



Anxiety and Community Compliance of the Covid-19 Health Protocol: Implementation in Ponorogo Regency

Lina Ema Purwanti^{1,2}✉, Siska Munika², Ririn Nasriati², Tintin Sukartini³,
and Ninuk Dian Kurniawati³

¹ Doctoral Programme, Nursing Faculty, Airlangga University of Surabaya, Surabaya, Indonesia
lina.ema.purwanti-2020@fkip.unair.ac.id

² Nursing Department, Health Sciences Faculty, Muhammadiyah University of Ponorogo,
Ponorogo, Indonesia

³ Advanced Nursing Department, Nursing Faculty, Airlangga University of Surabaya, Surabaya,
Indonesia

Abstract. Background: The widespread coronavirus disease (Covid-19) has increased the number of cases causing people to experience panic and anxiety. The government imposed control measures to reduce the spread of the Covid-19 virus, including making it mandatory for the public to comply with the implementation of the Covid-19 health protocol.

Aim: The study was conducted to determine the relationship between anxiety and compliance with the community's performance of the Covid-19 health protocol.

Methods: The design of this research was cross-sectional. The subjects of this study were 98 respondents from Keniten Village, Ponorogo Regency. The sampling technique was purposive sampling. The data collection method used was the HARS questionnaire. Research data were analyzed using chi-square with a p-value < 0.05.

Results: The result of this study indicated that 48 respondents (49.0%) showed a level of anxiety at a moderate level, and 59 respondents (60,2%) complied with the health protocol. The chi-square statistical test showed a relationship between anxiety and compliance with the implementation of the Covid-19 health protocol in the Keniten Village resident, Ponorogo regency, with a p-value (of 0.000).

Conclusion: The level of public anxiety can affect their compliance with the implementation of health protocols. It will impact the number of Covid-19 transmissions in the community. Health workers can provide education to help reduce the incidence of Covid-19 in the community.

Keywords: anxiety · compliance · Covid-19 health protocol

1 Introduction

The Covid-19 pandemic has unexpectedly unfolded in most nations and brought sudden health, financial, social, academic, and mental effects [1]. Emergencies instances

can affect the public's properly-being, protection, and fitness (causing confusion, lack of confidence, stigma, and emotional isolation) and groups (causing faculty closures, paintings loss, food lack of confidence, poor distribution of necessities, and insufficient assets for medical response) [2]. Moreover, during a health disaster, people tend to go through the panic and pressure of being inflamed with the ailment ensuing in depression, stress, and tension [3]. Similarly, the chance of fast virus transmission and increasing instances can cause anxiety, impacting network compliance in wearing out the Covid-19 health protocol [4].

The widespread use of the virus has increased the number of Covid-19 instances daily [5]. It causes people to experience panic and anxiety. As a result, the number of positive cases of Covid-19 increased daily. Based on data from the World Health Organization (WHO), the number of confirmed cases of Covid-19 worldwide until 27 September 2021 was 231.703.120, and 4.746.620 people died [6]. During the first year of the Covid-19 pandemic, the worldwide incidence of hysteria and depression increased by 25% [7]. In addition, the brief identifies the individuals who have been most affected and provides a summary of the pandemic's impact on the availability of intellectual health services and how this has changed over the course of the pandemic.

Meanwhile, based on data from the Task Force for the Acceleration of handling Covid-19, in Indonesia until 28 September 2021, the number of positive cases was 4,209,403; with 40,270 active patients, 4,027,548 recovered, and 141,585 died. In East Java, until 28 September 2021, 395,011 positive cases, 1,864 active cases, 363,752 recoveries, and 29,395 deaths [8]. In Ponorogo Regency, as of 28 September 2021, there were 12,301 confirmed positive cases, with 91 active cases, 10,893 recovered, and 1,317 deaths. Meanwhile, the place to be researched was in the Ponorogo sub-district until 27 December 2021, which ranks first with the number of positive confirmed cases, as many as 3008 people, 2714 people recovered, and 293 people died. In Keniten Village, as many as 205 people were declared positive for Covid-19 [9]. Based on researchers' observations, there were still people who did not comply with health protocols, for example, by not using masks, not keeping their distance, and still crowding in crowded places.

