# FACTORS RELATED TO PUBLIC ANXIETY DURING THE COVID-19 PANDEMIC

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#### Abstract

The Covid-19 pandemic is a circumstance that can trigger anxiety in the community. Anxiety can be harmful to one's mental health. The aim of this research was to determine the factors that influence public anxiety during the Covid-19 pandemic. Study design was analytic with a cross sectional approach. A total of 96 respondents were involved from three villages. Samples from each village were selected using a purposive sampling technique. Respondents who were more than 20 years old, could read and write, and willing to participate were included Public anxiety was measured using the Coronavirus Anxiety Scale. The relationship between variables was analyzed using the Chi-Square Test. The results showed that during the Covid-19 pandemic, most people experienced anxiety (68.8%). Most of the respondents aged <40 years (68.8%), female (62.5%), junior high school education (35.5%), low economic status (66.7) and varied sources of information (75%). The factor related to public anxiety during the Covid-19 pandemic in the work area of the Kasemen Health Center was age (p value < 0.0001; OR = 11.2). Factors of gender, education, economic status, and sources for people who experience anxiety can be one of the services in the public health center.

Keywords: anxiety, Community, Covid-19 pandemic, public

#### Introduction

Covid-19 began in Wuhan, China, in December 2019 and then spread widely to various countries in the world, including Indonesia. Indonesia officially declared the findings of Indonesians who were exposed to Covid-19 in early March 2020. The World Health Organization labeled Covid-19 a pandemic on March 11, 2020, due to its widespread nature (WHO, 2020).

The development of the spread of Covid-19 in Indonesia has attracted the attention of not only Indonesian citizens but also the world. Since it was announced in early March 2020, cases have increased rapidly to reach more than 8000 people per day at the end of December 2020. In early January 2021, Indonesia became the country with the highest number. Covid 19 cases in Asia with a total of more than 108 thousand cases with a total death of more than 21 thousand people. (Satgas Covid-19, 2020). Until the end of December 2020, Banten Province was included in the five provinces with the highest number of positive cases. the highest increase in the weekly death rate, which was over 130 percent. This figure is the highest number compared to other provinces in Indonesia(Satgas Covid-19, 2020).

The Covid-19 pandemic has triggered a global crisis. The massive and rapid spread of Covid-19 of Covid-19 was affected on the global order of life, including health, economics, social, political, educational, cultural, and religious settings. The news of the addition of cases and deaths that have reached more than thousands of people has become a terror for the community. The impact is the emergence of psychological disorders in the form of fear and anxiety in the community in the Covid-19 pandemic situation (Jarnawi, 2020).

The American Psychological Association (APA) conducted a survey of the United States. According to the survey, eight out of 10 Americans (78%) are stressed, and the highest form of stress is anxiety. One-third of respondents are worried that they will become seriously ill or die from Covid-19, and two-thirds are worried that their family or loved ones will be infected. A small percentage of them said the Covid-19 pandemic had a serious impact on their mental health and more than half of the respondents admitted that the effects of the Covid-19 pandemic were quite severe on their daily lives (American Psychological Association, 2020).

The results of the Association of Indonesian Public Health Scholars and Professionals' (Persakmi) Psychosocial Survey of Indonesian Society During the Covid-19 Pandemic, that of the 8,031 respondents in 34 provinces in Indonesia, more than half experienced anxiety, with categories of anxiety and extreme anxiety in various contexts of their lives, namely education, economy, work, religion and social community interaction. In the aspect of education, 74% feel anxiety, 67% experience anxiety in the aspect of social relations and community interactions, 63% are anxious in the work aspect, 58% are anxious in the economic aspect, and 55% are anxious about their religion aspect (Persakmi, 2020). An increase in the incidence of anxiety in the community also occurred in Serang City, which was caused by the addition of Covid-19 cases which was quite high in areas in Banten Province.

In the Coronavirus pandemic situation, anxiety usually comes in various forms, such as the fear of death. Fear of contracting the corona virus or infecting other people. Fear of losing a job or income due to restrictions on going out of the house or Large-Scale Social Restrictions (PSBB) causes the place of business to be empty of buyers, or the workplace to close. Fear of scarcity of basic foodstuffs due to public panic buying basic necessities until they are scarce in the market. Fright of losing family, fear of tense situations, deserted streets and even areas that impose curfews, fear of riots, and other forms of fear (Jarnawi, 2020).

