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# Overview of Compliance Implementation of Public and Community Health Protocol Implementation on Effort to Break the Chain of Transmission of the Covid-19 Virus

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#### **ABSTRACT**

COVID-19 has been designated a global pandemic by the WHO because of the fast rate of spread between humans. WHO urges to practice physical distancing and implement health protocols as one of the initial preventive steps in breaking the chain of spread of COVID-19. Public places and facilities have a fairly large potential for COVID-19 transmission. For this reason, it is necessary to mitigate the impact of the COVID-19 pandemic to prevent the spread of COVID-19 in facilities or public places. This study aims to describe the implementation of health protocol compliance in the prevention and control of COVID-19 by providers of facilities or public places. This study is a study that uses a cross sectional design with a quantitative descriptive approach. Data collection is done through google form, then performed univariate data analysis. The results showed that as many as 471 (94.2%) public facilities implemented health protocols using masks, and 437 (87.4%) applied hand washing with running water. There are 447 (89.4%) public facilities that put up posters of the dangers of preventing COVID-19, and as many as 378 (75.6%) public facilities carry out cleaning with disinfectants. Based on the results of the study, it can be concluded that the application of the protocol health in public places during the COVID-19 pandemic is currently still relatively low. As a public place visited by many people, the public facility provider must implement health protocols in an effort to break the chain of transmission of the COVID-19 virus.

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## 1. INTRODUCTION

Diseases that have symptoms similar to pneumonia were found to first appear in Wuhan City, Hubei Province, China at the end of December 2019, but the cause of the disease is not yet known. Then, this disease became an epidemic that spreads quickly with a chain of transmission between humans (Zhi, 2020). Day by day, the spread of this disease continues to spread not only in mainland China but also to other countries. Based on research, it is known that this disease is caused by a new type of corona virus that has never been identified in humans before (WHO, 2020). This virus is called SARS-CoV-2 which was previously called 2019-nCoV which is still in the same family as the virus that causes Middle East disease.

Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The spread of the 2019-nCoV virus was very fast, reaching 204 countries in the world. In the end, in March 2020 the World Health Organization (WHO) designated this disease as a global pandemic and called this corona virus COVID-19 (Corona Virus Disease in 2019). Statistical data on the spread of COVID-19 released by the World Health Organization (WHO) on September 8, 2021, with 224 countries affected by the COVID-19 pandemic, shows the number of confirmed positive cases of COVID-19 is 221,648,869 cases with total deaths due to COVID-19 19 worldwide amounting to 4,582,338 (WHO, 2021). Based on worldometers, on September 9, 2021, Indonesia was in the 13th position with the highest positive spread of COVID-19 in Indonesia world, with 5,990 new cases and 334 deaths. Meanwhile, based on data from the Indonesian Ministry of Health (Kemenkes RI) on September 9, 2021, there were 4,153,355 positive cases of COVID-19 in Indonesia with a total of 3,887,410 recovered cases, followed by the death rate from COVID-19 of 138,116.

In a short time the spread and number of cases of COVID-19 disease in various countries is increasing. On March 2, 2020, Indonesia reported cases of COVID-19 and the number is increasing to date. The number of COVID-19 cases in Indonesia as of July 17, 2020 has reached 81,668 cases with a death rate of 3,873 cases. One of the COVID-19 red zone areas is North Sumatra with 2,693 cases with 136 deaths. This situation is increasingly having an impact on the political, economic, social, cultural, defense,and security, as well as the welfare of the people in Indonesia, so that comprehensive strategies and efforts are needed in accelerating the handling of COVID-19 (Purba, 2021).

The government is also trying to break the chain of the spread of COVID-19 in Indonesia. One of them is by issuing Large-Scale Social Restrictions (PSBB) which limit the movement and activities of people outside the home, and comply with the health protocols set by the Government (Andriani, 2020). The high positive number of COVID-19 to date has caused a change in various aspects of life. so that programs in the health sector are now focused on handling and preventing COVID-19. With this COVID-19, humans are required to make changes, both in thinking, behaving, and even working. The COVID-19 pandemic has certainly become a very big challenge in various countries, especially Indonesia. This kind of health problem is certainly a new challenge for stakeholders in providing solutions (Kemenko PMK, 2020). Based on a statement from WHO, one of the efforts that can be taken to protect yourself so you can avoid this virus is: diligently clean hands with soap, use

alcohol-based liquids, avoid frequently touching the face (eyes, mouth and nose) as well as limiting physical contact with other people or maintaining a distance (social distancing) (Wiranti et al., 2020).