The most commonplace signs of Covid-19 are fever, dry cough, and tiredness. Aches and pains, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell, pores, skin rash, or arm or foot discoloration are other less common symptoms that some patients may also experience. The side effects experienced are usually slight and show up consistently. The transmission of the Covid-19 virus is through droplets released from the nose or mouth when an infected person coughs, sneezes, or speaks. Those splashes are noticeable to be heavy, travel a short distance, and quickly land on the ground. [6].

Public anxiety is a negative effect due to this pandemic. Anxiety can appear in individuals when faced with unpleasant circumstances, causing anxiety for them [10]. Anxiety during a pandemic is caused by several factors, namely fear of the epidemic, feeling alienated, feeling sad about being away from family, feeling anxious about the needs of daily life, as well as confusing news [11]. Excessive anxiety can lower the body's immunity, so the risk of contracting the Covid-19 virus increases. The impact of not complying with health protocols is the increasing number of Covid-19 cases. The

National Covid-19 Task Force continues to convey messages to the entire community to reduce the risk of transmission of the Covid-19 virus, including staying at home, wearing masks, washing hands, maintaining physical distancing, not touching the face, and do not make a crowd. However, there are still many people who do not comply with these regulations. The impact of someone positive for Covid-19 is the feeling of being alienated from being away from family. The impact felt by the community is the fear of contracting the Covid-19 virus. The primary recommendation suggested by whom to avoid the risk of transmitting the Covid-19 virus is to comply with the health protocol in the form of 5M, namely wearing masks, washing hands, and maintaining distance. In addition, it also limits mobility and interaction and maintains the body's immunity [12].

2 Methods

A quantitative correlation study with a cross-sectional design was conducted to determine the relationship between anxiety and compliance with implementing the Covid-19 health protocol at Keniten Village, Ponorogo Regency. The population in this study was the community in Keniten Village, Ponorogo District, amounting to 5,693 people. Sampling using purposive sampling. The sample size in this study was 98 people, with the sample criteria being 20–60 years old, able to read and write, and willing to be research respondents. Data collection used a Hamilton Anxiety Rating Scale (HARS) questionnaire. Health protocol compliance was measured using a questionnaire according to the Ministry of Health in 2020: wearing masks, washing hands, maintaining distance, avoiding crowds, and limiting mobility or interaction.

The present research used both univariate and bivariate analysis. The univariate data analysis used frequency distribution, while the bivariate analysis used chi-square (sig. Level 95%). This research has passed the ethical test by the Health Research Ethics Committee, Faculty of Health Sciences, the University of Muhammadiyah Ponorogo, with number 156/ER/KEPK/2022.

3 Results

Table 1 shows that most respondents were aged 51–55 (19.4%), 52 respondents (53.1%) were male, 43 respondents (43.9%) with high school education, and 43 respondents (43.9%) had self-employed jobs. Based on knowledge about Covid-19, all respondents (100%) knew about Covid-19 and the Covid-19 health protocol. Ninety-one respondents (92.9%) have never been exposed to Covid-19, and seven (7.1%) have been exposed to Covid-19. In addition, 48 respondents (49.0%) had moderate anxiety, and 16 (16.3%) had severe anxiety. Fifty-nine respondents (60.2%) complied with the Covid-19 health protocol (Table 2).

The results showed that 48 respondents experienced moderate anxiety, 36 of whom were obedient to health protocols. However, of 34 respondents with mild anxiety, 25 did not comply with the health protocol. The statistical test results with Chi-Square obtained a p -value = 0.000, meaning that the p -value is less than 0.05. Therefore, it can be concluded that there is a relationship between anxiety and compliance with implementing the Covid-19 health protocol in the community of Ponorogo District (Table 3).