According to Saddock (2010), anxiety is a normal response to certain frightening situations that happens along with growth, change, new experiences, and the search for one's identity and life. Anxiety is a restless mental tension experienced as a general reaction to an incapacity to deal with an issue or a lack of security. These uneasy feelings are often unpleasant and can lead to physiological and psychological problems in the future. Anxiety in terms of health is also a condition that shakes because of a threat to health.

Anxiety is influenced by many factors. According to Saddock (2010), several factors that influence anxiety include age, gender, education level, access to information, and socioeconomic level. Age is correlated with psychological maturity, that the increasing age of individual psychological maturity the better, meaning that the more mature a person's psychology is, the better adaptation to anxiety will be. The level of education and access to information is related to understanding, high education will be easier to identify stressors within themselves and from outside themselves. The level of socioeconomic status is related to the ease of seeking to cope to suppress anxiety.

Anxiety does not always lead to negative things, but anxiety can encourage people to lead to positive attitudes and behaviors. Anxiety can heighten a person's awareness of a threat, so he will prompting self-defense. Faced with Covid-19 pandemic it's important to manage anxiety well so that it continues to provide awareness but does not cause excessive panic or lead to worse mental health disorders (Asmara, 2021; Vibriyanti, 2020).

The survey of the Persakmi (2020), wich included over 8000 respondents throughout Indonesia with online showed that based on characteristics, people aged between 30-39 years experienced the most anxiety (76%) compared to other age ranges. Based on the type of gender, women are more dominant in experiencing anxiety than men. From marital status, those who are not married are more anxious than those who are married. According to education, respondents with a higher education level, such as high school and university, more than 70 percent experienced anxiety. Based on work, both those who have not worked, those who have worked, and housewives mostly experience anxiety. However, this survey does not explain the distribution of data by province or city and district.

Serang City is one of the areas in Banten Province where the addition of Covid-19 cases is quite high, although it is still below the city or district of Tangerang as an area directly adjacent to the City of Jakarta. The Serang City Government provides an isolation location in Margaluyu Flats, Kasemen District, Serang City, in anticipation of an increase in the number of cases, particularly from family clusters in Serang City (Dinkes Kota Serang, 2020). The existence of an isolation house for Covid-19 sufferers is a concern for residents or the local community.

The results of a preliminary study conducted through interviews with 10 residents in the Kasemen Sub-District Region obtained information that most expressed anxiety about the Covid-19 pandemic. As many as six people (60%) said they were worried if they and their families were infected, whereas two people (20%) were more concerned about economic issues. They are concerned about their income dropping as a result of government actions aimed at preventing the spread of Covid-19, such as the regulation of Large-Scale Social Restrictions (PSBB) and the prohibition of direct sales. As many as two people (20%) admitted that they were not worried, but instead were confused by the existence of the coronavirus. They claimed to have obtained information that the coronavirus was an issue that was deliberately raised in the community. Therefore, this study aims to find out what factors are related to public anxiety in the work area of the Kasemen Health Center during the Covid-19 pandemic.

### Methods

This research is descriptive correlational research with a cross-sectional approach. Respondents are adults who live in the working area of the Kasemen Health Center. The researcher chose three villages based on their geographical location to represent all the characteristics of the Kasemen District, namely villages close to the city center (Kasemen Village), middle ones (Kasunyatan Village), and those located in remote areas (Margaruyu Village).

Respondents were obtained from three selected villages. Researchers determine in advance the number of each village by considering the number of residents in each village. The sample selection in each village was carried out using purposive sampling, where the criteria for the respondents involved were respondents who were more than 20 years old, could read and write, and were willing to participate. The total population in Kasemen District is 95,992 people. The number of samples investigated was 96 respondents, based on the sample size calculation from Isaac and Michael's population specific sampling, which had a significant degree of 95 percent (Z=1.96) and a degree of deviation from the desired population of 10 percent. The study was conducted after obtaining permission from the Kasemen Public Health Center.

The Coronavirus Anxiety Scale (CAS) questionnaire was used to assess public anxiety. The questionnaire consists of 5 items with 5 measuring scales, a cut-off point of 9 and distinguishes anxiety from non-anxiety. Scores less than 9 are declared not anxious and scores 9 are declared anxious. This measuring instrument has a sensitivity of 90% with a specificity of 85%, the reliability was 0,93 (Lee, 2020). The research data were categorical data and described using percentages. The relationship between variables was analyzed using the Chi-square test.

