting demonstrations in the form of showing Minang language caricature videos related to health education in the context of preventing and transmitting Covid-19. The methods applied can focus the attention of training participants to be able to focus and easily understand information. The results of the counseling showed that 97% of the elderly understood and knew how to live a clean and healthy lifestyle to avoid contracting Covid-19.*

Keywords : *Audio Visual; Clean and healthy living behavior; Covid-19*

How to cite:

Example: Fatimah¹, Iswenti Novera², Yenni Elfira³, Irwadi⁴, Ikhsan Amran⁵, Leo Agustino⁶. Health Education In Order To Prevent And Transmit Covid-19 In The Elderly Through Audio Visuals. *Journal of Public Health Indonesian*, 1(2), September 2024. DOI: <https://doi.org/10.62872/632j6g43>

INTRODUCTION

The COVID-19 pandemic has had a huge impact on global health, and the elderly are one of the most vulnerable groups to the virus (Benksim et al., 2020). The elderly face a high risk of serious complications from COVID-19 infection, such as pneumonia or acute respiratory distress syndrome, and have a higher chance of death (Wu et al., 2020). In addition, they often have underlying health conditions and weaker immune systems, which adds to their level of vulnerability. The health and well-being of older adults during this pandemic is a top priority, requiring special attention from health systems and communities. Effective health education plays a crucial role in efforts to prevent and control the spread of COVID-19 among the elderly. In delivering important information on the need to maintain distance, wear masks, wash hands properly, and recognize symptoms and steps to take if exposed to the virus, audiovisual media-based



approaches offer a more effective solution. These media can convey information in a more engaging and easy-to-understand way, utilizing images, sound and video to improve comprehension and retention. Audiovisual health education not only facilitates access to information for older adults but can also increase their motivation to follow health protocols (Abed, 2023). This study aims to evaluate the extent to which audiovisual health education can increase older adults' awareness and adherence to COVID-19 preventive measures, and provide recommendations for more effective and inclusive health education strategies.

The Covid-19 pandemic has had a significant impact, especially on the elderly who fall into the high-risk category. The elderly face greater health and safety challenges during this pandemic, as they are more susceptible to severe complications from SARS-CoV-2 virus infection. To protect this group, effective health education is essential to increase their understanding and awareness regarding the prevention and management of Covid-19. Audio-visual media is an effective method in health education, especially for the elderly, because it can convey information in an interesting and easy-to-understand way. This media facilitates the delivery of material through images and sound, thus strengthening the understanding and motivation of the elderly to implement health protocols correctly. The goal of audio-visual-based education is to educate the elderly on various aspects of Covid-19 prevention, including maintaining personal hygiene, wearing masks, practicing social distancing, and the importance of vaccination. Increased understanding and implementation of proper health protocols are expected to help the elderly to be better protected and play an active role in preventing the spread of Covid-19, as well as contribute to the creation of a safer and healthier environment.

Coronaviruses are a large family of viruses that can infect birds, mammals, and include humans. According to WHO (World Health Organization) this virus causes from mild flu to more severe respiratory infections such as MERS-CoV and SARS-CoV, this virus is zoonosis which can transmit between animals and humans. At the end of 2019, precisely in Wuhan, China, a new type of corona virus was discovered called SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2), the infection caused by this virus is called COVID-19. Covid-19 can cause various disease complications, especially in respiratory disorders such as acute respiratory failure, ARDS (Acute Respiratory Distress Syndrome), Pnuemonia, and complications in other organs so that it can cause death in sufferers (Zendrato, 2020).

As of November 3, 2021, data released by the World Health Organization (WHO) shows that the number of COVID-19 cases worldwide has reached 247,472,724. In Indonesia, the number of recorded cases reached 4,246,174, signaling the huge impact of the pandemic at the national level and the huge challenge in tackling the spread of the virus. In West Sumatra province, the situation is no less serious. On the same date, the number of COVID-19 cases in the province reached 89,784, showing a consistent upward trend since cases were first detected in Indonesia. This rise in the number of cases highlights the need for a more effective approach to prevention as well as greater efforts to raise public awareness on health protocols. It also emphasizes the importance of continued support from the government, medical personnel, and communities in addressing this health crisis and ensuring that public health is maintained amidst ongoing challenges.

