



Implementation of a Clean and Healthy Lifestyle to Increase Body Immunity during the Covid-19 Outbreak

Rois Wardan¹, Ridwan Arifin^{2✉}, Yuni Kartika³, Nahdiah Masayu⁴, Febri Fera⁵

¹Kepala Seksi Kesejahteraan dan Pelayanan Desa Kalirancang Alian Kebumen

²Ilmu Hukum, Universitas Negeri Semarang

³Jurusan Biologi, Universitas Negeri Semarang

⁴Jurusan Bahasa dan Sastra Asing, Universitas Negeri Semarang

⁵Jurusan Bahasa dan Sastra Inggris, Universitas Negeri Semarang

Abstrak. Pola hidup bersih dan sehat (PHBS) adalah sekumpulan perilaku yang dipraktekkan atas dasar kesadaran sebagai hasil pembelajaran yang menjadikan seseorang, keluarga, kelompok atau masyarakat mampu menolong dirinya sendiri (mandiri) di bidang kesehatan dan berperan aktif dalam mewujudkan kesehatan masyarakat. Kelompok mahasiswa KKN BMC UNNES 2020 memiliki misi untuk menjadikan masyarakat Desa Kalirancang, Kecamatan Alian, Kabupaten Kebumen, Jawa Tengah menyadari akan pentingnya menerapkan pola hidup bersih dan sehat (PHBS) dalam kehidupan sehari-hari khususnya dalam masa pandemi Covid-19. Metode pelaksanaan program KKN ini meliputi sosialisasi dan penyuluhan penerapan pola hidup bersih dan sehat (PHBS) secara langsung kepada masyarakat Desa Kalirancang, Kecamatan Alian yang dijadikan objek. Beberapa kegiatan yang dilakukan diantaranya menimbang bayi setiap bulan, menggunakan air bersih, mencuci tangan menggunakan sabun, pola makan yang sehat, dan melakukan aktivitas tubuh. Hasil yang dicapai melalui beberapa kegiatan tersebut yaitu mampu menyadarkan masyarakat akan pentingnya menerapkan pola hidup bersih dan sehat (PHBS) serta dapat memberi pengetahuan kepada masyarakat terkait bagaimana menerapkan pola hidup bersih dan sehat secara tepat sehingga masyarakat dapat menerapkan PHBS secara rutin dalam kehidupan sehari-hari.

Abstract. A clean and healthy lifestyle (PHBS) is a set of behaviors that are practiced on the basis of awareness as a result of learning that makes a person, family, group or community able to help themselves (independently) in the health sector and play a role in realizing public health. The student group KKN BMC UNNES 2020 has a mission to make the people of Kalirancang Village, Alian District, Kebumen Regency, Central Java aware of implementing a clean and healthy lifestyle (PHBS) in their daily life, especially during the Covid-19 pandemic. The method of implementing KKN includes socialization and counseling on the application of a clean and healthy lifestyle (PHBS) directly to the people of Kalirancang Village, Alian District, which is the object. Several activities are carried out, such as weighing the baby every month, using clean water, washing hand use soap, healthy eating patterns, and doing bodily activities. The results achieved through these activities are being able to make people aware of the importance of implementing a clean and healthy lifestyle (PHBS) and can provide knowledge to the community regarding how to properly implement a clean and healthy lifestyle so that people can implement PHBS regularly in their daily life.

Keywords: Body Immunity; Clean and Health Lifestyle; PHBS; Socialization

Introduction

Currently, Indonesia is facing a serious challenge in the form of a double burden of disease. In the 1990s, the biggest causes of death and illness in Indonesia were infectious diseases such as Upper Respiratory Tract Infections (ARI), Tuberculosis (TBC), and Diarrhea. Then since 2010, non-communicable diseases (PTM) such as stroke, heart disease, and diabetes have a greater proportion in health services (Suryani et al., 2019). However, today the whole world is in an uproar due to the Coronavirus Disease 2019 (Covid-19) pandemic, including in Indonesia. Coronavirus Disease 2019 (COVID-19) is a respiratory infection caused by an emerging coronavirus that was first recognized as appearing in Wuhan, China, in December 2019. Genetic sequencing of this virus indicates that it is a betacoronavirus closely

related to SARS virus (World Health Organization, 2020). This disease can be transmitted between humans and cause death. Therefore, the Indonesian government urges its people to implement a clean and healthy lifestyle (PHBS) as an effort to prevent the transmission of Covid-19.

