Descriptive Online Survey: Knowledge, Attitudes, and Anxiety During the Period of Pandemic COVID-19 in Indonesia

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Abstract

Background: The Government provides directives related to the prevention of cases spread, but the number of cases still shows improvement. Community knowledge and attitudes influence the level of compliance with the Government's recommended COVID-19 deployment precautions.

Objectives: Assess knowledge, attitudes, and anxiety during the COVID-19 period.

Method: This is a quantitative descriptive study, sampling techniques using Snowball. Questionnaires have four parts, social-demographic, knowledge, attitude, and anxiety during the pandemic. Online questionnaires were developed using Google forms. Questionnaire link sent via email, Whats App, Facebook. Variables are summarized into frequencies and percentages using SPSS version 25.

Results: Total (61.3%) The respondent knows how to spread COVID-19, (97.4%) and (95.3%) Know COVID-19 is more dangerous for elderly and people have chronic diseases, (95.1%) Know the handwashing is a preventive effort, almost all of the participants agreed on hand washing, hand sanitizer, using a mask, (92%) Participants agreed to the screening COVID-19, (93%) Participants are willing to follow the Government's recommendation, (60%) Participants felt paranoid, (83%) Participants are always worried for themselves and those closest to you.

Conclusion: This study resulted in respondents having demonstrated good knowledge, positive attitudes, and feeling anxious during the COVID-19 pandemic

Keywords: *COVID-19, knowledge, attitude, anxiety.*

Introduction

Coronavirus disease Pandemic 2019 (COVID-19) is a problem that is happening in more than 200 countries in the world. COVID-19 has been identified as the cause of infectious respiratory disease outbreak in Wuhan, China.[1] The COVID-19 is highly contagious as most people do not have immunity against this new virus. Currently, COVID-19 attempts are performed only on the treatment of symptoms, treatment, and prevention of complications, but there have not been any medications that can cure this disease. Therefore, the best strategies to keep prevention such as keeping social distances or wearing masks may help us to prevent infections.[2] The governmental action of closing public services causes the collapse of the industry to negatively impact the economy.[3]

The spread of COVID-19 caused confusion, anxiety, and fear among the general public. A variety of research

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on COVID-19, many facts are constantly changing and many myths are not prevalent in the general population regarding the prevention and management of infections. This is sometimes very annoying for certain individuals.[4] The absence of appropriate protective measures is the main cause of concern among common society. At the community level, there is distrust of others in the spread of disease and the role of government in tackling the plague. Especially in countries like Indonesia which is a populated country without strong health infrastructure, it is the cause of concern. Some levels of panic also appear in public due to the unavailability of basic protective measures.

COVID-19 was first reported in Indonesia on February 2, 2020, until today it continues to increase. Governments, media, physicians, researchers, celebrities, police and other community stakeholders urge communities to avoid public gatherings such as sports, religious ceremonies, family events, meetings and classes in schools, this is done to prevent the spread of Coronavirus infections.[4] Disbelief in the spread of disease and the role of the government in tackling the plague so that the spread of COVID-19 in Indonesia is difficult to overcome. To comply with the Government's recommendation, the public requires knowledge of the spread, the title, prevention of COVID-19. Facts in the field still many people ignore the importance of social distance due to attitude problems. Anxiety and community concerns generally affect every individual. Recent evidence suggests that individuals who are in isolation and quarantine experience anxiety, anger, confusion.[5] The knowledge and attitude of society largely affect the level of adherence to the prevention of disease spread that has been recommended by the Government. Therefore, it is important to study these domains in the Indonesian population. Based on the relevance of all of the above factors, researchers aim to assess the perceived knowledge, attitudes, and anxieties during the COVID-19 pandemic in Indonesia.