Table 1. Demographic data of respondents (n = 98)

Variable	n	%
Age (year)		
21–25	6	6.1
26–30	9	9.2
31–35	4	4.1
36–40	11	11.2
41–45	17	17.3
46–50	17	17.3
51–55	19	19.4
56–60	15	15.3
Gender		
Male	52	53.1
Female	46	46.9
Education		
Elementary school	22	22.4
Junior high school	19	19.4
Senior high school	43	43.9
Bachelor/Diploma degree	14	14.3
Job		
Unemployment	31	31.6
Farmer	16	16.3
Entrepreneur	43	43.9
Civil servant	8	8.2
Knowledge about Covid-19		
Yes	98	100
Knowledge about the health protocol for Covid-19		
Yes	98	100
Covid-19 history		
Yes	7	7.1
No	91	92.9

4 Discussion

Level of Anxiety and Sociodemographics Characteristic

Anxiety is a group of psychiatric disorders most often found as a signal that alerts or warns of threatening hazards and allows a person to take action to triumph over the danger [13]. Maximum respondents (49.0%) had experienced moderate anxiety, and 16 (16.3%) skilled severe anxiety about Covid-19. Most respondents with intense tension have been 26–30 years, girls, and S1/diploma schooling stage. COVID-19 is no longer

Table 2. Anxiety and compliance with the implementation of the Covid-19 health protocol (n = 98)

Variable	n	%
Anxiety		
Mild	34	34,7
Medium	48	49,0
High	16	16,3
compliance of Health protocol		
Compliance	59	60,2
Not compliance	39	39,8

Table 3. Relationship between Anxiety and Compliance with the Implementation of the Covid-19 Health Protocol (n = 98)

Anxiety	Health protocol compliance with Covid-19				Total		P value
	Compliance		Not compliance		n	%	
	n	%	n	%			
Mild	9	9.2	25	25.5	34	34.7	0.000
Medium	36	36.7	12	12.2	48	49.0	
High	14	14.3	2	2.0	16	16.3	
Total	59	60.2	39	39.8	98	100	

the most effective reason for bodily health problems however additionally outcomes in numerous psychological disorders. The brand new coronavirus spread can affect human beings' intellectual fitness in various communities [14]. Consequently, it's far crucial to hold the intellectual health of individuals and increase mental interventions which could enhance the intellectual health of vulnerable companies at some stage in the Covid-19 pandemic [15]. Many elements can affect someone's anxiety level, consisting of painting factors, age, gender, and degree of training [2, 16]. This study indicates that anxiety may additionally have been common at some point during the Covid-19 outbreak among the general population, mainly amongst inflamed individuals, humans with suspected infection, and people who might have contact with sufferers with Covid-19. Some measures, along with quarantine and delays in returning to paintings, were also related to the intellectual health of many of the public.

Females often experience more anxiety than males due to the fear of losing their activity accomplishments due to college closures throughout the Covid-19 pandemic and the worry of Covid-19 hurting the nicely-being of their households or spouse and children [17]. But, reasonable and mild anxiety stages can also inspire humans to take part in more healthy behaviors in response to Covid-19, along with increasing chance tolerance and adopting preventive tactics during the pandemic [1]. as an example, the

differences observed in this analysis between males and females may be related to threat perception. These days, it became said that gender turned into a significant predictor variable of threat belief tiers among respondents, in which being a woman was a predictor of improved chance belief. Similar outcomes have been formally documented in gender, that women turned into a predictor of the bad psychological effect of the Covid-19 pandemic. Women enjoy an extra big psychological effect and better ranges of hysteria than adult males [18]. That is additionally in step with other research displaying girls to be greater psychologically vulnerable than men during Covid-19 [15].

Compliance with a Health Protocol

The results showed that most of the 59 respondents (60.2%) complied with the Covid-19 health protocol, and almost half of the 39 respondents (39.8%) did not comply with the Covid-19 health protocol. Compliance with enforcing health protocols is part of community conduct in preventing Covid-19. The demographic and manipulate variables explained approximately 10% of the variance in compliance, instrumental issues contributed nine%, and normative issues contributed some other 9% to the version explained [19].

The elements that affect compliance are motivation, knowledge, and circle of relatives' help [20]. Complying with health protocols to keep away from the chance of Covid-19 transmission with the aid of as lots as 85% if carried out strictly and successfully [5]. Age, education, profession, know-how, attitudes, infrastructure providers, and fitness popularity are compliance factors in implementing fitness protocols to preserve distance. However, the sphere of labor turned into no longer associated with the usage of masks, while fitness reputes become no longer associated with compliance in washing arms. People must be aware that retaining health begins with self-prevention, now not simplest because of obeying the regulations [21].