A clean and healthy lifestyle (PHBS) is a set of behaviors that are practiced on the basis of awareness as a result of learning that makes a person, family, group or community able to help themselves (independently) in the health sector and play an active role in realizing public health. The realization of public health can be done through PHBS, where each individual must be aware, willing and able to practice PHBS. The scope of PHBS includes washing hands with soap, consuming healthy food and drinks, using healthy latrines, throwing garbage in the trash, not smoking, not consuming drugs, alcohol, psychotropic substances and other additives (drugs), not spitting anywhere, eradicating mosquito larvae (Simbolon & Simorangkir, 2018).

Septianto et al., (2020) in their research stated that a healthy lifestyle is obtained from those who pay attention to their body condition, diligently exercising, eating, and getting enough sleep, so that it will improve a person's quality of life. On the other hand, unhealthy lifestyles are obtained from those who do not pay attention to the condition of their bodies, eat that is not balanced with their activities, and rarely do sports, so that this will cause the community's immune system to be disturbed.

The immune system is a coordinated biological response system that aims to protect the integrity and identity of individuals and prevent the invasion of harmful organisms and substances in the environment that can damage them. The immune system has at least three main functions. The first is a very specific function, namely the ability to recognize and distinguish various target molecules and also have a specific response. The second function is the ability to distinguish between self-antigens and foreign antigens. The third function is the memory function, namely the ability through previous contact experiences with pathogenic foreign substances to react faster and stronger than the first contact (Munasir, 2016).

Unfortunately, most Indonesians, especially Central Java, still ignore the application of a clean and healthy lifestyle (PHBS) in their daily life. Based on data obtained from the Strategic Plan Report of the Central Java Provincial Health Office for 2018 to 2023, the percentage level of Clean and Healthy Life Behavior (PHBS) in Central Java is 28% (Health & Java, 2012). This percentage shows that the level of awareness of the people of Central Java to implement a clean and healthy lifestyle (PHBS) is still very low. One of the villages in Central Java province that still ignores a clean and healthy lifestyle (PHBS) is Kalirancang village. Kalirancang is a village located in Alian District, Kebumen Regency, Central Java. In Kalirancang village, it can be seen that some of the people who live there do not care about the problem of implementing a clean and healthy lifestyle. Based on data from the Covid-19 Information and Coordination Center of the Kebumen Regency Government, the number of confirmed cases of confirmed Covid-19 patients, which was updated on Tuesday, September 1, 2020, was 212 people with details of 41 people being treated, 158 people recovering, and 6 people dying. world. Therefore, it is very important to urge the people of Kebumen, especially the village of Kalirancang to apply a clean and healthy lifestyle (PHBS) in their daily life.

Based on the problems above, the author formulated an article on how to implement a clean and healthy lifestyle (PHBS) for the people of Kalirancang Village during the Covid-19 pandemic.

Methods

Implementation Program

The method of implementing this activity is to conduct socialization and counseling on the application of a Clean and Healthy Lifestyle (PHBS) directly to the people of Kalirancang Village, Alian District, who are used as objects.

Timeline and Schedule

The program of socialization activities and counseling on Clean and Healthy Lifestyles (PHBS) was carried out four times with each meeting one hour and a half, namely:

1. On July 14, 2020, a Clean and Healthy Lifestyle (PHBS) education was held for the children of the Kalirancang Village community through poster education media.
2. On July 17, 2020, elderly gymnastics activities were held.
3. On July 21, 2020, a Clean and Healthy Lifestyle (PHBS) education was held for mothers and the elderly in Kalirancang Village.
4. On August 16, 2020, socialization and counseling activities for Clean and Healthy Lifestyles (PHBS) were carried out. This activity was carried out in RT 2, RW 3, Kedungsemut Kulon Hamlet, Kalirancang Village, Alian District, Kebumen Regency.

