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# The Level of Community Compliance in Implementing Health Protocols to Prevent the Spread Of COVID-19

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**Abstract---** World health problems caused by corona virus or pandemic needs to get special attention from health practitioner, scientist and community. Some health protocols initiated by the Ministry of Health are by wearing masks, maintaining distance and washing hands, avoiding crowds and limiting mobility outside home. The purpose of this study was to determine the level of community compliance at Banjar Buluh and Banjar Sakih, Guwang village, Sukawati Gianyar in implementing health protocols in their daily routines. This study employed descriptive design with cross sectional approach. The setting of this research was in the area of Banjar Buluh and Banjar Sakih, Guwang village, Sukawati – Gianyar. There were 101 respondents recruited as sample of the study through accidental sampling. The data were collected by using questionnaire. The data were analyzed by using Statistical Package for the Social Science (SPSS for Windows, Release 23.0). The data analyzed included descriptive analysis (mean, standard deviation, frequency, percentage and range). The results showed that the majority of the respondents in Banjar Buluh and Banjar Sakih, Guwang village, Sukawati-Gianyar were classified as non-compliance in applying health protocols. There were 59 respondents (58.4%) were in the category of non-compliance in applying health protocols. The community at Banjar Buluh and Banjar Sakih, Guwang village, Sukawati-Gianyar should be reminded in implementing the 5M health protocols. Based on the finding of the research, the majority of respondents are still in the category of non-compliance in implementing health protocols. Promotive action are needed to improve community compliance in applying health protocols.

**Keywords---**community compliance, COVID-19, health protocols, implementing, world health

## Introduction

The world health problem or pandemic that is currently in the spotlight and is very important to get special attention from health workers, scientists and the general public is the disease caused by the corona virus. Corona Virus Disease – 19 or better known as Covid-19 was designated by WHO (World Health Organization) as a Public Health Emergency of Concern for the World (Mustopa & Supriadi, 2020). On March 12, 2020, WHO declared COVID-19 a pandemic. The COVID-19 mortality rate in Indonesia is 8.9%, this figure is the highest in Southeast Asia (Simanjuntak et al., 2020). The increase in Covid-19 cases in Indonesia continues to grow. The spokesperson for the COVID-19 Task Force said that in the first week of September 2020 the increase in COVID-19 in Indonesia reached 18.6%. The highest increase at the beginning of the week of September 2020 occurred in Bali. In just 1 week the increase in COVID-19 cases in Bali exceeded 100 percent (Anggreni & Safitri, 2020).

The community is the front line so that the spread of the corona virus does not spread. Actions that can be taken by the community include implementing health protocols such as washing hands with soap in running water, wearing masks when traveling, and keeping a distance. The community plays a very important role in breaking the chain of transmission of COVID-19 (Mustopa & Supriadi, 2020). However, often the application of health protocols in the community has not run optimally, when the government imposes an appeal for activity restrictions, for example, there are still many people who gather in one place without implementing a health protocol. This is a mediator in the spread of the virus that causes Covid-19 on a larger scale. The existence of a trivial opinion of the Indonesian people towards the existence of this virus is a factor that plays a role in the behavior of not heeding government appeals (Niruri et al., 2021).

Based on data from the COVID-19 officers of the Republic of Indonesia, Bali Province ranks eighth out of all regions in Indonesia in terms of the number of positive COVID-19 patients, with a total of 3,892 people. Gianyar Regency is one of 4 regencies in Bali that are in the High-Medium category in the Risk Map for the Spread of COVID-19 (Sukawana & Sukarja, 2021). According to data from the COVID-19 Handling Task Force, it is known that, only four sub-districts in Gianyar Regency have carried out the maximum 100% implementation of prokes, namely, Blahbatuh District, Sub-district. Tampaksiring, Payangan and Tegalalang Districts. Meanwhile, three other sub-districts in the Gianyar Regency are still in the category of health protocol compliance that has not been maximized, namely Sukawati District, Ubud District, and Gianyar District (Officer COVID 19 of Indonesia, 2021). Sukawati sub-district is one of the sub-districts in Gianyar Regency which has the largest number of villages and official banjars (Central Bureau of Statistics Bali, 2021). If it is seen from the monitoring data for compliance with the health protocol and also based on the number of villages and official banjars owned, this research will be carried out in one of the villages in the Sukawati District, namely Guwang Village. Guwang Village is one of the traditional villages in the Sukawati District area which is famous for the Art Village because it has high cultural historical value. Guwang Village covers 7 (seven) official banjars, namely Banjar Tegal, Banjar Buluh, Banjar Manikan, Banjar Tatag, Banjar Dangin Jalan, Banjar Wangbung and Banjar Sakih (BPS Gianyar, 2019). Based on the preliminary study, this research was conducted in Banjar Buluh and Banjar Sakih because these two banjars are official banjars that have the largest population compared to other banjars in the Guwang Traditional Village area.