primarily based on the result, the maximum number of respondents who obeyed the Covid-19 health protocol at the age of 51–55 years was 15 (15.3%). Age is a component that describes bodily, psychological, and social maturity and affects the learning process. Age makes someone more mature, and a feeling of duty and concern will increase [4]. The elder will affect the level of adulthood and someone's capacity to assume and work. Consistent with researchers, the extra mature the tendency to obey a rule. it will grow due to the fact older humans are extra prone to be inflamed with Covid-19, so they may be greater obedient in imposing the Covid-19 fitness protocol. The older adults (65 years and above) had threefold more odds of insufficient know-how approximately Covid-19 than adults. Older adults by and large do not have access to trendy technology in Ponorogo. Consequently, they have inadequate information about Covid-19 as compared with adults because of the lack of facts. Based on research that of the 59 respondents who adhered to the Covid-19 health protocol, 34 respondents (34.7%) were female. The women pay more attention to their health and are more obedient to the Covid-19 prevention health routine due to gender differences [22]. Females were also identified to have higher odds of adhering to precautionary Covid-19 measures [23]. The Covid-19 problem has also had a greater impact on women's employment outcomes than it has on men's. This is partially due to the fact that the crisis notably affected industries with a female preponderance, and that within these areas, women have had a higher rate of job loss than men. Additionally, female workers are more likely to work in highly exposed

occupations like healthcare, care, and personal care, where occupational exposure to disease is higher [24]. Women's adherence to health protocols was largely determined by their personality traits and their health literacy regarding Covid-19. Women were more likely to adhere to health guidelines when they felt more responsible for their own health and the health of those around them.

Educational factors also influence compliance with the Covid-19 health protocol. The result showed that most respondents who obeyed had a high school education level of 31 (31.6%). The higher one's education, the greater the likelihood that Covid-19 preventative measures will be followed. When compared to participants who were unable to read or write, those who attended high-level education had a 60% higher likelihood of adhering to Covid-19 preventive measures. A different study found that better preventive behaviors were linked to higher levels of education [25]. A higher person's education will affect the implementation of public health, and a person's low education will cause a person's lack of awareness of improving his health [26]. Due to their knowledge of the dangers posed by Covid-19 and information regarding controlling its spread, a person with a higher education level will always follow health protocol [27]. According to researchers, education is also essential in community compliance with health protocols. Someone with a high education will have a good understanding of the Covid-19 health protocol so that community compliance behavior will also increase.

Correlation Between Anxiety and Compliance with a Health Protocol

Based on the results discussed above, it can be concluded that the data analysis using the Chi-Square statistical test gained a $p\text{-value} = 0.000$, meaning that the $p\text{-value}$ is less than 0.05. It can be concluded that there is a relationship between anxiety and compliance with the Covid-19 health protocol implementation in Indonesia. Community Rt.03 Rw.02 Keniten Village, Ponorogo District. Anxiety about the Covid-19 virus can be prevented by adhering to health protocols where the higher a person's level of anxiety, the level of compliance will increase [16].

This study is also related to research from [4] which states that there is a relationship between anxiety levels and adherence to health protocols during the Covid-19 pandemic. Another study was also conducted [28], which in their research stated that the level of anxiety affects compliance with the application of health protocols where anxiety will affect public behavior, especially behavior related to health. According to researchers, it can be concluded that the more threatened a person is in a condition, the person will look for a way out to feel safe. Especially during the pandemic, a sense of anxiety will be felt by everyone by feeling anxious about being infected with the Covid-19 virus. Thus, with that anxiety, the public will comply more with the Covid-19 health protocols.

5 Conclusions

The results showed that 48 respondents (49.0%) experienced moderate anxiety, and community compliance with the Covid-19 health protocol could be interpreted as that most of the 59 (60.2%) complied with the Covid-19 health protocol. Based on the Chi-Square statistical test results, the $p\text{-value}$ was 0.000, which means that the $p\text{-value}$ was less than 0.05. Therefore, it can be concluded that there is a relationship between anxiety

and compliance with implementing the Covid-19 health protocol in the Keniten Village, Ponorogo District community. Therefore, it is hoped that health workers will create an environmental atmosphere that encourages the creation of increased compliance with Covid-19 health protocols. One example is the provision of health protocol facilities, for example, by providing hand washing facilities in public places, providing information services, conducting socialization, and forming a Task Force so that people are more obedient than before. As a result, the spread of the virus can be controlled.

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