Type of Research

In carrying out this research, the researcher used a qualitative descriptive method.

Research Focus

This research is focused on the following matters:

Clean and healthy living behavior of the people of Kalirancang Village, Alian District, Kebumen Regency in improving public health, with indicators:

- a. Weigh the baby every month
- b. Using clean water
- c. Wash hands with clean water and soap
- d. Eat fruits and vegetables every day
- e. Doing body activities

Factors that influence clean and healthy living behavior in Kalirancang Village, Alian District, Kebumen Regency, with indicators:

- a. Level of education
- b. Medical facility

Types and Sources of Data

The types of data used in this study include:

1. Primary data, namely data obtained by going directly to the object of research. this is done with the aim of obtaining empirical data.
2. Secondary data, namely supporting data or complementary data that can be obtained in this study without having to go directly to the object of research. One of the uses of this secondary data is to strengthen the basis of theoretical analysis related to the theme of this research.

Result and Discussion

Benefits of Clean and Healthy Lifestyles (PHBS) for Community

Clean and Healthy Lifestyles (hereinafter as PHBS) according to the Ministry of Health is an abbreviation of Clean and Healthy Living Behavior which means health behavior that

is carried out because of personal awareness so that families and all members are able to help themselves in the health sector and have an active role in community activities. In this pandemic period, Clean and Healthy Living Behavior is basically a simple habit with an effort to increase the body's immune system to avoid viruses, both for ourselves and for others around us. The main benefit of PHBS is the creation of people who are health conscious and have the knowledge and awareness to live a life that maintains cleanliness and meets health standards.

The PHBS order involves several elements that are part of the place of activity in daily life. The following are 6 awareness processes about clean and healthy living behavior:

1. PHBS in the household
2. PHBS in School
3. PHBS at work
4. PHBS in health facilities
5. PHBS in public places

Furthermore, the general benefit of PHBS is to increase public awareness to want to live a clean and healthy life. This is so that people can prevent and overcome health problems. In addition, by implementing PHBS the community is able to create a healthy environment and improve the quality of life.

a. Benefits of PHBS in School

PHBS in schools is an activity to empower students, teachers and healthy lifestyles in the school community. The goal is to want to adopt a healthy lifestyle to create healthy schools. The benefits of PHBS in schools are able to create a clean and healthy environment, as well as comfortable and healthy learning.

b. Benefits of PHBS in the Household

The benefits of PHBS in the household, among others, are able to improve welfare and are not susceptible to disease, are able to increase the productivity of household members and become accustomed to implementing a healthy lifestyle and children can grow up healthy and well-nourished.

c. Benefits of PHBS in the Workplace

PHBS in the workplace is an activity to empower workers to know and want to practice a Clean and Healthy Lifestyle. The benefits of PHBS in the workplace are able to increase body immunity, increase work productivity, and improve a positive workplace image.

d. Benefits of PHBS in the Community

The benefits of PHBS in the community are that the community is able to create a healthy environment, prevent the spread of disease, and be able to develop health that comes from the community.

Furthermore, there are some indicators of PHBS in Schools, such as:

1. Wash hands with soap before and after eating
2. Eating healthy snacks
3. Using clean and healthy latrines
4. Regular exercise
5. Eradicating mosquito larvae
6. No smoking in the school environment
7. Throw garbage in its place
8. Doing community service with school community members to create a healthy environment.

In the Household, PHBS implemented in various forms. One of the main PHBS arrangements is household PHBS which aims to educate household members so that they are willing to carry out behaviors in daily life, clean and healthy families and be active in

community life. The main objective of the PHBS arrangement at the household level is the achievement of a healthy household. There are ten PHBS indicators at the household level:

1. Delivery assisted by health personnel

Deliveries that receive assistance from health workers, whether doctors, midwives or paramedics, have standards in the use of clean, sterile and safe equipment. This step can prevent infection and other hazards that pose a risk to the safety of the mother and the newborn.

2. Exclusive breastfeeding

Awareness of the importance of breastfeeding for children aged 0 to 6 months is an important part of the indicators of success in the practice of Clean and Healthy Behavior at the household level.