The best way to control and prevent this disease is to break the chain of the spread of COVID-19. Breaking the chain of transmission can be implemented by implementing health protocols in a disciplined manner. That is by frequently washing hands with running water and soap or using a hand sanitizer, using a mask and not touching the face area before washing hands, and keeping a distance in every activity (Sukawana & Sukarja, 2021). Health protocols are rules that must be implemented by everyone in order to avoid the transmission of COVID-19 and can do activities outside the home more safely (González-Rubio et al., 2020). If the community adheres to the application of health protocols, it is expected to minimize the spread of the virus and break the chain of transmission of Covid-19 (Erlin et al., 2020). Several health protocols initiated by the Ministry of Health are wearing masks, maintaining distance, washing hands, avoiding crowds and limiting mobility outside the home (5 M) (Putra et al., 2021).

Various concessions to the implementation of health protocols still occur in various regions and regions, although calls and raids are often carried out by officers. The sanctions given have not been able to provide a deterrent effect to the community to comply with the health protocol. The COVID-19 outbreak, which has been going on for more than a year in Indonesia and the cases continue to increase, causes us to think that the problem is no longer about knowledge of COVID-19 and how it is transmitted, but rather about public compliance in implementing health protocols to break the chain of COVID-19 spread (Putra et al., 2021). Community compliance is still a phenomenon that must continue to be improved to improve behavior in breaking the chain of transmission of COVID-19, so it is necessary to make an effort, one of which is done through research on the level of community compliance in the application of health protocols. The results of this study are expected to be able to provide an overview to the community about the importance of implementing health protocols and also as a benchmark for the community itself in implementing health protocols (Spratlin et al., 2008; Sobol et al., 2020).

## Method

The design in this research is descriptive cross sectional. The location of this research is the area of Banjar Buluh and Banjar Sakih Guwang Traditional Village, Sukawati Gianyar. The population in this study were residents of the Banjar Buluh and Banjar Sakih communities in the Guwang Traditional Village area. The sampling technique used in this research is accidental sampling. The sample in this study will be selected based on the criteria determined by the author during the data collection period (Vaishya et al., 2020; Butler & Barrientos, 2020). So that obtained a number of 101 respondents. Collecting data using a questionnaire. The collected data were analyzed using the

Statistical Package for the Social Science (SPSS for Windows, Release 23.0). The data analyzed included descriptive analysis (Mean, SD, Frequency, Percetangle and Range) for demographic and univariate data for each variable. Determination of the choice of analysis will be determined after seeing the distribution of data distribution (Padwa et al., 2016; Rowe et al., 2020).

## Result

Table 1  
Distribution of research participant characteristics

Characteristic	f/Mean	%/SD
Age	31.51	9.54
Gender		
Man	60	59.4
Woman	41	40.6
Education		
Primary School	1	1.0
Junior High School	2	2.0
Senior High School	33	32.7
Diploma	28	27.7
Bachelor	37	36.6

Table 1 shows the average age of the respondents 31.51 (standard deviation 9.54). The majority of respondents in this study were male (n=60, 59.4%). Judging from the level of education, the majority have tertiary education S1/S2/S3 (n=37, 36.6%) and also have high school education (n=33, 32.7%). The majority of respondents' income in this study was 3,000,000 (n=47, 46.5%)

Table 2  
Distribution of community compliance categories in the application of Health protocols

Category	f	%
Obey	42	41.6
Not Obey	59	58.4

Table 2 shows that the majority of respondents are still not compliant (n=58.4, 59%) to the implementation of health protocols, while only (n=42, 41.6%) people are obedient to the implementation of health protocols. The results of this study indicate that the majority of respondents who answered the questionnaire in the Banjar Buluh and Banjar Sakih areas of the Guwang Sukawati Gianyar Traditional Village were still classified as not complying with the application of health protocols. If seen based on the distribution results of the community compliance category in the application of health protocols, out of 101 respondents, 59 respondents or 58.4% were still in the category of non-compliance with the application of health protocols. Of the 15 statement items given to 101 respondents in the Banjar Buluh and Banjar Sakih areas, several statement items indicate that the people of Banjar Buluh and Banjar Sakih have not complied with the Health protocol in fighting COVID-19, namely statement items number 2,6,7, 9.11 (Moulson et al., 2020; Yen et al., 2020).