The rapid increase and increase in cases of death due to Covid-19 has a negative impact on every aspect of life with changes in new habits both from social, economic, religious and psychological aspects (Saha, 2020). The psychological aspects that can be seen are mental stress and unrest that can affect health, especially vulnerable groups such as children and the elderly (Syamson et al., 2021). Corona-19 virus is still new and still causes a pandemic in the world, especially Indonesia. Information related to this virus is of course still very limited because many things are still in research and epidemiological data so that there

are changes in policies and other things related to the development of research results, epidemiological data and advances in diagnosis and therapy (Handayani, et al.,2020).

Covid-19 is becoming a global health threat and pandemic situation around the world. WHO has declared infection due to Covid-19 as PHEIC (Public Health Emergency of International Concern) in public health emergencies. Coronavirus-19 can infect all age groups with the highest mortality rate of 95% being in vulnerable age groups, namely the elderly with an age range of >60 years. The vulnerability of the elderly who died historically due to Covid-19 infection in several countries, namely in Spain 95.5%, Italy 95%, Brazil 85%, China 80%, Malaysia 62.6%, and in Indonesia 14.67%. Studies on several cases of Covid-19 patients show the fact that the level of risk of transmission and death in vulnerable age patients such as the elderly is higher than in the younger age group category (Ezalina et al., 2021).

Adaptation of new habits is a scenario to accelerate the handling of Covid-19 in health and socio-economic (Lahiri, 2021) . The Indonesian government has announced plans to implement new habit adaptation scenarios, one of which is by increasing PHBS (Clean Healthy Living Behavior). This activity is a behavior that is practiced by each individual with their own awareness to improve their health status and play an active role in creating a healthy environment. Clean and healthy living behavior must be applied every day and done anytime and anywhere. As well as PHBS in the household / family environment, health institutions, social agencies, public places, schools and workplaces (Hayati & Hasibuan, 2020).

UPTD Panti Sosial Tresna Werdha (PSTW) Sabai Nan Aluih is a government institution that provides physical, spiritual, social services and care, skills guidance and protection to meet the needs of the elderly (Syahbana, 2021). Elderly adults have a higher risk of being infected with Covid-19 and have a higher risk of death (Martini et al., 2021). Through media/methods in the form of audio visual (a combination of lecture methods Focus Group Discussion, posters, booklets, videos) in providing health education to elderly groups has a good influence on receiving information or health education (Nurmayunita, 2019). The use of video media is an efficient learning method in delivering educational messages because it can be seen and heard directly so that it is easily understood by the elderly, posters and leaflets that are designed in the form of images and text that are as attractive as possible can help the elderly in understanding the meaning of the message to be conveyed in efforts to prevent and transmit Covid-19 (Wulan et al., 2021)..

METHOD

This activity begins with the preparation stage and the implementation stage. In the preparation stage, it is carried out by requesting a permit to work together with the partner community as the target of the activity, discussing the activity plan, making an agreement on the counseling schedule and conducting a preliminary study which is useful for analyzing the situation and problems faced by the partner. After that, purchasing equipment and materials to complete the activities to be carried out. Making Minang language caricature videos and posters as media in health education for the elderly related to the prevention and transmission of Covid-19. The Implementation Stage by Carrying out Socialization activities to the elderly using posters and leaflets and Conducting demonstrations in the form of showing Minang language caricature videos related to health education in the context of preventing and transmitting Covid-19.

The method used is direct counseling with education carried out to partner communities with the title "Health Education in the Context of Prevention and Transmission of Covid-19 in the Elderly Through Audio Visual", targeting the elderly at the Tresna Werdha Sabai Nan Aluih Sicincin Social Home, reinforced by several research results. Based on research conducted by Wulan et al (2021) on health