3. Weighing babies and toddlers regularly

This practice can make it easier to monitor the baby's growth. Weighing can be done at the Integrated Healthcare Center (hereinafter as Posyandu) from the age of 1 month to 5 years. Posyandu can be a place to monitor children's growth and provide complete immunizations. Regular weighing can also facilitate early detection of cases of malnutrition.

4. Wash hands with soap and clean water

This practice is a step related to personal hygiene as well as a step to prevent the transmission of various types of diseases thanks to clean and germ-free hands.

5. Using clean water

Clean water is a basic need to live a healthy life.

6. Using healthy latrines

The latrine is an important sanitation infrastructure related to the sewerage unit and water for cleaning purposes.

7. Eradicating mosquito larvae

Mosquitoes are vectors of various types of diseases and breaking the life cycle of these creatures is an important part in preventing various diseases.

8. Consumption of fruits and vegetables

Fruits and vegetables can meet the needs of vitamins and minerals as well as fiber that the body needs to grow optimally and healthy.

9. Do physical activity every day

Physical activity can be in the form of sports activities or work activities that involve movement and the release of energy.

10. No smoking inside the house

Active smokers can be a source of various diseases and health problems for passive smokers. Quitting smoking or at least not smoking in the house can prevent the family from various health problems.

Implementation of PHBS During Covid-19 Outbreak for Improving Health and Body Immunity in Kalirancang Vilage, Alian Kebumen

Corona Virus Disease (COVID-19) is a new type of disease that is hitting various countries, including Indonesia. In humans, it usually causes respiratory tract infections, ranging from the common cold to serious illnesses such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). A new type of coronavirus appeared in Wuhan, China in December 2019, later named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV2), and caused Coronavirus Disease-2019 (COVID-19) (Kemkes RI, 2020).

The covid-19 virus has spread in various parts of the world, not only countries, provinces, districts, but to remote areas of the village which has caused concern for residents

so far. Clinical symptoms caused include fever; cough and cold; tired, lethargic; sore throat, and shortness of breath. The spread of this virus is classified as very fast, it can be through droplets or liquid droplets from coughing and sneezing, personal contact such as touching and shaking hands, and touching objects or surfaces with the virus on it, then touching the mouth, nose or eyes before washing hands. To reduce the risk of spreading the Covid-19 virus, the government has taken policies, including Large-Scale Social Restrictions (PSBB) which have been implemented in several big cities that enter the red zone in Indonesia.

The condition of the COVID-19 pandemic has finally made people to adopt a clean and healthy lifestyle into a routine. This is because the spread of COVID-19 is increasingly widespread and there is currently no COVID-19 vaccine available. There are several things that people can do to prevent transmission, namely by washing their hands every 1-2 hours in the right way. In addition, perform physical activities such as exercising regularly in or around the house. Also, consume healthy and balanced foods that contain various vitamins for endurance (Anhusadar and Islamiyah, 2020).

A clean and healthy lifestyle is very important for the survival of all family members. In household PHBS there are 10 indicators. Based on the observations that have been made previously, 5 indicators of a clean and healthy lifestyle (PHBS) were used in the socialization in Kedungsemut Kulon Hamlet and Jerotengah Hamlet. The indicators of a clean and healthy lifestyle used are weighing infants and toddlers, using clean water, washing hands with clean water and soap, eating fruits and vegetables every day, and doing body activities. The selection of these five indicators was due to problems found during observations in the two hamlets and adjusting to current conditions, namely the Covid-19 pandemic outbreak.

Socialization activities for clean and healthy lifestyles (PHBS) in Kedungsemut Kulon Hamlet and Jerotengah Hamlet in improving health and preventing the transmission of COVID-19.

Weighing Babies and Toddlers

Kalirancang Village has a weighing activity at the Integrated Service Post (Posyandu) which is held once a month on the first Saturday of the week. This Posyandu activity was carried out at the Polindes, which was near the PERTIWI Kindergarten and opposite the Kalirancang village hall. There are approximately 16 toddlers who are registered to participate in this posyandu activity related to monitoring children's health from 0 months to 5 years old. Of course, the village supports the activities carried out by village cadres in improving the health of children at the village level.