If we look at item number 2, the majority of respondents are still not used to carrying spare masks and replacing them every 4 hours. This can be seen in the answers of respondents who still answered Sometimes in the statement section as many as 33 people (32.7%). The function of masks is very important in preventing the spread of COVID 19 because masks have the ability to protect the wearer from bacteria, dust, infectious particles, or are useful for limiting the spread of droplets released by the wearer into the air (Howard et al., 2020). So people should always get used to using masks correctly and changing masks every 4 hours to protect themselves and others from infectious particles and droplets. In statement items number 6 and 7, the majority of respondents also answered. Sometimes the statement kept a minimum distance of 1 meter from other people when outside the house, which was 36 people (35.6%) and sometimes kept a distance from elderly people. a total of 35 people (34.7%). Maintaining a distance (social distancing) is very important in reducing interactions and crowds during the COVID-19 pandemic, and is

useful for preventing the spread of the COVID-19 virus among communities (Aslam, 2020). The group of people who are in old age or elderly, have a greater risk of being infected with the COVID 19 virus and have a great chance of transmitting the virus (Yanti et al., 2020). In an effort to prevent the spread of COVID 19, people are expected to get used to keeping their distance from other people, especially the elderly when doing activities outside the home (Sohrabi et al., 2020; Patel et al., 2021).

In statement number 9 it can be seen that the majority of respondents still answered Frequently on the statement using public facilities or going to public places (public transportation, malls, markets, tourist attractions) as many as 39 people (38.6%). During a pandemic like now, most people who spend a lot of time in crowded public places and with high traffic, such as in various public places or in public facilities, will have a high risk of being infected with COVID 19 (Saadat et al., 2020). This can happen because the implementation of the health protocol, namely social distancing, has not been optimally implemented in all public places or public facilities. So that the implementation of strict health protocols is expected to be an effective way to suppress the spread of the COVID-19 virus in the community. In statement number 11 it was stated that the majority of respondents still answered Frequently on the statement touching the eyes, nose and mouth before washing hands, namely 36 people (35.6%). Always prioritizing personal hygiene by implementing Clean and Healthy Lifestyle (PHBS) is a must (Afrianti & Rahmiati, 2021; Martos-Benítez et al., 2021). It is absolute and very important for everyone to prioritize personal hygiene including washing hands, using hand sanitizer to clean hands that touch objects, and using masks rationally when visiting high-risk areas. So based on this fact, the application of PHBS as an absolute new habit to be applied independently by each person in order to protect himself from infection with the COVID 19 virus (Yanti et al., 2020).

The results obtained in this study stated that the majority of the people of Banjar Buluh and Banjar Sakih in the Guwang Sukawati Gianyar Traditional Village were still in the category of non-compliance in the application of the 5M Health protocol. These results are in line with the results of research conducted by Kuntardjo and Sebong in 2020 regarding the Interaction Pattern and Compliance of Market Trader Health Protocols in Semarang City where the majority of respondents have not complied with implementing health protocols properly such as washing hands, wearing masks and keeping a distance (Kuntardjo & Sebong, 2020). The implementation of health protocols is an absolute must to prevent the spread of the COVID-19 virus and end this pandemic. The community is an important element that has a major role in efforts to prevent and reduce the spread of the virus. Community compliance in implementing the 5M health protocol must always be improved, especially for people in the Banjar Buluh and Banjar Sakih areas of Guwang Traditional Village, Sukawati District, Gianyar. Based on the results of research conducted, the majority of respondents are still in the category of non-compliance in implementing the Health protocol. So that promotive actions to improve community compliance in the application of health protocols are needed through various activities that can be carried out involving collaboration between communities, local governments and related health agencies (Heriyadi et al., 2022; Umamaheswari & Vasumathi, 2022).

## Conclusion

The majority of the respondents in Banjar Buluh and Banjar Sakih, Guwang village, Sukawati-Gianyar were classified as non-compliance in applying health protocols. There were 59 respondents (58.4%) were in the category of non-compliance in applying health protocols. The community at Banjar Buluh and Banjar Sakih, Guwang village, Sukawati-Gianyar should be reminded in implementing the 5M health protocols. Based on the finding of the research, the majority of respondents are still in the category of non-compliance in implementing health protocols. Promotive action are needed to improve community compliance in applying health protocols.