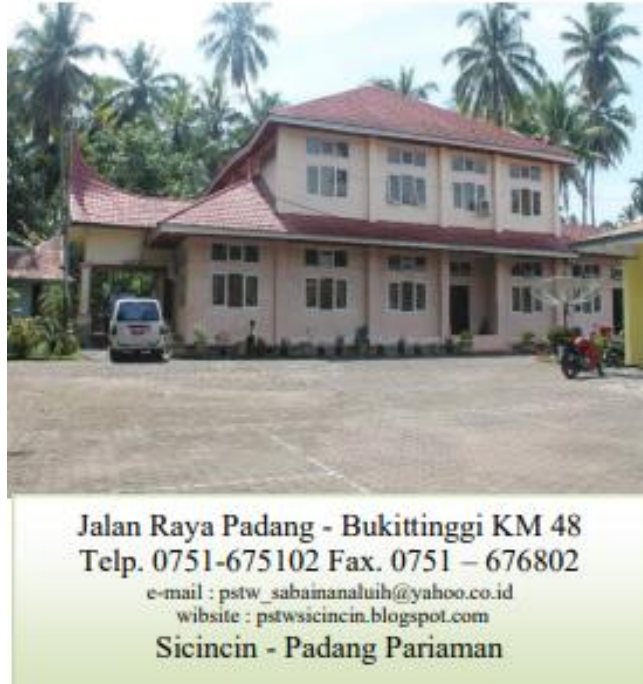
protocol counseling with video and leaflet media, they got good results after respondents watched the video and read the educational leaflet provided. Nurmayunti (2019) also conducted research using audio-visual media in health education on hypertension care for the elderly, this study had a positive influence on the behavior of the elderly regarding hypertension care. The distribution of posters and leaflets during counseling serves to help participants better understand the counseling material. The posters and leaflets distributed to the elderly contain information on how to implement clean and healthy living behaviors in order to avoid transmission of Covid-19.

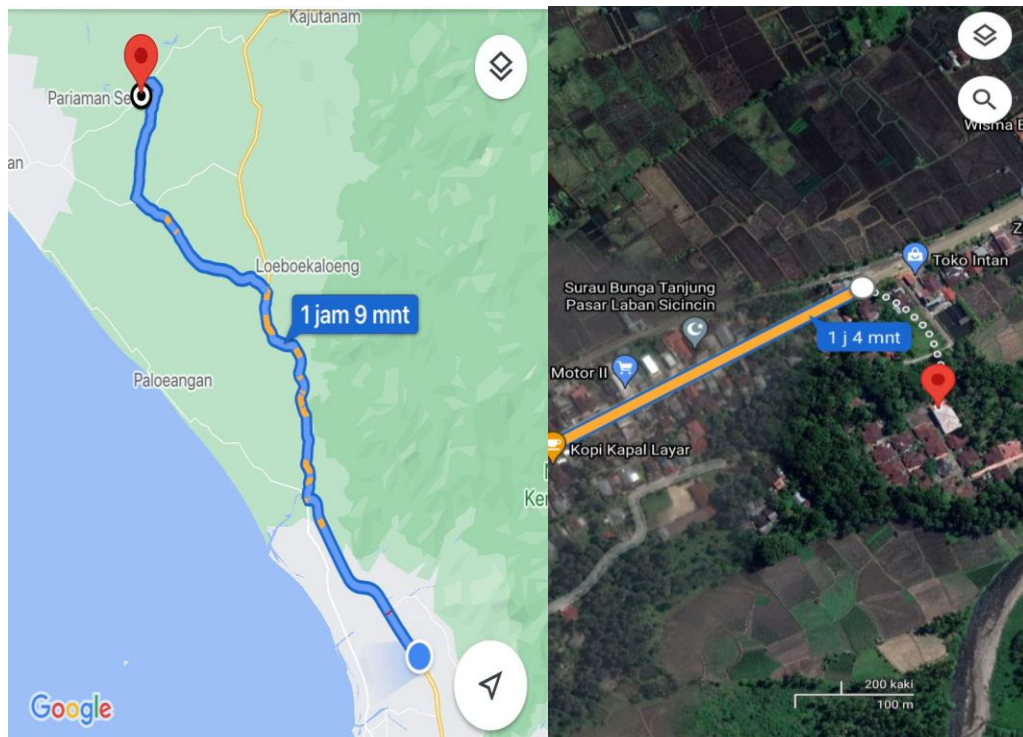
RESULTS AND DISCUSSION

Health education through audio-visual media is proven to be an effective method in improving the understanding of the elderly regarding the prevention and control of Covid-19. The elderly, who fall into the high-risk category, need clear and accessible information to protect themselves from the risk of severe infection due to the SARS-CoV-2 virus. Audio-visual media, with its ability to convey information visually and auditory, facilitates comprehension and recall, especially for the elderly who may have difficulty in understanding information through text or verbal conversation alone. Videos showing how to wash hands properly or the proper use of masks provide a live demonstration that is easier to understand than written explanations.