In 2020 there is one midwife and assisted by six cadres. Last July, toddlers received vitamin A from the puskesmas. Some of the gifts are drunk on the spot and some are taken home. Vitamin A is given twice a year. It is hoped that from an early age toddlers can prevent damage to the eye organs.



Figure 1. Giving A Vitamin to the Toddlers and Height Measurement

In addition, this Posyandu activity has a target in improving the health of toddlers. Some things to check are weight and height or body length. In addition to the pandemic, there will be games from the cadres to increase their knowledge. Starting from singing to memorizing prayers together. Posyandu also provides toys for toddlers to be sensitive to everything. Due to the current pandemic, posyandu activities are only for primary checks, then PMT is given, after which they go home. Of course, health protocols are very important. Although the pandemic still exists, this is the right time to further strengthen health monitoring in toddlers. Because toddlers are also a vulnerable age for viruses. The Ministry of Health is of course very concerned about this, for almost 5 months the posyandu has not been running, now while still adhering to health protocols, the posyandu is being held again with a note that there are no crowds as usual (Rodiyah, Utari, Arifin, Waspiyah, & Damayanti, 2021).

Table 1 is a list of names of participants for toddlers at the Posyandu "Kenanga II" Kalirancang Village.

Table 1. Posyandu Kenangan II Kalirancang (Data per 5/9/2020)

No.	Name	Date of Birth	Gender	Name of Mother	Name of Father	BB (kg)	TB (cm)
1	Abrizam F. W.	12/3/2020	L	Endah Lestari	Muhamad Fauji	12.3	78
2	Adian A. Singgih	30/7/2019	L	Nur Aeni	Hermanto	10.5	75
3	Ahmad Fajri	9/7/2017	L	Sri Maryati	Kasikun	11.1	86
4	Aisyah N Azzahra	3/5/2018	P	Khotijah	Sumarsono	10	83
5	Arfan Rais Nur F.	6/6/2020	L	Siti Nur H.	Muh. Ocim	5.1	57
6	Ayunindia	29/11/2016	P	Siti Nur H.	Ade Widiawan	13	91
7	Azqa Aqila S.	9/9/2019	P	Nur Awaliyah	Nurul H.	7.6	68
8	Defano A. Al Fikri	19/8/2016	L	Roehyanti	Darmadi	15.6	104
9	Faiqah M. Putri	17/3/2017	P	Ropiku	Mohamad Solihun	12.3	93
10	Faishal I. Hakim	5/2/2019	L	Sri Karyati	Ngatiman	10.6	74
11	Farzana Naina A.	23/7/2020	P	Khotijah	Sumarsono	4.1	3.5
12	Fatian Ghaisan Munir	1/1/2017	L	Siti Muzakiyah	Riski Misbahu M.	14.6	95
13	Fayra Khairina A.	19/08/2016	P	Silvi Widia Rahma	Slamet Saefudin	13.3	87
14	Kafa N. Fadilah	15/11/2017	P	Istiqomah	Darmadi	12	90
15	Kahisha Safwana P.	9/6/2020	P	Ade Roswita	Edi Purwanto	6.1	57
16	Khalila Zelindra KJ.	30/9/2015	P	Jumiah	Satino	13.7	94
17	Maryam Covana M.	16/3/2016	P	Rahmayani	Muhydin	12.6	90
18	Raisa Hasna Hanifa	31/3/2017	P	Esti Purwaningsih	Ahmas Saefudin M.	14	97

Sumber: Data diolah (2021)

Use clean water

Communities in Kedungsemut Kulon and Jerotengah Hamlets get clean water from wells and PAM. The need for clean water is used daily for drinking, cooking, bathing, washing clothes, washing kitchen utensils, and so on. The benefits of using clean water can be avoided from disease disorders such as diarrhea, cholera, dysentery, typhus, worms, and others.