One method of epidemiological monitoring is to watch passengers from the affected country/territory in airport. Surveillance operations for passengers from infected countries who are not at risk and do not exhibit symptoms are conducted by monitoring the HAC (Health Alert Card) distributed at the country's border. State entry officers are responsible for notifying the local health office at the address specified on the HAC(Siregar, 2020; Kementerian Kesehatan RI, 2020).

Public places and facilities are areas where people carry out social life activities and carry out activities to fulfill their needs. The risk of movement of people and the gathering of people in public places and facilities, has a fairly large potential for COVID-19 transmission. So that the wheels of the economy can continue to run, it is necessary to mitigate the impact of the COVID-19 pandemic, especially in public places and facilities. The community must make changes to their lifestyle with the order and adaptation of new habits (new normal) so that they can live productively and avoid the transmission of COVID-19. Discipline in applying the principles of a cleaner and healthier lifestyle is the key in suppressing the transmission of COVID-19 in the community, so it is hoped that the COVID-19 outbreak will end soon .

In relation to efforts to overcome and break the chain of spread of COVID-19, the fact is that many people still do not wear masks when in public places, gather in crowded places even when there are members of the public. his family died due to COVID-19 there were some who did not heed so they carried out a general funeral procession. As a result, the transmission of COVID-19 spreads rapidly (Hasibuan, 2020).

Health protocols are rules and conditions that need to be followed by all parties in order to carry out activities safely during this pandemic. According to the Ministry of Health (2020) that the health protocol was established with the aim that people can carry out activities safely and do not endanger the safety or health of others. The government sets a strategy for implementing health protocols through the Decree of the Minister of Health of the Republic of Indonesia No. 382/2020 concerning Public Health Protocols in public places and facilities in the context of preventing and controlling COVID-19.

However, there are still many people who have not implemented health protocols in their daily activities, especially when they want to travel outside the home such as visiting places or public facilities. So this study was written with the intention of describing the level of public awareness in the application of health protocols during the pandemic COVID-19 while in public places. The purpose of this study is also to see whether public places in the North Sumatra region have implemented health protocols in accordance with KEPMENKES RI Number HK. 01. 07/MENKES/382/2020 Regarding Health Protocols in Public Places and Facilities for Control of Corona Virus Disease 2019 (COVID-19)

# 2. RESEARCH METHOD

The research method used in this study is a quantitative descriptive research method with a cross-sectional design. The population in this study are public places in the North Sumatra region where direct observations will be made regarding the compliance of public facility service providers and the orderly behavior of public health protocols when visiting public facilities during the COVID-19 pandemic. The sample is 500 public places spread across the province of North Sumatra, with the sampling method using the Probability Sampling method.

## Research Location and Time

This research was conducted in 500 public facilities in the area of North Sumatra province, including health facilities (hospitals, clinics, health centers, etc.), educational facilities (campus, schools), religious places (churches, mosques, temples, temples), children's playgrounds (playgrounds, kindergartens, PAUD), public places (hotels, restaurants, terminals, malls), public transportation, and places of work.

Public facilities that are the object of research, are then observed to assess compliance with the application of health protocols in these public places, taking into account the standards for implementing health protocols during the COVID-19 pandemic. Visitors to public facilities are also observed regarding compliance in implementing health protocols during the current COVID-19 pandemic. This research was conducted from June 2021 to August 2021.

## Data collection technique

While the data collection technique used in this study used an instrument in the form of a questionnaire (questionnaire). The quantitative data obtained were carried out by making direct observations in public places that were used as objects for observing compliance with the application of health protocols. Furthermore, the results of the observation are carried out on a google form, by filling in the an online questionnaire that has been prepared previously, contains questions to assess compliance with the implementation of health protocols in public places.

At public facilities that are the object of research observations, direct observations will be made to assess compliance with the implementation of health protocols by service providers or visitors during the COVID-19 pandemic. Furthermore, the data will be tabulated descriptively and univariate analysis will be carried out to show the percentage of each facility that applies standard health protocols during the COVID-19 pandemic.