Engaging audio-visual media formats, such as animations or interactive simulations, can increase older people's motivation to follow health protocols. These formats are important for maintaining the attention and interest of older adults in the learning process. Audio-visual media also ensures consistent and standardized information delivery, reducing the risk of misinformation or inconsistency. However, challenges such as difficulty operating technological devices or visual and hearing limitations need to be considered, ensuring educational materials are designed to be easily accessible and comprehensible. With this approach, it is hoped that older adults can better understand and effectively implement Covid-19 prevention measures, play an active role in maintaining their own health, and contribute to the creation of a safer and healthier environment during the pandemic.

On November 12, 2021, a counseling session was held at Sabai Nan Aluih Tresna Werdha Social House, Sicincin, which took place from 08.00 to 12.00 WIB, involving 48 elderly people from the social house. The main objective of this counseling was to increase the understanding of the elderly about the importance of maintaining health, especially in the context of preventing and overcoming Covid-19. During the counseling, participants were given detailed information on various aspects of hygiene and health. The material presented included the practice of maintaining personal hygiene, the importance of vaccination, and the correct implementation of health protocols. The delivery of the material was done with an approach that suits the physical conditions and needs of the elderly, and was complemented with a question and answer session to ensure in-depth understanding. The results of this counseling showed a very good achievement, with 97% of elderly participants showing a good understanding of the importance of maintaining health and implementing clean and healthy living behaviors. They not only understood the information provided but were also ready to apply it in their daily lives. With this knowledge, it is hoped that the elderly can play an active role in creating a healthier environment, both in their social homes and in their communities in general. This effort aims to create a safe and healthy environment, especially in the midst of a pandemic situation





Clean and healthy living behavior is a series of actions that reflect an individual's awareness and learning, which enables a person to maintain personal health while actively contributing to the health sector to achieve public health. Adopting a healthy lifestyle and creating a clean environment are key ways to maintain optimal body condition (Schwarzer, 2021). This involves various practices such as personal hygiene habits, a healthy diet, as well as management of a health-supportive environment (Horowitz, 2020). Therefore, it is imperative for every individual to continuously maintain, protect, and expand knowledge regarding the importance of clean and healthy living behaviors.

The adoption of these behaviors not only assists individuals in maintaining personal health but also has a broad positive impact on society (Marcus *et al.*, 2020). By raising awareness of the importance of hygiene and health, individuals can reduce the risk of disease transmission, improve quality of life, and contribute to the creation of a healthier environment. Education and training programs on clean and healthy living behaviors are essential to ensure that this knowledge is widespread and consistently applied (Gielen, 2021). A community that is well educated and informed about health practices will be better able to face health challenges and maintain overall well-being. Therefore, continuous efforts in health education, promotion of hygiene behaviors, and raising public awareness are essential to create an environment that supports the health and well-being of individuals and the community as a whole.

The Indonesian government has launched a program aimed at promoting healthy lifestyles through clean and healthy living behaviors (PHBS) (Kusuma, 2021). The program focuses on educating the public on healthy habits and preventive measures to reduce the risk of disease. The initiative aims to create far-reaching positive behavioral changes, with attention to various aspects of life, such as healthy eating, exercise habits, personal hygiene, and the environment (Kruize, 2019). PHBS includes not only individual

aspects but also collective efforts to create an environment that supports health, such as adequate sanitation facilities and efficient waste management. Increased public awareness and knowledge of clean and healthy living behaviors are expected to reduce the burden of disease and improve quality of life. Support and active participation from individuals, families, and communities are crucial to achieving this goal. The PHBS program is a strategic step that emphasizes not only disease prevention, but also comprehensive health promotion, so as to create a healthier and more productive society.