## References

- Afrianti, N., & Rahmiati, C. (2021). Faktor-faktor yang mempengaruhi kepatuhan masyarakat terhadap protokol kesehatan covid-19. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, 11(1), 113-124.
- Anggreni, D., & Safitri, C. A. (2020). Hubungan Pengetahuan Remaja tentang COVID-19 dengan Kepatuhan dalam Menerapkan Protokol Kesehatan di Masa New Normal. *Hospital Majapahit (Jurnal Ilmiah Kesehatan Politeknik Kesehatan Majapahit Mojokerto)*, 12(2), 134-142.
- Aslam, F. (2020). COVID-19 and importance of social distancing.
- Bali Province COVID-19 Task Force. (2021). Bali Province Corona Virus Disease 2019 (COVID-19) Handling Task Force. (2021). <https://infocorona.baliprov.go.id>
- Butler, M. J., & Barrientos, R. M. (2020). The impact of nutrition on COVID-19 susceptibility and long-term consequences. *Brain, behavior, and immunity*, 87, 53-54. <https://doi.org/10.1016/j.bbi.2020.04.040>

- Erlin, F., Putra, I. D., & Hendra, D. (2020). Peningkatan Pengetahuan Siswa Dalam Pencegahan Penularan COVID-19. *JMM (Jurnal Masyarakat Mandiri)*, 4(4), 663-669.
- González-Rubio, J., Navarro-López, C., López-Nájera, E., López-Nájera, A., Jiménez-Díaz, L., Navarro-López, J. D., & Nájera, A. (2020). A systematic review and meta-analysis of hospitalised current smokers and COVID-19. *International Journal of Environmental Research and Public Health*, 17(20), 7394.
- Heriyadi, S. S., Armiyati, Y., Widodo, S., Warsono, W., & Khoiriyah, K. (2022). Description of clinical manifestations of COVID-19 patients in the isolation treatment room. *International Journal of Health Sciences*, 6(S3), 3375–3389. <https://doi.org/10.53730/ijhs.v6nS3.6454>
- Howard, J., Huang, A., Li, Z., Tufekci, Z., Zdimal, V., van der Westhuizen, H. M., ... & Rimoim, A. W. (2020). Face masks against COVID-19: an evidence review.
- Indonesian Ministry of Health. (2020). Guidelines for the Prevention and Control of Coronavirus Disease (COVID-19). Ministry of Health of the Republic of Indonesia. [https://covid19.go.id/storage/app/media/Protocol/2020/Juli/REV05\\_Pedoman\\_P2\\_COVID-19\\_13\\_Juli\\_2020.pdf](https://covid19.go.id/storage/app/media/Protocol/2020/Juli/REV05_Pedoman_P2_COVID-19_13_Juli_2020.pdf)
- Kuntardjo, N., & Sebong, P. H. (2020). Pola interaksi dan kepatuhan protokol kesehatan oleh pedagang di pasar X Kota Semarang: studi kualitatif eksploratif. *Jurnal VITASPERHERE*, 1(1), 1-9.
- Martos-Benítez, F. D., Soler-Morejón, C. D., & García-del Barco, D. (2021). Chronic comorbidities and clinical outcomes in patients with and without COVID-19: a large population-based study using national administrative healthcare open data of Mexico. *Internal and emergency medicine*, 16(6), 1507-1517.
- Moulson, N., Bewick, D., Selway, T., Harris, J., Suskin, N., Oh, P., ... & Krahn, A. D. (2020). Cardiac rehabilitation during the COVID-19 era: guidance on implementing virtual care. *Canadian Journal of Cardiology*, 36(8), 1317-1321. <https://doi.org/10.1016/j.cjca.2020.06.006>
- Mustopa, A., & Supriadi, D. (2020). FAKTOR-FAKTOR YANG MEMPENGARUHI PRILAKU MASYARAKAT DENGAN KEPATUHAN PROTOKOL KESEHATAN 3M SEBAGAI UPAYA PENCEGAHAN PENYAKIT COVID-19: LITERATURE REVIEW. *PIN-LITAMAS*, 2(1), 116-123.
- Niruri, R., Farida, Y., Priharsara, F., Yugatama, A., & Ma'rufah, S. (2021). Perilaku Masyarakat dalam Pelaksanaan Protokol Kesehatan sebagai Upaya Pencegahan Covid-19 di Punggawan, Banjarsari Surakarta. *Pharmacon: Jurnal Farmasi Indonesia*, 18(1), 75-81.