The percentages were obtained from the results of research questionnaires, in the form of percentages related to the standard application of health protocols for efforts to prevent COVID-19 in public facilities (provision of COVID-19 prevention posters, checking body temperature, maintaining distance, wearing masks, washing hands, and spraying disinfectants), as well as percentages related to the description of visitor behavior while in public facilities, to the implementation of health protocols carried out by visitors.

#### 3. RESULT AND ANALYSIS

The results of the distribution of characteristics of the variables and research subjects can be seen in the following table.

Table 1. Distribution of Research Variable Characteristics from Overview of Monitoring Results of Public Facilities Implementation of North Sumatra Regional Health Protocol

	N		(%)	
Variable				
	There is	No	There is	No
		there is		there is
Found the danger poster of COVID-19	447	53	89.4	10.6
Prevention				
Application by checking the temperature	453	47	90.6	9.4
It was found an appeal to keep a distance of 1	462	38	92.4	7.6
meter				
There was an appeal for the use of masks	471	29	94.2	5.8
There is a place to wash hands	437	63	87.4	12.6
There is soap for washing hands	207	293	41.4	58.6
There is a hand sanitizer	331	169	66.2	33.8
Application of cleaning with disinfectant in	122	378	24.4	75.6
public places				

Table 1 above shows the distribution results of the fourth variable as many as 471 (94.2%) public places that have been observed running the health protocol program to always use masks, this is related to the standards set by the government. In addition, we can observe based on other variables showing that there are 453 (90.6%) who have implemented a body temperature check to know someone's health. In variable 5 as many as 437 (87.4%) apply hand washing with running water and the results in variable 1 there are 447 (89.4%) public places putting up COVID-19 prevention hazard posters, but in variable 8 there are 378 (75.6%) public facilities that still rarely apply cleaning with disinfectants. The appeal to maintain a distance of 1 meter (physical distancing) was also implemented in 462 (92.4%) public places, this aims to reduce the risk of transmission of COVID-19.

Observations were made in order to determine the level of community compliance by implementing health protocols. To improve the implementation of actions. To prevent transmission, the public is expected to follow the rules that have been set during the current COVID-19 pandemic. The spread of the corona virus is so fast that it requires high awareness from all walks of life.

Table 2. Distribution of Characteristics of Research Subjects from the Overview of Monitoring Results of Public Facilities Community Behavior in Implementing the Regional Health Protocol of North Sumatra

Research Subject	Community Behavior				
	N Whole	N Part	N Nothing	Obey/No obey	
Visitors want to take measurements body temperature	163	18	319	No Obey	
There are people who don't wear masks in public facilities	25	326	149	No Obey	
Visitors want to wash their	157	225	118	Obey	
hands when enter place				-	
There is visitors hand sanitizer	93	297	110	No Obey	
Visitors do social distancing	121	211	168	No Obey	
(keep a distance of 1 meter)				,	
There is visitors crowd	161	220	119	Obey	
Visitors avoid shaking hands	186	216	98	Obey	
There are visitors with equipment own (worship equipment)	116	141	243	No Obey	

From table 2 above shows the results of measuring body temperature, it can be seen data from 500 public places that have been observed including 163 places, all visitors want to take body temperature measurements, some of the 18 places visitors want to have their body temperature checked. However, there are 319 places where visitors are reluctant to check body temperature, which means that people are still not complying with health protocols. This makes it easier for people to be infected with the corona virus.

The use of masks can be seen from the data from the monitoring description above in 500 public places including 25 places that are visitors wear masks, apart from that from 326 places some visitors use masks and 149 places where visitors don't wear masks, this is an act of community behavior who does not want to follow the protocol that has been set by the government. People still don't understand the fast transmission of the corona virus through droplets, so they take this problem lightly and ignore the use of masks, even though masks are a fairly effective prevention method.

Washing hands can be seen from data from 500 public places that have been observed in the North Sumatra area including there are 157 places, visitors want to carry out health protocols by washing their hands when entering these public facilities, some of the results are from 225 public places where visitors want to wash their hands before entering the public area and as many as 118 public places visitors don't want to wash their hands before entering. The results above are more people who obey to wash their hands. Even though there are many benefits of washing hands, one of which is that it can kill germs and bacteria on the surface of the skin so that bacteria do not enter the mouth and reside in the respiratory tract.