Material and Method

The type of research used is quantitative descriptive. This approach was done to see a clear and accurate picture of the knowledge, attitudes, and anxieties during the pandemic COVID-19 period in the Indonesian population. Sampling techniques using Snowball. A semi-structured online questionnaire was developed using the Google form, with the consent form also available. Questionnaire links are sent via email, Whats App, Facebook, or any other social media to the respondent. The questionnaire contains the characteristics of social-demographic, knowledge, attitudes, and anxiety in sequence, which the respondents must answer. This study is an online study, participants who can participate in this research if they have a social media account and have access to the Internet. The age of participants in this study is more than 18 years old, able to understand Bahasa Indonesia, and willing to approve respondents. Data collection started on 16 June 2020 hours 13.00 WIB and closed on 23 June 2020 at 12.00 WIB.

The questionnaire consists of 9 questions about knowledge covering the way of transmission, symptoms, prevention, and treatment of COVID-19. The questionnaire attitude during the pandemic contains 15 question items that are graded with a scale Likert 5 points, namely: very disagree, disagree, hesitate, agree, and strongly agree. Anxiety during a pandemic associated with a COVID-19 infection has 17 question items, rated using a Likert scale of 4 points, namely: never, sometimes, often and always. The analysis in this study uses descriptive statistics using SPSS version 25. Variables are summarized into frequency and percentage distribution based on the question item given to the respondent

Findings:

Table 1. Socio-Demographic of the Participants (n = 1051)

Socio-demographic Characteristics	Frequency	%
Age (years)		
≤ 20	163	15,5
21 - 30	511	48,6
31 - 40	277	26,4
41 - 50	67	6,4
51 - 60	28	2,7
> 60	5	0,5
Gender		
Male	319	30,4
Women	732	69,6
Education		
No school	2	0,2
Elementary school	2	0,2
Middle School	3	0,3
High school	262	24,9
College	782	74,4

Socio-demographic Characteristics	Frequency	%
Profession		
Government employees	174	16,6
General employees	383	36,4
Entrepreneur	95	9,0
Housewives	54	5,1
Student	310	29,5
Labor	21	2,0
Not working	14	1,3
Agama		
Islam	894	85,1
Christian	136	12,9
Hindu	17	1,6
Buddhist	3	0,3
Confucius	1	0,1

Source: Primary Data, 2020

The characteristics of socio-demographic participants are shown in table 1. Among the participants who responded, 511 (48.6%) 21 – 30 years of age group, 732 (69.6%) Female gender, 782 (74.4%) College, 383 (36.4%) Working as a private employee, 894 (85.1%) Islamic faith.

Table 2. Knowledge of COVID-19 among Research Participants (n = 1051)

Knowledge Items	Frekuensi	%
1. COVID-19 spreads through		
a. Touch	116	11,0
b. Sneezing	287	27,3
c. Kissing	4	0,4
d. answered everything (touch, sneezing, kissing)	644	61,3
2. COVID-19 can be transmitted from people without symptoms		
a. Yes	983	93,5
b. Not	41	3,9
c. Do not know	27	2,6
3. Pets in the House can transmit COVID-19		
a. Yes	422	40,2
b. Not	365	34,7
c. Do not know	264	25,1
4. COVID-19 more dangerous for elderly		
a. Yes	1024	97,4
b. Not	12	1,1
c. Do not know	15	1,4
5. COVID-19 is more dangerous in people who have chronic diseases		
a. Yes	1002	95,3
b. Not	12	1,1
c. Do not know	37	3,5
6. Symptoms		
Fever		
a. Yes	836	79,5
b. Not	215	20,5
Headaches		
a. Yes	325	30,9
b. Not	726	69,1
Cough		
a. Yes	708	67,4
b. Not	343	32,6
Sore throat		
a. Yes	665	63,3
b. Not	386	36,7
Fatigue		
a. Yes	299	28,4
b. Not	752	71,6
Difficulty breathing		
a. Yes	784	74,6
b. Not	267	25,4
Chest Pain		
a. Yes	177	16,8
b. Not	874	83,2
7. Isolation of a person who has symptoms COVID-19 can stop the spread of COVID-19?		
a. Yes	1000	95,1
b. Not	24	2,3
c. Do not know	27	2,6
8. Frequent hand washing can stop the spread of COVID-19?		
a. Yes	999	95,1
b. Not	30	2,9
c. Do not know	22	2,1
9. Antibiotics can treat COVID-19		
a. Yes	251	23,9
b. Not	499	47,5
c. Do not know	301	28,6

