



JURNAL PENGABDIAN MASYARAKAT DALAM KESEHATAN

Vol. 4 No. 2, October 2022

<https://e-journal.unair.ac.id/IPMK>

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IMPLEMENTATION OF HEALTH PROTOCOLS DURING COVID-19 PANDEMIC IN PONDOK PESANTREN IN THE SPECIAL REGION OF YOGYAKARTA

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ARTICLE HISTORY

Received: July 07, 2022

Accepted: December 28, 2022

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ABSTRACT

Introduction: COVID-9 is a global pandemic and causes changes in behavior and life. The implementation of health protocols is the most important aspect to prevent the transmission of COVID19, especially in the Islamic boarding schools (Pondok Pesantren) community. The aim of this study is to identify the practice of a clean and healthy lifestyle as well as the application of health protocols in the Pondok Pesantren to control the spread of COVID-19.

Methods: The preliminary survey was conducted as a part of training for the healthy student cadre and the establishment of COVID-19 shelters in Pondok Pesantren in The Special Region of Yogyakarta, Indonesia. Fourteen questions including the name of Pondok Pesantren and multiple-choice questions related to clean and healthy living behaviors comparison before and during the pandemic, health protocol implementation during the pandemic, and provision of COVID-19 prevention and control program.

Results: Total sample consisted of 84 students from 18 Pondok Pesantren in The Special Region of Yogyakarta. Among the factors affecting the student's compliance with health protocol implementation in Pondok Pesantren were the disparity of individual's understanding and obedience to rules and regulations regarding health protocol implementation (71,8%), inadequate facilities (12,8%), and other factors including that there was no strict supervision and punishment for violation upon regulations.

Conclusion: Pondok pesantren is an institution that needs more attention amid the pandemic of COVID-19. Dense population, minimum infrastructure, and relatively poor access to healthcare facilities have made them a vulnerable community.

KEYWORDS

clean and healthy living practice; covid-19; health protocol; pondok pesantren

Cite this as:

Pratama, Y. Y., Farhany, F. F., Amalia, I., Husna, N. & Widayari, V. (2022). Implementation of Health Protocols during COVID-19 Pandemic in Pondok Pesantren in The Special Region of Yogyakarta. *J. Pengabdian Masyarakat dalam Kesehatan*. 4(2). 74-81. Doi: [10.20473/jpmk.v4i2.37371](https://doi.org/10.20473/jpmk.v4i2.37371)

1. INTRODUCTION

Corona Virus Disease (COVID19) is a disease caused by infection with the SARS CoV-2 virus (Raoult et al., 2020). This virus was first discovered in Wuhan City, Hubei Province, China at the end of 2019 (Nisa, 2020). At the beginning of 2020, this virus was declared by WHO as a pandemic that hit the whole world (Keni et

al., 2020). COVID19 first hit Indonesia in early March 2020, precisely on March 2, 2020 when 2 Indonesian citizens were tested positive for COVID-19. After almost a year and a half, as of June 30, 2021, there have been 2 million Indonesians who have been confirmed positive for COVID-19. This condition is exacerbated by the existence of the Delta variant that

spreads in 34 provinces in Indonesia which makes health services such as hospitals collapse due to the large number of people infected with COVID-19 (Miftahussurur et al., 2022). One of the provinces that was severely affected by the COVID-19 delta variant is the Special Region of Yogyakarta Province (Luo et al., 2022).

The existence of COVID 19 has changed the practice of PHBS in the community. Based on the Regulation of the Minister of Health of the Republic of Indonesia Number. 2269/ Menkes/PER/XI/2011 Regarding PHBS Guidance Guidelines, PHBS is a set of behaviors that are practiced on the basis of awareness as a result of learning, where a person, family, group or community is able to help themselves (independently) in the health sector and play an active role in realizing public health. (Peraturan Menteri Kesehatan Republik Indonesia Nomor: 2269/MENKES/PER/XI/2011 Tentang Pedoman Pembinaan Perilaku Hidup Bersih Sehat (PHBS), 2011). PHBS is one of the efforts that can have a good impact on health and the quality of human resources, especially improving health status, nutritional status, and lifestyle. PHBS can be applied to activities at home and institutions both in government and private institutions (Azizah et al., 2020). One of the government institutions is a school environment where Islamic boarding (*Pondok Pesantren*) schools are one of them. Islamic boarding schools are recognized as having had a very large role in the history of the struggle to print and educate human resources in Indonesia. Apart from being an educational institution, *pondok pesantren* is a social institution that has contributed a lot in improving the welfare of the community through various activities it carries out (Kementerian Kesehatan Republik Indonesia, 2021). Based on data from EMIS or Education Management Information System, there are approximately 27,732 *Pondok Pesantren* with a total of 3,666,467 students. Meanwhile, based on the 2019 Ministry of Religion Islamic Boarding School

Database, there are 27,722 *Pondok Pesantren* in Indonesia with a total of 4,173,027 students (Kementerian Agama Republik Indonesia., 2019).