Using a hand sanitizer, you can see data from 500 public places that have been observed including 93 public places, including all visitors using hand sanitizer, some of the 297 public facilities visitors use hand sanitizer, but there are 110 places where visitors don't want to use hand sanitizer, it can be interpreted that people are still not obedient to health protocol. Just like the discussion above, hand sanitizer is a substitute for washing hands when doing

activities outside the home, hand sanitizer containing active alcohol can kill germs as well as prevent the transmission of the COVID-19 virus which is transmitted through physical contact.

Maintaining a distance of up to 1 meter (social distancing) can be seen from data from 500 public places that have been observed, there are 121 places, of all visitors implementing social distancing (maintaining 1 meter distance), some of the 211 places, visitors also implementing social distancing. But as many as 168 places, visitors who come do not practice social distancing, meaning that there are still many people who do not comply with health protocols. This is a non-pharmaceutical intervention intended to prevent the transmission of COVID-19 disease.

Staying away from crowds can be seen from data from 500 public places, including 161 places of all visitors avoiding crowds. In addition, some of the 220 visitor places also follow health protocols by avoiding crowds. But as many as 119 public facilities, visitors don't want to avoid crowds. This shows that there is still a sense of community compliance with health protocols. By avoiding crowds you can protect yourself and others who are vulnerable affected by the COVID-19 virus such as the elderly and people with chronic diseases.

Avoid shaking hands, as can be seen from data from 500 public places where 186 of the visitors avoided shaking hands, while 216 places where some visitors also avoided shaking hands, but in 98 other places there were visitors who did not want to avoid shaking hands. It was observed that there were fewer people who did not comply than those who obeyed the health protocol. The corona virus that attacks the respiratory tract can be transmitted when shaking hands with an infected person, the virus is carried when touching the nose, mouth or sensitive parts on the face, and enters the body, causing infection. This habit is one of the fastest methods of contracting the COVID-19 virus.

Bringing personal worship equipment, you can see data from 500 public facilities that have been observed, including 116 places from all visitors bring their own equipment such as worship equipment, while in 141 other places visitors also bring personal worship equipment. And there are 243 places next to visitors those who came did not want to bring their own worship equipment. It can be interpreted that there are still many people's behaviors that do not comply with health protocols, even though this is behavior that has a good impact on body health and is useful for avoiding us being exposed to the COVID-19 virus.

#### 4. DISCUSS

A person's compliance with the rules will be influenced by the existing knowledge, attitudes and regulations, especially the losses that will be obtained if you do not carry out this behavior (Tambunan, 2020). According to Nadiya (2020), everyone should practice personal hygiene. According to Romadlon (2016), it includes bathing, clothing, handwashing, and sleeping behaviour.

Observations were made in order to determine the level of community compliance by implementing health protocols. To improve the implementation of actions. To prevent transmission, the public is expected to follow the rules that have been set during the current COVID-19 pandemic. The spread of the corona virus is so fast that it requires high awareness from all walks of life.

Knowledge is one of the variables that determine how people behave regarding health (Weni, 2019). Individuals are willing to accept influence from others when they anticipate a favourable reply or response from the other person (Ashar, 2020; Siregar, 2020b). The results show that respondents who have higher education, good knowledge and good attitudes tend to be more obedient to Covid-19 policies (Wiranti et al., 2020)

Health protocols for the community in public places or facilities in the context of preventing and controlling COVID-19 are prepared to increase participation. In order to anticipate the transmission of the corona virus, this health protocol can be developed by each related party according to their characteristics and needs. In the North Sumatra area, the death rate caused by the COVID-19 virus is very high because there are still many people who have not implemented health protocols according to the directions of health workers. There are still 75% people with minimal knowledge about the spread of the COVID-19 virus, and the efforts that must be made in anticipating the disease. This research can be seen from the frequency of results from the application and prevention by checking the body temperature of the end, which is around 32.6%, meaning that the majority of the population in North Sumatra is very likely to be infected.