Source: Primary Data, 2020

Knowledge among study participants on COVID-19 is described in Table 2. The majority is 644 (61.3%) Virus

COVID-19 spreads through touch, sneezing and kissing, 983 (93.5%), 1024 (97.4%) Know COVID-19 more dangerous for elderly, 1002 (95.3%) Know COVID-19 is more dangerous in people who have chronic diseases, 1000 (95.1%) Know the isolation of a person who has symptoms COVID-19 can stop the spread of COVID-19, and 999 (95.1%) Know often hand washing can stop the spread of COVID-19.

Table 3. Attitudes About COVID-19 among Participants Research (n = 1051)

Attitude Items		Responses that answered agree and strongly agree (N = 1051)	
		F	%
1	When I meet friends, I always greet them without shaking hands	908	86,4
2	When I meet my friends and colleagues, I always welcome them without hugging	956	91,0
3	I wash my hands using soap or hand sanitizer regularly	986	93,8
4	I usually use masks to protect myself from the risk of contracting COVID-19	1027	97,7
5	If I have any of the symptoms associated with COVID-19, I will tell the health worker	957	91,1
6	If I make a contact or interaction with the infected COVID-19, I am willing to be in isolation at home within a certain period until it proves that I am not infected with COVID-19	1014	96,5
7	If I make a contact or interaction with the infected COVID-19, I was willing to be isolated in the hospital within a certain period until it proved that I was not infected with COVID-19	947	90,1
8	If there is a laboratory test available to detect the COVID-19, I am willing to do so	972	92,5
9	If there is a vaccine available for COVID-19, I am willing to be vaccinated	902	85,8
10	I usually follow the latest updates or news about the spread of COVID-19 in my country	902	85,8
11	I usually follow the latest updates or news about the spread of Covid-19 around the world	752	71,6
12	If the counseling is held about the COVID-19 in the region where I live, I will follow him	634	60,3
13	If it is as smooth or a brochure that includes information about COVID-19, I will read it and follow the instructions described therein	912	86,8
14	I am willing to follow the Government's recommendation regarding the prevention of COVID-19 transmission	987	93,9
15	I am willing to buy COVID-19 preventive equipment such as masks and hand sanitizer	983	93,5

Source: Primary Data, 2020

Preventive measures to limit the spread of COVID-19 and their responses are presented in table 3. The majority of participants agreed when meeting friends or colleagues did not shake hands or embraced. Almost all of the participants said they agreed to wash their hands using soap or hand sanitizer regularly and use masks to protect themselves from the transmission of COVID-19. Most study participants agreed in isolation at home or in the hospital if they made contact with the COVID-19 or infected people. Approximately 92% of participants agreed to the screening for COVID-19. The results of the study were obtained about 93% of the participants were willing to follow the Government's recommendation regarding the prevention of COVID-19 transmission and willing to purchase COVID-19 preventive equipment such as masks and hand sanitizers.

Table 4: Anxiety about COVID-19 among Participants Research (n = 1051)

During the COVID-19 Pandemic		Responses that feel anxious (often and always) (N = 1051)	
		F	%
1	How often do you think about COVID-19	855	81,4
2	How often do you feel paranoid/scared about COVID-19	618	58,8
3	How often do you avoid partying	939	89,3
4	How often you avoid direct social contact	882	83,9
5	How often you avoid large meetings directly such as worship, meetings, and more	873	83,1
6	How often you order food online	384	36,5
7	How often do you talk to your friends about the COVID-19 pandemic	778	74,0
8	How often you have trouble sleeping due to worry about the spread and transmission of COVID-19	273	26,0
9	How often you feel affected by news coverage in newspapers and TV	540	51,4
10	How often you feel the need to buy and store all the needs at home	569	54,1
11	How often do you feel scared if anyone in your neighborhood is reported to be infected with COVID-19	635	60,4
12	How often you feel you need to use a hand cleanser	970	92,3
13	How often you feel you need to constantly wash your hands using soap or hand sanitizer	958	91,2
14	How often do you feel worried about yourself, and the people closest to the spread and transmission of the COVID-19?	874	83,2
15	How often you use masks even without any obvious symptoms of infection	972	92,5
16	How often the story of COVID-19 makes you feel frightened so that it leads to unnatural behavior towards others	318	30,3
17	How often are the stories of COVID-19 that make you panic on social media	321	30,5