The importance of implementing PHBS for the pesantren community is also in accordance with the mandate of Undang-Undang No. 36 Tahun 2009 Pasal 11 Tentang Kesehatan, 2009 which states that every person is obliged to behave in a healthy life to realize, maintain, and promote health as high as possible. Moreover, due to the COVID-19 pandemic and to overcome the health problems experienced by many school-age children such as scabies, Upper Respiratory Tract Infection (ARI), gastritis, worms and skin diseases, the Ministry of Health has set several PHBS points in Islamic boarding schools such as washing hands with soap in running water, maintaining distance, using masks and/or face shields, throwing garbage in its place, eating snacks in healthy canteens, using healthy latrines, exercising regularly and measurably, eradicating mosquito larvae, not smoking in Islamic boarding schools, measuring body weight and height every 6 months, maintain personal hygiene, maintain reproductive health, maintain mental health, eat healthy food, and use clean water.

In fact, according to the results of research on the relationship between personal hygiene and scabies disease in a boarding school in Padang, data was found that scabies had infected 24.6% of students at the boarding school (Ma'rufi et al., 2005). Meanwhile, at a pesantren in Lamongan, scabies was 64.2% greater than a total of 338 students (Akmal et al., 2013). Diseases such as scabies have become a regular and become synonymous with the lives of the students in a boarding school. There is a jargon that is quite thick to be heard in the santri environment, if "*ga kena gudik gak nyantri*". Though the disease can be transmitted from one person to another. Scabies is a disease caused by poor personal hygiene and poor environmental sanitation (Machfutra et al., 2018). Lack of maintaining personal hygiene means that

clean and healthy living behavior (PHBS) has not been fully implemented by students. Even PHBS itself is a term or jargon that is too common to be known by the wider community, especially in the pesantren environment.

Therefore, through this research, we want to know the practice of PHBS and the application of health protocols in the Islamic boarding school environment as well as provide education to students and boarding school administrators in the Special Region of Yogyakarta through the Healthy Santri Cadre program.

2. MATERIAL AND METHODS

The preliminary survey was conducted as a part of training for the healthy student cadre and the establishment of COVID-19 shelters in Pondok Pesantren in The Special Region of Yogyakarta, Indonesia. Participants is student from 18 Pondok Pesantren in The Special Region of Yogyakarta. The training program was a two days online community service program using the Zoom meeting platform on September 18-19, 2021. The training program consisted promotion of healthy living behaviors and implementation of health protocol during the pandemic. This event was conducted as a collaboration program from Lembaga Kesehatan Nahdlatul Ulama Yogyakarta, Keluarga Mahasiswa Nahdlatul Ulama Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, Faculty of Medicine, Universitas Islam Indonesia, and Impressive Santri.

The survey data were collected based on self-administered questionnaires developed on Google forms. The questionnaire was prepared based on a detailed literature review. The self-administered questionnaire was structured with relevant and important practical items selected by the researcher. The pre-final version of the questionnaire was pilot tested on students and was not included on final study. The link was distributed through social media

and WhatsApp groups, using the snowball technique. All participants must be a student or teachers who lived in Pondok Pesantren in Yogyakarta during the event period. The objective is to identify the need for health training and education in Pondok Pesantren and address challenges and opportunities to develop healthcare access and facilities, especially in the COVID-19 pandemic era.

Fourteen multiple-choice questions related to three main variables were put on the questionnaire namely clean and healthy living behaviors comparison before and during the pandemic, health protocol implementation during the pandemic, and provision of COVID-19 prevention and control program, including access to vaccination, COVID-19 shelter, and health care facilities availability. Brief demographic details about the participants' origins for identification were questioned.

The data were transferred to and tabulated on Microsoft Excel, and the results were summarized using descriptive analysis. The results of the characteristic analysis are shown in percentages. The results were then presented in the collaboration forum to further develop the health training needed.

3. RESULTS

This community service activity was carried out in the PTPN XII Plantation Area of Gunung Gambir Jember. The majority of farmers are men with a ratio of 80.5% and 19.5% with women. The largest proportion of farmers are aged 31-40 years and have worked more than 5 years. The general characteristics of farmers who are respondents are summarized in Table 1.

This can be seen from the monitoring of both verbal evaluations, written evaluations, and also skills. Farmers can answer several questions from the facilitator related to the material provided and can explain coherently and comprehensively about the Mc-Kenzie exercise. Some farmers can also demonstrate the exercises coherently and correctly can be seen in Figure 2.