- Padwa, H., Teruya, C., Tran, E., Lovinger, K., Antonini, V. P., Overholt, C., & Urada, D. (2016). The implementation of integrated behavioral health protocols in primary care settings in project care. *Journal of Substance Abuse Treatment*, 62, 74-83. <https://doi.org/10.1016/j.jsat.2015.10.002>
- Patel, M. K., Bergeri, I., Bresee, J. S., Cowling, B. J., Crowcroft, N. S., Fahmy, K., ... & Feikin, D. R. (2021). Evaluation of post-introduction COVID-19 vaccine effectiveness: Summary of interim guidance of the World Health Organization. *Vaccine*, 39(30), 4013-4024. <https://doi.org/10.1016/j.vaccine.2021.05.099>
- Putra, I. D., Malfasari, E., Yanti, N., Erlin, F., Hasana, U., Harahap, A. S., & Hendra, D. (2021). Tingkat Kepatuhan Mahasiswa Kesehatan Dalam Berprotokol Kesehatan Pasca Lebih Dari Satu Tahun Masa Pandemi Covid-19. *Jurnal Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia*, 9(2), 429-434.
- Rowe, S. M., Godden, S. M., Nydam, D. V., Gorden, P. J., Lago, A., Vasquez, A. K., ... & Thomas, M. J. (2020). Randomized controlled trial investigating the effect of 2 selective dry-cow therapy protocols on udder health and performance in the subsequent lactation. *Journal of Dairy Science*, 103(7), 6493-6503. <https://doi.org/10.3168/jds.2019-17961>
- Saadat, S., Rawtani, D., & Hussain, C. M. (2020). Environmental perspective of COVID-19. *Science of the Total Environment*, 728, 138870.
- Simanjuntak, D. R., Napitupulu, T. M., Wele, A. M., & Yanie, R. (2020). Gambaran kepatuhan masyarakat menerapkan protokol kesehatan Covid-19 di tempat umum periode September 2020 di DKI Jakarta.
- Sobol, M., Blachnio, A., & Przepiorka, A. (2020). Time of pandemic: Temporal perspectives related to compliance with public health regulations concerning the COVID-19 pandemic. *Social Science & Medicine*, 265, 113408. <https://doi.org/10.1016/j.socscimed.2020.113408>
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... & Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International journal of surgery*, 76, 71-76. <https://doi.org/10.1016/j.ijssu.2020.02.034>
- Spratlin, J. L., Hui, D., Hanson, J., Butts, C., & Au, H. J. (2008). Community compliance with carcinoembryonic antigen: follow-up of patients with colorectal cancer. *Clinical colorectal cancer*, 7(2), 118-125. <https://doi.org/10.3816/CCC.2008.n.016>
- Sukawana, I. W., & Sukarja, I. M. (2021). Gambaran Kepatuhan Masyarakat Mawang Kelod Dalam Menerapkan Protokol Pencegahan Covid-19 Di Tempat Umum Bulan September 2020. *Community Publ Nurs*, 9(2), 204-10.

- Umamaheswari, M., & Vasumathi, R. (2022). Impact of COVID-19 on women owned firms. *International Journal of Health Sciences*, 6(S1), 11602–11610. <https://doi.org/10.53730/ijhs.v6nS1.7848>
- Vaishya, R., Javaid, M., Khan, I. H., & Haleem, A. (2020). Artificial Intelligence (AI) applications for COVID-19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(4), 337-339. <https://doi.org/10.1016/j.dsx.2020.04.012>
- Yanti, N. P. E. D., Nugraha, I. M. A. D. P., Wisnawa, G. A., Agustina, N. P. D., & Diantari, N. P. A. (2020). Public knowledge about covid-19 and public behavior during the covid-19 pandemic. *Jurnal Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia*, 8(4), 491-504.
- Yen, M. Y., Schwartz, J., Chen, S. Y., King, C. C., Yang, G. Y., & Hsueh, P. R. (2020). Interrupting COVID-19 transmission by implementing enhanced traffic control bundling: implications for global prevention and control efforts. *Journal of Microbiology, Immunology and Infection*, 53(3), 377-380. <https://doi.org/10.1016/j.jmii.2020.03.011>