Source: Primary Data, 2020

Anxiety among study participants on COVID-19 was presented in table 4. More than 85% of the participants were busy with a COVID-19 pandemic, around 60% of the paranoid participants with a mind contracted COVID-19 during a pandemic. About 85% of participants avoided party, social contact, and avoided meetings such as worship, meetings, and others for fear of being displaced by COVID-19. About 83% of participants reported worrying for themselves and their closest people during the ongoing pandemic. About 92% of participants always use masks even without any obvious symptoms of infection.

Discussion

Indonesia is still not able to suppress the transmission of COVID-19 effectively. The population of Indonesia participates in this study, most of the community has a good knowledge of the spread of COVID-19, which is evident from some of the questions we ask. Respondents to this study who have higher knowledge are also due to most of the respondents over the age of 20. The results of the study were conducted in three countries (Jordan, Saudi Arabia, and Kuwait), that the higher COVID-19 knowledge scores proved to be significantly related to the age and achievement of education.[6] Knowledge is considered important in the prevention efforts of COVID-19 if society has good knowledge, hopefully, the community is more obedient in the prevention efforts of COVID-19 recommended by the Indonesian Government. The study in China obtained 89% demonstrated sufficient knowledge about COVID-19. Knowledge is a prerequisite for building preventative beliefs, shaping positive attitudes, and promoting positive behaviors, and individual cognition

and attitudes towards the disease affect the effectiveness of certain strategies and behaviors.[7]

Participants of this study were optimistic about the prevention of COVID-19, most of the participants took the precaution of spreading the infection by COVID-19, such as: not shaking hands and hug when meeting friends or colleagues, always use masks when exiting the house and wash hands using soap or hand sanitizer regularly. Previous research showed that most of the population took the COVID-19 precautions, i.e. not traveling in crowded places,[8] and using masks.[9] Study in Vietnam stated that the prevention of the transmission of COVID-19 was by hand washing and using face masks.[10]

Most of the study participants agreed to be isolated at home if they made a contact or interaction with the COVID-19 infected person. Disconnecting the suggested transmission chain is to implement social distance as well as isolation and quarantine to the general public who have symptoms of COVID-19. The patient's isolation is very effective in stopping the transmission if early detection is possible before a clear virus release.[11]

Findings from this study, often the respondents wash their hands using soap, sanitizer, and mask. This shows the respondent's concern for the action to maintain personal hygiene to avoid the COVID-19 infection. Respondents ' awareness of the COVID-19 was seen in their behavior, as the frequent avoidance of going to the party, avoiding meetings, and also avoid going to the place of worship. Anxiety was also reflected by their fears that there was a COVID-19 transmission, even a quarter of respondents were struggling to sleep because of a COVID-19 spread. The level of anxiety in respondents can cause unnatural behavior such as anxiety, worry, or anger.

Excessive anxiety in society will have an impact on mental life. Therefore, it is important to address the difficulties of mental health in a pandemic situation. Study in India states that when anxiety occurs a broad population, it can lead to panic for the community, which causes the resources to quickly run out. Research in Iraq states that social media has a significant impact on the spread of fear and panic related to the COVID-19 outbreak, with a potential negative influence on mental health and psychological wellbeing of society.[12]

Conclusion

Our study showed that respondents had a good knowledge of the way the transmission and prevention of COVID-19 had a positive attitude during the pandemic and some respondents felt anxiety during the COVID-19 pandemic. There need to be mental health consulting facilities for the community throughout Indonesia to reduce the level of public anxiety.

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Ethical Clearance: The study was approved by the institutional Ethical Board of Immanuel School of Health Sciences Bandung.

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