The Clean and Healthy Lifestyle Movement aims to improve the quality of health through a process of awareness that forms the basis of individual contributions in living a clean and healthy daily life (Mamesah, 2022). The implementation of this movement is expected to form a community with high awareness of health, as well as adequate knowledge of the importance of hygiene principles and health standards (Petersen, 2024). The main benefit of implementing a Clean and Healthy Lifestyle is the creation of a community that is concerned and educated about hygiene and the implementation of healthy practices. This includes personal hygiene habits, environmental sanitation, and healthy eating and physical activity. Maintaining personal hygiene, such as proper handwashing, as well as ensuring good environmental sanitation through waste management and provision of adequate sanitation facilities, are essential in preventing the spread of disease (World Health Organization, 2020). A healthy diet and regular physical activity play an important role in maintaining optimal health and preventing chronic diseases. With this holistic approach, it is hoped that people will adopt healthier lifestyles, reduce the burden of disease, and improve overall quality of life. The movement also serves to create a collective consciousness that supports public health efforts, resulting in a cleaner and healthier environment and a more productive and happy community.

The implementation of a Clean and Healthy Lifestyle is crucial to creating a safe and healthy environment at Sabai Nan Aluih Tresna Werdha Social Home (PSTW), as well as preventing the spread of diseases such as COVID-19. Strategic measures including the provision of adequate sanitation facilities, the implementation of regular cleaning and disinfection, and the implementation of strict health protocols are essential in this endeavor (Giné *et al.*, 2021). Raising awareness and providing training to staff and residents on hygiene and infection prevention practices is also an integral part of this strategy (Storr, 2017). Through comprehensive training, staff and residents are expected to understand and implement proper hygiene procedures and effective preventive measures in their daily lives (Low *et al.*, 2020). Effective implementation of all these measures is expected to create an environment that is not only safe from the risk of COVID-19 transmission but also supports the health and well-being of all residents (D'alessandro *et al.*, 2020). Active support from all relevant parties, including management, staff, and residents, is essential to realize a healthy and safe environment. Joint commitment and solid cooperation in implementing a Clean and Healthy Lifestyle will ensure the achievement of these goals, as well as create conditions that support health and safety in this social home.

The implementation of this counseling activity is by providing education to the elderly through the media using posters and leaflets and conducting demonstrations in the form of showing Minang language caricature videos related to health education in the context of preventing and transmitting Covid-19. This media can convey information effectively with the use of attractive colors, images, and words that aim for the elderly to easily understand and comprehend the information provided in order to implement clean and healthy living behaviors in the context of preventing and transmitting Covid-19.

The supporting tools used include leaflets and posters, which are intended to be read again because the presentation of the material is only obtained during the presentation. The second supporting equipment

is a laptop. The supporting equipment is a laptop used by the speaker to deliver the material, the third supporting equipment is an LCD projector to display presentation slides and the fourth is a laser pointer to show parts of the slides to make it easier during the presentation (Prasad, 2020). Discussions and Q&A were carried out one by one to the elderly who attended the counseling (Whitlock, 2022). The elderly were very active and enthusiastic in asking about how to implement clean and healthy living behaviors to avoid transmission of Covid-19.

CONCLUSIONS

Counseling activities Providing education to the elderly at the Tresna Werdha Sabai Nan Aluih Sicincin social shelter on November 12, 2021 is expected to provide a positive contribution in increasing awareness, increasing and improving the knowledge of the elderly about how to implement clean and healthy living behaviors to avoid transmission of Covid-19. With 97% of the 48 elderly who participated in this counseling showing a good understanding, they can now implement clean and healthy living behaviors to avoid transmission of Covid-19. This counseling was carried out using posters, leaflets, and showing Minang language cartoon videos related to health education in the context of preventing and transmitting Covid-19 using various tools to facilitate interactive and effective communication.

ACKNOWLEDGMENTS

Thank you to the head of the Sabai Nan Aluih Sicincin Social Home for the Elderly who has given permission for the activity and all parties who have contributed to this activity.

REFERENCES

Book

- Nurmayunita, M. (2019). The Influence of Health Education with Audiovisual Media on Hypertension Care Behavior in the Elderly in the Beji Wetan Sendangsari Pajangan Hamlet, Bantul, Yogyakarta. Thesis. 'AISYIYAH University.
- World Health Organization. (2020). Water, sanitation, hygiene and waste management for COVID-19: technical brief, 03 March 2020 (No. WHO/2019-NcOV/IPC_WASH/2020.1). World Health Organization.
- WHO. (2021). WHO Coronavirus (Covid-19) Dashboard Cases. Retrieved 04 November 2021.