The results of Sari (2020) research show that there are 74.19% of people who have a high level of compliance in the use of masks. According to the findings of Arrazy (2019) research, the majority of market traders lack clean water channels (70.4 percent), do not have their own hand washing basins (79.0 percent), do not have watertight and closed trash cans (92.6 percent), and do not separate organic and non-organic waste in their kiosks (87.7 percent). However, the majority of traders (61.7 percent) have garbage cans and clean their kiosks daily (93.8 percent). According to Anggraeni (2018) the findings of an environmental sanitation evaluation conducted at Balmbangan Market in Banyuwangi, the eastern Blambangan market lacks a handwashing space for sellers and visitors. Traders should wash their hands with only running water from the available hose, avoiding the use of soap. Additionally, there are several disease vectoring animals such as rats, flies, and cockroaches (Anggraeni & Aslamiyah, 2018). According to the findings of Efendi (2018) research show evident in both markets in South Tangerang, which continue to face the same issue, namely that routine testing for clean water and wastewater has not been conducted every six months.

Washing hands can be seen from data from 500 public places that have been observed in the North Sumatra area including there are 157 places, visitors want to carry out health protocols by washing their hands when entering these public facilities, some of the results are from 225 public places where visitors want to wash their hands before entering the public area and as many as 118 public places visitors don't want to wash their hands before entering. The results above are more people who obey to wash their hands. Even though there are many benefits of washing hands, one of which is that it can kill germs and bacteria on the surface of the skin so that bacteria do not enter the mouth and reside in the respiratory tract.

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Handwashing with soap is one of the sanitation procedures that humans use to clean their hands and fingers with water and soap to stay clean and break the germ cycle. Handwashing with soap is also referred to as a preventative measure (Amar, 2021). This is because hands are frequently agents that convey germs and facilitate the transmission of infections from one person to another, either directly or indirectly (using other surfaces such as towels and glasses). Handwashing before cooking or eating is just as critical as handwashing after using the restroom to prevent infectious infections. In comparison, our study discovered that handwashing prior to cooking or eating is less common than after using

the restroom, as other studies have discovered (Tuzun, 2015). While handwashing with water alone is more prevalent, it has been shown to be less effective in maintaining health than handwashing with soap. While using soap in handwashing requires more time, soap is beneficial because the fat and grime that adhere to the hands will be released as the hands are rubbed and rubbed to remove them. Germs thrive in the fat and filth that adhere to this condition (Amar, 2021).

Proper handwashing consists of six steps: wetting the hands and rubbing the palms, backs, and between the fingers, the backs of the fingers, rubbing the thumbs and nails, and finally rinsing with clean water. Hygiene practices such as handwashing with soap can help prevent infectious diseases such as diarrhoea and helminthiasis in the community. Handwashing behaviour, particularly with soap, remains a critical goal in health promotion, particularly clean and healthy living (Putri, 2017). Handwashing with soap is not a daily behaviour that the general public engages in with low handwashing with soap behaviour and a high level of handwashing with soap in reducing disease transmission; it is critical to have health promotion programs focused on boosting handwashing (Saputri, 2019; Talaat, 2016).

The Aceh Provincial Government has also undertaken health promotion measures, including as cooperating with local and international NGOs to construct handwashing facilities in schools, as well as latrines and clean water sanitation through the community-based comprehensive sanitation program. Changes in the environment have an effect on the number of diarrheal illness cases in Aceh Province (Syahlidin, 2021). If you are infected with this deadly virus, the spread of COVID-19 can be reduced by staying at home, because there will be fewer opportunities to meet a crowd or many people, but if you have to continue to do activities outside the home, it is necessary to apply prevention such as.

Another component contributing to compliance is a person's perception of a certain event or condition. The findings of this survey indicate that respondents adhere to the Covid-19 health protocol to a great degree and are overwhelmingly positive about health protocol policies. However, 32.9 per cent of respondents express reservations about the covid 19 health protocol's adoption. They were attempting to contain the spread of Covid-19 (Afrianti, 2021). This attitude can be formed due to a variety of things, including experience and belief. The existence of trust in government decisions is one of the factors that increases the positive attitude of the community in complying with the regulations for handling and preventing Covid-19 (Tobías, 2020).