### Results

Overview of Anxiety, Characteristics of Respondents, and Sources of Information About Covid 19 Anxiety descriptions, respondent characteristics, and sources of information about Covid 19 are depicted in Table 1.

Table 1. Frequency	Distribution o	f Respondent	Characteristics,	Anxiety,	and	Sources	of	Information	about
Covid 19									

Variable	Res	Results			
Anxiety	Frequency N=96	Percentage (%)			
Anxious	66	68.8			
No Anxious	30	31.3			
Ages					
Early Adulthood	66	68.8			
Middle Adult	30	31.3			
Gender					
Woman	60	62.5			
Man	36	37.5			
Education					
Elementary School	23	24.0			
Junior High School	35	36.5			
Senior High School	19	19.8			
College	19	19.8			
Economic Status					
Low	64	66.7			
High	32	33.3			
Sources of Information About Covid-19					
Non varied	24	25.0			
Varied	72	75.0			

Based on Table 1, it is known that of the 96 respondents, most (68.8%) experienced anxiety during the Covid-19 pandemic, most (68.8%) were in the early adult category, the largest percentage of respondents' last education was junior high school (36, 5%), most (66.7%) have low economic status, and most (75%) have various sources of

information about Covid 19. The results showed that most of the people in the Kasemen Health Center Work Area experienced anxiety during the Covid-19 Pandemic Period.

Significant results of the emergence of public anxiety during the Covid-19 pandemic in this study were shown by symptoms of anxiety felt by the community, including often feeling dizzy when hearing news about the corona virus (38.5%), often having trouble sleeping when thinking about the corona virus (33.3%), often feel paralyzed when thinking or hearing about the corona virus (51%), sometimes loses appetite when hearing about the corona virus (50%), and often feels nauseous when thinking about the corona virus (43.8%) one of the causes of anxiety is the news about Covid-19. The news of the addition of cases and deaths that have reached more than thousands of people has become a terror in itself for the community. The impact is the emergence of psychological disorders in the form of fear and anxiety in the community in the Covid-19 pandemic situation (Jarnawi, 2020a).

Most of the respondents in this study were <40 years old or in the early adult category (68.8%). Age is a general indicator of when a change will occur. Age describes a person's experience, the older he is, the level of maturity and strength a person will be more mature in thinking and working (Abbruzzese et al., 2019; Flint et al., 2012). Young people are more vulnerable to anxiety and stress than older people because they have immature mental and mental readiness as well as a lack of experience (Hawari, 2011). However, in this Covid-19 pandemic situation, age may not necessarily be used as a measure to conclude that anxiety is more experienced by certain age groups. This is because the Covid-19 pandemic can be said to be a new, threatening experience for people living today.

Based on gender, the results showed that most of the respondents were female (62.5%). Several studies show that in terms of anxiety women have differences from men. In general, men have a stronger mentality towards something that is considered threatening to themselves than women. Anxiety is more often experienced by women because women prioritize emotions and are more sensitive to their feelings of anxiety (Aprelia et al., 2019; Sentana, 2016). However, other studies showed that older women have better emotions than older men (Abbruzzese et al., 2019).

The results of base on education showed that junior high school had the highest percentage of respondents' education, followed by elementary, high school, and college. These findings describe to the vast majority of respondents who have a low level of education. Education is tought to be capable of generating motivation and attitudes toward health, having better knowledge, easy to receive information, understanding concepts easily, and performing a good analysis of the concept. In terms of anxiety, people with higher education are better able to adapt to their environment and new things that happen around them than people with lower education, so they are able to find the right coping in solving the problems they face (Suyani, 2020; Vellyana et al., 2017).

Based on economic status, the results showed that the majority of the respondents had low economic status. Economic status is a description of a person's level of life in society. Income variables in economic status affect aspects of life including health care (Notoatmodjo, 2012). In the uncertain situation of the Covid-19 pandemic, economic status plays an significant role in the anxiety felt by the community. Aside from income, it is also measured in some studies by level of education. Income and education level both have a positive impact on a person's health. People with high economic status have a better ability to anticipate bad things during a pandemic, such as meeting their daily needs and health care costs (Rakasiwi, 2021).