Journal Article

- Abed, M. A., Himmel, W., Vormfelde, S., & Koschack, J. (2023). Video-assisted patient education to modify behavior: a systematic review. *Patient Education and Counseling*, 97(1), 16-22.
- Benksim, A., Rachid, A. I. T., & Cherkaoui, M. (2020). Vulnerability and fragility expose older adults to the potential dangers of COVID-19 pandemic. *Iranian Journal of Public Health*, 49(Suppl 1), 122.
- D'alessandro, D., Gola, M., Appolloni, L., Dettori, M., Fara, G. M., Rebecchi, A., & Capolongo, S. (2020). COVID-19 and living space challenge. *Acta Bio Medica: Atenei Parmensis*, 91(9-S), 61.
- Ezalina, Deswinda, & Erlin, F. (2021). Covid-19 Prevention Education for the Elderly at the Husnul Khotimah Nursing Home in Pekanbaru. *JMM (Jurnal Masyarakat Mandiri)*, 5(1), 257-265.
- Giné-Garriga, R., Delepiere, A., Ward, R., Alvarez-Sala, J., Alvarez-Murillo, I., Mariezcurrena, V., & Jiménez, A. (2021). COVID-19 water, sanitation, and hygiene response: Review of measures and initiatives adopted by governments, regulators, utilities, and other stakeholders in 84 countries. *Science of the Total Environment*, 795, 148789.

- Hayati, N., & Hasibuan, R. (2020). Portrait of Clean and Healthy Living Behavior (PHBS) Efforts Towards Adaptation of New Habits in West Binjai District, Sukaramai Village. *Indonesian Health Scientific Journal*, 5(2), 13–18.
- Kruize, H., van Der Vliet, N., Staatsen, B., Bell, R., Chiabai, A., Muiños, G., & Stegeman, I. (2019). Urban green space: creating a triple win for environmental sustainability, health, and health equity through behavior change. *International Journal of Environmental Research and Public Health*, 16(22), 4403.
- Kusuma, A. N. (2021). Community Empowerment through Clean and Healthy Lifestyles to Improve Health Degrees in Indonesian Community. *Jurnal Mantik*, 5(3), 2137-2146.
- Mamesah, M., & Wijaya, H. (2022). Effect of Health Education with Audio-Visual Media as COVID-19 Prevention on Handwashing Behavior in School Age Children. *Lux Mensana: Journal of Scientific Health*, 97-106.
- Marcus, B. H., Forsyth, L. H., Stone, E. J., Dubbert, P. M., McKenzie, T. L., Dunn, A. L., & Blair, S. N. (2000). Physical activity behavior change: issues in adoption and maintenance. *Health Psychology*, 19(1S), 32.
- Prasad, S., Roy, B., & Smith, M. (2000). The art and science of presentation: electronic presentations. *Journal of Postgraduate Medicine*, 46(3), 193-198.
- Saha, S., & Dutta, D. T. (2020). A study on the psychological crisis during the lockdown caused due to Covid-19 pandemic. *African Journal of Biological Sciences*, 3(2), 41-49.
- Schwarzer, R. (2008). Modeling health behavior change: How to predict and modify the adoption and maintenance of health behaviors. *Applied Psychology*, 57(1), 1-29.
- Storr, J., Twyman, A., Zingg, W., Damani, N., Kilpatrick, C., Reilly, J., & Allegranzi, B. (2017). Core components for effective infection prevention and control programmes: new WHO evidence-based recommendations. *Antimicrobial Resistance & Infection Control*, 6, 1-18.
- Whitlock, E. P., Orleans, C. T., Pender, N., & Allan, J. (2002). Evaluating primary care behavioral counseling interventions: an evidence-based approach. *American Journal of Preventive Medicine*, 22(4), 267-284.
- Wu, C., Chen, X., Cai, Y., Zhou, X., Xu, S., Huang, H., & Song, Y. (2020). Risk factors associated with acute respiratory distress syndrome and death in patients with coronavirus disease 2019 pneumonia in Wuhan, China. *JAMA Internal Medicine*, 180(7), 934-943.
- Wulan, S., Gurusinga, R., Ginting Munthe, N. B., Lubis, B., & Markus, I. (2021). Health Protocol Counseling Using Video and Leaflet Media on Elderly Knowledge and Attitudes Regarding Covid-19 Prevention. *Jurnal Pengmas Kestra (JPK)*, 1(1), 34–37.