## 5. CONCLUSION

From the results of the study as many as 471 (94.2%) public places that have been observed running the health protocol program to always use masks, this is related to the standards set by the government. In addition, we can observe based on other variables showing that there are 453 (90.6%).

It is hoped that better cooperation or support from the community will be realized for the implementation of protocols or regulations related to the prevention of COVID-19 masks, wash hands with soap and running water, keep a distance. In addition, you can bring hand sanitizer, bring personal worship equipment, use non-cash payment alternatives, and clean up after leaving the house. has implemented a body temperature check to determine a person's health. Then in other variables as many as 437 (87.4%) apply hand washing with running water and the results in variable 1 there are 447 (89.4%) public places put up danger posters for Covid-19 prevention, but in variable 8 there are 378 (75.6%) public facilities that still rarely apply cleaning with disinfectants. Because if there is no participation from the community, the policy will not have a maximum impact and will facilitate the spread of the virus so that the pandemic will not end.

#### 6. REFERENCES

- Afrianti, N. (2021). Faktor-Faktor yang Mempengaruhi Kepatuhan Masyarakat terhadap Protokol Kesehatan Covid-19. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, 11(1), 113–124. https://doi.org/https://doi.org/10.32583/pskm.v11i1.1045
- Amar, R. Y. (2021). The Correlationbetween Knowledge and Habit of Handwashing with Soap on Students of Primary School101893 Bangun Rejo. *International Archives of Medical Sciences and Public Health*, 2(1), 34-43.
- Andriani, S.Si, Apt, M.Sc, Ph.D, H. (2020). Effectiveness of Large-Scale Social Restrictions (PSBB) toward the New Normal Era during COVID-19 Outbreak: a Mini Policy Review. *Journal of Indonesian Health Policy and Administration*, 5(2). https://doi.org/10.7454/ihpa.v5i2.4001
- Anggraeni, M. D., & Aslamiyah, M. (2018). Gambaran Sanitasi Lingkungan di Pasar Blambanga, Banyuwangi Tahun 2017. *Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat, Vol. 3*(No. 4), Hal. 1-10.
- Arrazy, S. (2019). Persepsi Masyarakat tentang Higiene Sanitasi Pasar Tradisional Kota Medan. Contagion: Scientific Periodical of Public Health and Coastal Health, 2(1), 1-13. https://doi.org/http://dx.doi.org/10.30829/contagion.v2i1.7276
- Ashar, Y. K. (2020). Tingkat Pengetahuan dan Sikap Pengelolaan Sampah pada Mahasiswa Fakultas Kesehatan Masyarakat UIN Sumatera Utara Medan. *Contagion: Scientific Periodical of Public Health and Coastal Health*, 2(1), 28–38. https://doi.org/http://dx.doi.org/10.30829/contagion.v2i1.7258
- Efendi, R., & Syifa, J. N. A. (2018). Status Kesehatan Pasar Ditinjau Dari Aspek Lokasi dan bangunan pada Pasar Ciputat dan Pasar Modern BSD Kota Tangerang Selatan. *Jurkessia*, *IX*(1), 9–14. https://doi.org/10.1007/978-1-4614-7990-1
- Hasibuan, R. P. P. M., & Ashari, A. (2020). Optimasi Peran Negara Menghadapi Pandemi Corona Virus Disease 2019 dalam Perspektif Hukum Tata Negara Darurat. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(7). https://doi.org/10.15408/sjsbs.v7i7.15379
- Kementerian Kesehatan RI. (2020). *Pedoman Kesiapsiagaan Menghadapi Coronavirus Disesase (Covid-19)* (Listiana Aziza (ed.); Pertama). Kementerian Kesehatan RI.
- Nadiya, A. (2020). Hubungan Personal Hygiene dan Sanitasi Lingkungan dengan Penyakit Scabies pada Santri di Pondok Pesantren Sa'adatuddaren. Contagion: Scientific Periodical of Public Health and Coastal Health, 2(2), 99-106. https://doi.org/10.30829/contagion.v2i2.7240
- Purba, I. P. M. H. (2021). Implementasi Undang-UndangNomor 6 Tahun 2018 Tentang Kekarantinaan Kesehatan di Jawa Timur Menghadapi Pandemi COVID-19. *Journal of Chemical Information and Modeling*, 4, 1–11.
- Putri. (2017). Perbedaan Pengaruh Media Pembelajaran Lagu Dan Slide Pada Praktik Mencuci Tangan Ditinjau Dari Jenis Kelamin'. *Jurnal Penelitian Ilmu Pendidikan*, 1(1), 1–10. https://doi.org/doi.10.21831/jpipfip.v9i2.12910
- Romadlon, & Syahri. (2016). Hubungan Praktik Personal Hygiene Dan Kondidsi Sanitasi Lingkungan Dengan Kejadian Scabies Di Pondok Pesantren Roudhotu Tholibin Sirau Kecamatan Kemranjen Kabupaten Banyumas. Poltekkes Semarang.
- Saputri. (2019). Pengaruh Pendidikan Kesehatan Menggunakan Audio-Visual Terhadap Pengetahuan Cuci Tangan Pakai Sabun (CTPS) Pada Anak Kelas IV Di Mi Jamilurrahman Bantul'. *Medika Respati: Jurnal Ilmiah Kesehatan*, 14(3), 245–254.
- Sari, D. P., & 'Atiqoh, N. S. (2020). Hubungan Antara Pengetahuan Masyarakat Dengan Kepatuhan Penggunaan Masker Sebagai Upaya Pencegahan Penyakit Covid-19 Di Ngronggah. *Infokes: Jurnal Ilmiah Rekam Medis Dan Informatika Kesehatan, 10*(1), 52–55. https://doi.org/10.47701/infokes.v10i1.850
- Siregar, P. A. (2020a). Manajemen surveilans Covid-19 di wilayah kerja Bandar Udara Internasional Hang Nadim. *Jhecds*, 6(2), 73–81. https://doi.org/10.22435/jhecds.v6i2.3989
- Siregar, P. A. (2020b). *Promosi Kesehatan Lanjutan dalam Teori dan Aplikasi* (Edisi Pert). PT. Kencana.
- Syahlidin, T. (2021). Analysis of the Implementation of Health Promotion Programs on Diarrhea