Sources of information include everything that becomes an intermediary in conveying information, information media for mass communication. Sources of information can be obtained through print media (newspapers, magazines), electronic media (television, radio, internet), and through health worker activities such as training held (Notoatmodjo, 2012). The study is finding show that most respondents have various sources of information about Covid 19. The most sources of information about Covid-19 that the public got were from electronic media and information between friends (100%), information between partners (64.6%), from health workers (31.3%), field officers (21.9%) ), and print media (9.4%). This phenomenon demonstrates that during the COVID-19 pandemic, electronic media has become an easy medium to be access by the wider community. However, if it is not accompanied by good literacy skills, this condition risks receiving false information or hoaxes that can actually harm the community itself.

The relationship between respondent characteristics and sources of information about Covid 19 with public anxiety during the Covid-19 pandemic.

The relationship between respondent characteristics and sources of information about Covid 19 and anxiety during the Covid-19 pandemic is shown in Table 2.

No	Variables	P value	OR
1	Relationship between Age and Public Anxiety during the Covid-19 Pandemic	0,000	11,200
2	The Relationship between Gender and Public Anxiety During the Covid-19 Pandemic	0,909	-
3	Education with Community Anxiety during the Covid-19 Pandemic	1,000	-
4	The Relationship between Economic Status and Public Anxiety during the Covid-19 Pandemic	1,000	-
5	The Relationship of Information Sources about Covid- 19 with Public Anxiety during the Covid-19 Pandemic	0,127	-

 Table 2. The Relationship between Respondent Characteristics and Sources of Information about Covid 19 and Anxiety

Based on Table 2, it can be seen that the variable related to public anxiety during the Covid-19 pandemic in the Kasemen Health Center Work Area in 2020 is the age variable (p<0.0001). The variables of gender, education, economic status, and sources of information about Covid 19 were not related to public anxiety during the Covid-19 pandemic (p > 0.05).

The results of the analysis of the relationship between age and anxiety in respondents revealed that almost all of those in their early adulthood ( $\geq$ 40 years) experienced anxiety, whereas those in their middle adulthood ( $\geq$ 40 years) experienced less anxiety. In this study, respondents in early adulthood had an 11 times greater risk of experiencing anxiety during the Covid-19 pandemic compared to people with middle adulthood. The findings of this study are in line with the opinion of Hawari (2011) which states that young people are more prone to anxiety and stress than older people, where young people have immature mental and mental readiness and lack of experience. Age is also related to individual maturity which affects the ability of a person's coping mechanisms. So that more mature individuals are considered less prone to anxiety than younger individuals, this is because older individuals have better adaptability (Sturt, 2016; Hawari, 2011; Aprelia, Asrifudin & Kandou, 2020; Fitri & Ifdil, 2020).

In this study, respondents over the age of 40 years experienced greatest loss of income or work. The job characteristics of respondents under the age of 40 years are mostly factory workers and construction workers, whereas respondents over the age of 40 years are mostly farmers and fishermen who are still able to carry out economic activities compared to factory workers and construction workers. Respondents with under the age of 40 years also more often access the internet or connect with people through social media, and still often do activities together with friends. The need for information can be met through the use of social media which is very easily accessible in the era of massive information technology development, especially at the age of young adults, namely between 20-40 years (Maheswari, 2013). This causes at that age a person is more likely to get exposure to information that is less valid which can have an impact on anxiety.

The results of the analysis of the relationship between gender and anxiety showed that both male and female respondents have the same anxiety in this COVID-19 pandemic situation. Similarly, socioeconomic status, education and sources of information also do not have a relationship with anxiety. Respondents with high and low socioeconomic and educational levels are equally concerned about the COVID-19 pandemic. Respondents who got information about about Covid-19 from varied or non-varied sources also experienced anxiety. Because the Covid-19 pandemic is a new experience for the entire community, no one knows how to deal with it, and everyone feels the same level of anxiety. In this case, internal factors such as age, which demonstrates more maturity and experience in dealing with problems, become more important than other factors.

## Conclusions

The Covid-19 pandemic as a new experience for the community has an impact on anxiety. Age is a factor associated with anxiety, while gender, socioeconomic, education and sources of information are not associated with anxiety. Anxiety is more common in younger respondents, and younger age is a much higher risk factor than old age in anxiety during the COVID-19 pandemic. The results of this study can be used as consideration in determining policies for handling Covid-19 in the province of Banten. Providing consultation services for people who experience anxiety can be one of the services in the public health center

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