Table 1. Name of *Pondok Pesantren* and Total Number of Participants

Name of <i>Pondok Pesantren</i> (PP)	Number of participants (n)	Number of participants (%)
PP Darul Qur'an Wal Irsyad	12	14
PP Ali Maksum Krpyak	12	14
PP Nurussalam Krpyak	11	13
PP Mahasiswa Alma Ata	10	12
PP Al-Barokah	5	6
PP Sunan Pandanaran	5	6
PP Al-Munawwir Krpyak	4	5
PP Nailul Ula Center	4	5
PP Inayatullah	3	4
PP Aswaja Nusantara	3	4
PP Terpadu Al-Mumtaz	2	2
PP Al-'Iannah Playen	1	1
PP Al-Miftah Mlangi	1	1
PP Nurul Iman Sorogenen	1	1
PP Al-Qur'an Wates	1	1
PP Putri Al-Ikhlas Jogokariyan	1	1
PP Nurul Ishlahiyyah	1	1
PP Abdul Aziz	1	1
Not mentioned	6	7

Table 2. Percentages of Students Who Have Returned to The Dormitory

Percentages of students who had returned to the <i>Pondok Pesantren</i>	Number of responses (n)	Number of responses (%)
100%	15	19
75%	28	36
50%	23	29
25%	9	12
Not yet return	1	1
Unsure	2	3

Table 3. Comparison of Maintaining Clean and Healthy Lifestyle Practices Before and During the COVID-19 Pandemic

Clean and healthy lifestyle practices indicator	Before pandemic (n, %)	During pandemic (n, %)
Poor	1 (1)	0 (0)
Sufficient	18 (23)	13 (17)
Good	36 (46)	36 (46)
Very good	23 (30)	29 (37)

Table 4. Health Protocol Implementation during COVID-19 Pandemic

Health protocol implementation status	N	%
Poor	1	1
Sufficient	12	15
Good	33	42
Very good	32	41

Table 5. Healthcare Access and Facilities Provided during COVID-19 Pandemic

Indicator	Available (n, %)	Not available (n, %)
COVID-19 vaccination access	22 (28)	56 (72)
COVID-19 shelter	31 (40)	47 (60)
Health clinic	46 (59)	32 (41)

The results of the pre-test and post-test can be seen in Table 2. It can be seen in the figure that before community service was carried out, the knowledge of farmers with the largest proportion of farmers was in the poor category ($\leq 55\%$) as many as 27 farmers (75%) and only 1 person (2.7%) in the category of good knowledge (76-100%).

On the other hand, after being given knowledge and skills using simulation and role play methods, the largest proportion of farmers' knowledge in providing Mc-Kenzie Training was in a good category (25 people = 69.4%) and enough (9 people = 25%).

The total sample consisted of 84 students. The majority of participants were from Pondok Pesantren

Darul Qur'an Wal Irsyad (12%) followed by several Pondok Pesantren in Krapyak, including PP Ali Maksum, PP Nurussalam, and PP Al-Munawwir (32%). The result of participants is described in Table 1.

Most of the students had come back to their Pondok Pesantren during the survey period. The detailed number can be seen in Table 2, although we could not know for sure how many Pondok Pesantren in Yogyakarta had permitted the students to come back to the dormitory during the time of the questionnaire distribution.

Maintaining clean and healthy living behavior practice in a boarding school is very crucial to achieve good health and prevent diseases transmission especially during an outbreak or pandemic. To assess the current situation of the students and teachers' prior knowledge and practices related to clean and healthy living behavior, we developed two questions comparing the clean and healthy living practices in Pondok Pesantren before and during the pandemic. We put 4 aspects of a clean and healthy lifestyle, including washing hands using soap and running water, bathing, cleaning the bedroom, and cleaning the surrounding environment. There were significant changes in practicing a clean and healthy lifestyle before and during the pandemic era. There was an 8% increase in very good practice based on the respondent's valuation. A total of 75% of respondents stated minimal good practice before the pandemic and it increased to 83% with a significant rise in a very good practice assessment. The results are described in Table 3.

Another parameter that we inquired about in the questionnaire was how good the health protocol implementation in each Pondok Pesantren was. It was substantial because the proper implementation of health protocol in crowded facilities would help to minimize and stop the spread of communicable diseases, particularly COVID-19. Although there was 1 respondent who chose poor implementation, the

majority of the respondents (83%) stated at least good implementation in their Pondok Pesantren. The results are showed in Table 3.