The use of clean water must be boiled until it boils if you want to drink it. This is because, water that looks clean, is not necessarily free from germs. Disease germs in water die at a temperature of 100 degrees Celsius (when boiling). In addition, the information provided during the socialization if the source of clean water does not comply with the requirements for clean water physically, one of the family members is expected to report to the Puskesmas for follow-up. Conditions for clean water can physically be distinguished through the senses, among others, can be seen, tasted, smelled and touched. For example, the water is not cloudy, it must be free from sand, dust, mud, garbage, foam and other impurities.

Wash hands with clean water and soap

People wash their hands after cleaning their babies or children, after gardening, before eating and drinking and after using clean water. The habit of washing hands using water alone cannot protect against bacteria and viruses. Especially if you don't wash your hands under running water. This habit must be immediately abandoned and changed to a better one with standard procedures for washing hands with soap.

The correct way to wash hands with soap is to rub the palms together, rub the backs of both hands, intertwine the palms and rub them together, link the fingers between the palms in opposite directions, rub the thumbs in a circular motion followed by the area between the index fingers. and thumb alternately, rub both wrists in a circular direction, rinse with water and dry (Kemenkes RI, 2014).

Using soap in hand washing is known as an effort to prevent disease. This is because hands are agents that carry germs and cause pathogens that are transferred from one person to another through direct or indirect contact (Anhusadar and Islamiyah, 2020). During the pandemic, the habit of washing hands should be done every 1-2 hours. This is to prevent the spread of COVID-19. In addition, the community also provides a faucet or water reservoir in front of the house equipped with soap for every guest who visits the house to wash their hands first.

Eat vegetables and fruit every day

Eating vegetables and fruit every day is very important. This is because it contains vitamins and minerals that regulate energy metabolism, growth, and maintenance of the body. In addition, vegetables contain high fiber which is useful for maintaining the intestines. Each family member is expected to consume 3 servings of fruit and 2 servings of vegetables or vice versa every day. How to process vegetables is quite important so that vitamins and minerals remain, it is better to eat vegetables fresh or steamed, because if they are boiled they tend to dissolve vitamins and minerals. During the pandemic, consuming vegetables and fruit must be increased to maintain the body's immunity. Children under 5 years of age and adults over 65 years of age are classified as vulnerable to COVID-19 disease.

Doing exercise activities

This pandemic all ages must give up and immediately wash their hands. In addition to toddlers, the elderly must also be considered for health monitoring. The implementation of this emergency is like checking temperature, weight, blood check tests (Waspiyah, Arifin, Latifiani, Rodiyah, Cahyani, Widiastuti, Pratiwi, & Ayu, 2021). Elderly exercise is done once

a month in the third week on Friday. In addition to the elderly, mothers are also allowed to participate in gymnastics. This activity also exists like PMT, varies from month to month. Gymnastics/structure leaders are members of the village cadres themselves.

The factors that influence the level of clean and healthy living behavior according to Desi's research are the level of knowledge and attitudes of the community. In addition, according to Gita's research, factors that influence a clean and healthy lifestyle are age and knowledge.

According to Lawrence Green, the factors that influence clean and healthy living behavior are divided into 3 parts, namely predisposing factors (age, level of community knowledge), enabling factors (facilities and facilities) and reinforcing factors (support from community leaders, behavior of health workers, and conveyed information). whether or not PHBS health promotion to the community) (Green, 2005).

Conclusion

The conclusion that can be obtained from the application of a clean and healthy lifestyle during the pandemic in Kalirancang Village, Alian District, is that the community understands the importance of maintaining a clean and healthy lifestyle, especially during the pandemic. One indicator of a clean and healthy household that is very concerned is washing hands with running water and using soap. This is very helpful in preventing the spread of COVID-19. Some residents have implemented hand washing and soap areas in front of their homes. In addition, indicators of physical activity carried out by residents are very diverse. Starting from a healthy walk every day or even a popular one is cycling.

This program suggested that the implementation of a clean and healthy lifestyle needs to be monitored by the village. This can be assisted by village cadres to intensively carry out socialization related to the application of a healthy lifestyle in the household. It is hoped that the 10 indicators of PHBS in the household can be applied to each family head in Kalirancang Village. So that family members are healthy and do not get sick easily.