- Disease Control at Kuala Public Health Center, Bireuen Regency. *International Archives of Medical Sciences and Public Health*, 2(1), 44–56.
- Talaat. (2016). Effects of Hand Hygiene Campaigns on Incidence of Laboratory-confirmed Influenza and Absenteeism in Schoolchildren, Cairo, Egypt. *Emerging Infectious Disease Journal-CDC*, 17(4), 1–10.
- Tambunan, M. (2020). Factors Associated with the Use of HIV Screening in the PMTCT Program by Pregnant Women. *International Archives of Medical Sciences and Public Health*, *1*(1), 1-15.
- Tobías. (2020). Evaluation of The Lockdowns for The SARS-CoV-2 Epidemic in Italy and Spain After One Month Follow Up. *Sci Total Environ*, *725*(1), 138–145.
- Tuzun. (2015). Turkey Handwashing Survey: Suggetion for Taking the Ecological Model into Better Consideration. *Environ. Health Prev. Med*, 20(1), 325–331. https://doi.org/10.1007/s12199-015-0470-6
- Weni, L. (2019). Determinan Pemilihan Metode Kontrasepsi Jangka Panjang Pada Akseptor KB Aktif di Puskesmas Pedamaran. *Contagion: Scientific Periodical of Public Health and Coastal Health, 1*(1), 9–16. https://doi.org/10.30829/contagion.v1i01.4819
- WHO. (2020). Coronavirus disease 2019 Situation Report 155.
- WHO. (2021). "Coronavirus Disease (Covid-19) Situation Reports." Cluster Covid-19 (2020).
- Wiranti, Sriatmi, A., & Kusumastuti, W. (2020). Determinan kepatuhan masyarakat Kota Depok terhadap kebijakan pembatasan sosial berskala besar dalam pencegahan COVID-19. *Jurnal Kebijakan Kesehatan Indonesia*, 09(03), 117–124.
- Zhi, Z. L. X. B. X. Z. (2020). Epidemiology Working Group for NCIP Epidemic Response, Chinese Center for Disease Control and Prevention. [The epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19) in China]. https://doi.org/10.3760/cma.j.issn.0254-6450.2020.02.003