Among the factors affecting the student's compliance with health protocol implementation in Pondok Pesantren were the disparity of individual's understanding and obedience to rules and regulations regarding health protocol implementation (71,8%), inadequate facilities (12,8%), and other factors including that there was no strict supervision and punishment for violation upon regulations.

Health care access and facilities among Pondok Pesantren were different from one to another. Therefore, we need to map out their preparedness for pandemic prevention and control. Three variables were asked to measure the readiness of Pondok Pesantren for the COVID-19 prevention and control program, including vaccination program, COVID-19 shelter, and health care facilities availability. At the time this survey was conducted, 72% of respondents had not been vaccinated yet, due to several reasons, such as no access available (55,6%), information regarding vaccination access was hard to obtain (20,6%), and other reasons including fear and hesitation.

As the COVID-19 cases increased intensely in Indonesia between June-August, the use of the COVID-19 shelter served as a crucial place to isolate COVID-19 asymptomatic and mildly symptomatic patients. From the results of the survey, only 40% of respondents lived in Pondok Pesantren which already had created shelter to isolate students or local society who had contracted COVID-19 according to the acceptance criteria. There were only 59% of respondents lived in Pondok Pesantren which provides general health care facilities. Among those who had health care facilities, 55,2% were not adequate, which means there were limited facilities with no or limited health care professionals.

4. DISCUSSION

The finding above has shown that the COVID-19 pandemic has brought only a slight impact on pondok pesantren, particularly those in Yogyakarta, on health behaviors. This survey found that most sample has clean and healthy living behavior before and after the pandemic had 'good' and 'very good' indicators with an increase in 'very good' indicators, from 30% to 37%. However, there could be a misperception among respondents, who are students in pondok pesantren, about clean and healthy lifestyles practices as we do not measure their previous knowledge. A considerably high perception of the 'good' and 'very good' practice of health protocols implementation during the pandemic also proves that students in pondok pesantren in Yogyakarta have paid relatively great attention to the COVID-19 prevention practice. However, the survey also showed that the success of health protocols implementation had not been followed by proper infrastructure and strict regulation from the pondok pesantren institution. These results confirm in several other studies where students' obedience is the main reason for health protocol implementation success (Aziz et al., 2022; Syafriza, 2021).

It is also clear from the survey that access to healthcare facilities in pondok pesantren in Yogyakarta during the pandemic situation are in critical condition. Only 40% of respondents answered that their pondok pesantren had established a shelter for COVID-19 compared to 60% who have not been ready for COVID-19 shelter yet. At the same time, we know that shelter for COVID-19 is crucial, especially in a highly dense population area (Salama, 2020). Shelter, which functioned for self-isolation for students with mild-to-no symptoms, may prevent transmission of the highly contagious disease of COVID-19 to other students (Zhu et al., 2022). Students in pondok pesantren, will mostly share their sleeping room with five to 20 other students in their dormitory. The unavailability of shelter for the

COVID-19 case is an important issue (Stokel-Walker, 2021). We do not conduct a survey on why *pondok pesantren* have limited access to shelter, but we suggest that limited resource in infrastructure has become the primary issue (Gostin et al., 2020).

Another critical point to highlight is the unavailability of healthcare facilities within *pondok pesantren*. Even though more than 50% of respondents answered they have healthcare facilities, but only less than 50% have adequate facility including professional health workers. Communities with poor access to healthcare facilities are more vulnerable to COVID-19 impacts (Tai et al., 2021). Poor access to healthcare facilities may result in minimum testing and delay early treatment, leading to a worse outcome and endangering other community members (Shadmi et al., 2020). Mass testing allows the health system to identify infected people and isolate or treat them earlier. As cited by Zhang et al. (2020), shelter-in-place availability proved to be an essential effort on COVID-19 spread prevention. More concern from the government or empowered local community is needed to help pondok pesantren gain and reach more access to shelter and proper healthcare facilities (Zhang et al., 2020).

Low COVID-19 vaccine coverage around students in pondok pesantren also grabbed our attention. The reason could be pulled out from poor access to healthcare facilities. However, to achieve minimum vaccination coverage the WHO has set, we need to work harder on reaching pondok pesantren's community, whether it is an education on the safe, efficacy, and importance of vaccination, to vaccination program held in their institution.

5. CONCLUSION

Pondok pesantren is an institution that needs more attention during the pandemic of COVID-19. Dense population, minimum infrastructure, and relatively poor access to healthcare facilities have made them a vulnerable community. Even though they have

implemented better practices on clean and healthy lifestyles and health protocols, the resource and infrastructure to prevent disease transmission and more severe symptoms remain low. To achieve health equity, various stakeholders need to work harder to a bigger concern on the pondok pesantren community. To ensure that they have good access to healthcare facilities and the right to get COVID-19 vaccination.

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