Reference

- Anhusadar, L., & Islamiyah, I. (2020). Penerapan Perilaku Hidup Bersih dan Sehat Anak Usia Dini di Tengah Pandemi Covid 19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 463-475.
- Dinas Kesehatan Jawa Tengah. (2012). Dinas Kesehatan Provinsi Jawa Tengah.
- Green, W. L. et.al. (2005). *Health Education Planning a Diagnostik Approach*. The Johns Hopkins University. Mayfield Publishing Company.
- Kartika, Y., Pramestian, F., Masayu, N., Hasanah, H., Fera, F., & Arifin, R. (2021). Penerapan Pola Hidup Bersih dan Sehat untuk Meningkatkan Imunitas Tubuh di Desa Kalirancang, Alian, Kebumen. *Jurnal Abdi: Media Pengabdian kepada Masyarakat*, 7(1), 78-87. <http://dx.doi.org/10.26740/ja.v7n1.p78-87>.
- Kemendes RI. (2014). *Profil Kesehatan Indonesia*. Jakarta: Kemendes.
- Munasir, Z. (2016). Respons Imun Terhadap Infeksi Bakteri. *Sari Pediatri*, 2(4), 193-197. <https://doi.org/10.14238/sp2.4.2001.193-7>
- Prihanti, G. S., Lista, D. A., Habibi, R., Arsinta, I. I., Hanggara, S. P., Galih, R. P., & Sintia, F. (2018). Faktor-Faktor yang Mempengaruhi Tingkat Perilaku Hidup Bersih dan Sehat pada Tatanan Rumah Tangga di Wilayah Kerja Puskesmas Poned X. *Jurnal Sainatika Medika*, 14(1), 7-14.
- Rodiyah, R., Utari, I. S., Arifin, R., Waspiyah, W., & Damayanti, R. (2021). Ketahanan Pangan Bagi Anak di Masa Pandemi Covid-19: Sebuah Hak Fundamental (Perbandingan Indonesia-Malaysia). *Seminar Nasional Hukum Universitas Negeri Semarang*, 7(1). <https://doi.org/10.15294/snhunnes.v7i1.720>.

- Septianto, A., Wahyu, W., Nurmutia, S., Feblidiyanti, N., & Junaenah, J. (2020). Sosialisasi Pentingnya Pola Hidup Sehat Guna Meningkatkan Kesehatan Tubuh pada Masyarakat Desa Kalitorong Kecamatan Randudongkal Kabupaten Pemalang Provinsi Jawa Tengah. *DEDIKASI PKM*, 1(2), 55-62.
- Simbolon, P., & Simorangkir, L. (2018). Penerapan UKS dengan PHBS di Wilayah Kerja Puskesmas Pancur Batu Kabupaten Deli Serdang. *Jurnal Kesehatan Lingkungan Indonesia*, 17(1), 16-25. <https://doi.org/10.14710/jkli.17.1.16-25>
- Suryani, D., Nurdjanah, E. P., Yogatama, Y., & Jumadil, M. (2019). Membudayakan Hidup Sehat Melalui Gerakan Masyarakat Hidup Sehat (Germas) Di Dusun Mendang Iii, Jambu Dan Jrasah Kecamatan, Tanjungsari, Gunungkidul. *Jurnal Pemberdayaan: Publikasi Hasil Pengabdian Kepada Masyarakat*, 2(1). <https://doi.org/10.12928/jp.v2i1.486>
- Waspiah, W., Arifin, R., Latifiani, D., Rodiyah, R., Cahyani, K. F., Widiastuti, A. I., Pratiwi, A. R., & Ayu, A. S. (2021). Pemenuhan Hak Alimentasi Bagi Lansia di Masa Pandemi Covid-19 (Studi di Kedungkelor Wanureja Teegal). *Seminar Nasional Hukum Universitas Negeri Semarang*, 7(1). <https://doi.org/10.15294/snhunnes.v7i1.716>.
- World Health Organization. (2020). Tatalaksana klinis infeksi saluran pernapasan akut berat suspek penyakit COVID-19. *World Health Organization*, 4(March), 1–25.