

# ANXIETY AND COPING SKILLS DURING COVID-19 EPIDEMIC AMONG MIDWIVES AT COMMUNITY HEALTH CENTERS IN CENTRAL JAVA: A DESCRIPTIVE STUDY

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## ABSTRACT

**Background:** The increase of COVID-19 cases in the second wave has affected the workload of health workers in Indonesia. More workload may increase the risk of stress and anxiety among healthcare workers. Coping skills are one of the important strategies to maintaining mental health status during the delivery of healthcare services. This study aimed to examine anxiety levels and coping skills among midwives.

**Subjects and Method:** This was a cross-sectional study conducted at Community Health Centers in Central Java, from July to August 2021. A total of 83 midwives was selected by total sampling. The dependent variables included anxiety and coping skill. The anxiety level was measured by Generalized Anxiety Disorder (GAD-7). The coping skills variable was measured using a questionnaire. The data were analyzed descriptively.

**Results:** A total of 83 midwives (100%) experienced anxiety with varying levels as follows: minimal (50.6%), mild (32.5%), moderate (13.3%), and high (3.6%). The majority of midwives had adaptive coping strategy (94%). Only a few midwives had maladaptive coping strategy (6%).

**Conclusion:** Anxiety is highly prevalent among midwives in Central Java. Fortunately, the majority of them has adaptive coping strategy to maintain mental health.

**Keywords:** anxiety, coping skill, COVID-19, midwives

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## BACKGROUND

The novel coronavirus 2019 (COVID-19) which first appeared in Wuhan, China is one of the pandemics that caused a high death number globally (Cabarkapa *et al.*, 2020). Until 09 July 2021, the global number of confirmed COVID-19 reached 184,324,026 cases with the mortality number was 3,992,680 of confirmed COVID-19 cases. (World Health Organization, 2021). In Indonesia, COVID-19 is defined as a disease that causes a public health emergency. It does not only

cause death but also causes substantial economic losses (Kementerian Kesehatan Republik Indonesia, 2020). The total number of confirmed COVID-19 in Indonesia reached 2,417,788 cases with a mortality number was 63,760 cases (2.6%) (World Health Organization, 2021).

During the pandemic of COVID-19, frontline healthcare workers are one of the vulnerable populations who often have an overexposure risk (Cabarkapa *et al.*, 2020). Based on the World Health Organization, about 8% of the

total confirmed cases or 1.29 million cases are health workers. In the period month of March to mid-May 2020, health workers have a three-fold risk of infection compared to the general population (World Health Organization, 2021). In Indonesia until July 10, 2021, the mortality number of confirmed COVID-19 in healthcare workers reached 1,133 cases (<https://nakes.laporcovid19.org/>, 2021).

Healthcare workers have a higher tendency for mental health problems because they can contact with confirmed cases (Aly *et al.*, 2021; Sahebi *et al.*, 2021). Some sources of a stressor for healthcare workers during the pandemic are the risk of virus contamination, limited staff, fatigue, lack of personal protective equipment (PPE) and mourning the death of another healthcare workers (Rowawi, 2021).

Several research in Indonesia concluded that healthcare workers in the COVID-19 isolation rooms have higher anxiety, depression, and insomnia compared to those who do not (Hanggoro *et al.*, 2020). Mental health problems for healthcare workers cause not only a decrease in the healthcare services and patient safety aspect but also can affect the effort of handling the pandemic (Handayani *et al.*, 2020; Rowawi, 2021).

Adaptive coping mechanisms are needed by healthcare workers to create a permanent adaptation as a new habit of dealing with anxiety and stress during the COVID-19 pandemic. Some adaptive coping mechanisms are praying, having enough time to take a rest, mindfulness, sharing and talking to cares person and having hobbies time (Rowawi, 2021). Meanwhile, only 5% of

healthcare workers think quitting their jobs as a maladaptive coping mechanism in the face of the COVID-19 pandemic (Tunik *et al.*, 2020).

The midwife is one of the healthcare workers who provide healthcare services at the public health center, Hospital or Independent Midwife Practices during a pandemic. They have risk of experiencing health problem such as anxiety and possibility of being exposed to COVID-19. In Indonesia until July 10, 2021, the death number of a midwife due to COVID-19 was ranked the third highest under doctors and nurses at 14.7% (<https://nakes.laporcovid19.org/> 2021). Although most midwifery services do not directly treat patients with confirmed cases, the high mortality number can be a source of mental health problems for midwives. Based on this background, this study aimed to examine anxiety levels and coping skills among midwives.

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## SUBJECTS AND METHOD

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### **1. Study Design**

This was a descriptive study with cross-sectional design. Data collection was carried out in July to August 2021.

### **2. Population and Sample**

The population in this study were midwives who worked in Java Island which have regulation Enforcement of Restrictions on Community Activities (PPKM) level 4. This study used total sampling technique. The sample in this study were 83 midwives.

### **3. Study Variables**

The dependent variable was anxiety and coping skill.

#### 4. Operational definition of variables

**Anxiety Level** is an unclear fear accompanied by feelings of uncertainty, helplessness, isolation, and insecurity during the COVID-19 pandemic in Midwives. Anxieties measurement tool is the GAD-7 (Generalized Anxiety) questionnaire. This questionnaire values ranges from (not at all), 1 (several days), 2 (more than half of the days/more often) and 3 (almost every day). The classification of anxiety levels; minimal, mild, moderate and severe anxiety.

**Coping Mechanism** is mechanisms to face and deal with changes. Coping mechanism measurements using a questionnaire. In this research, the coping mechanism was measured by questionnaire from expert panel. There were 20 statements which consists of 9 adaptive and 11 maladaptive statements.

**Table 1. Characteristic of the sample**

Characteristics	Category	n	%
Age	≤25 years old (late adolescence)	8	9.6
	26-35 years old (early adulthood)	51	62.4
	36-45 years old (late adulthood)	15	18
	>45 years old (elderly)	9	10
Workplace	Clinic	5	6.0
	Midwifery private clinic	7	8.4
	Primary Health Care	38	45.8
	Hospital for non-covid referral	5	6.0
	Hospital for covid referral	23	27.7
	Others	5	6.0
Work duration	≤ 5 years	21	25.3
	< 10 years	11	13.3
	≥ 10 years	51	61.4

**Table 2. Description of Anxiety Level among Midwives**

Anxiety Level	Frequency (n)	Percentage (%)
Minimal	42	50,6
Mild	27	32,5
Moderate	11	13,3
Severe	3	3,6
Total	83	100,0

#### 5. Instruments

The data is in the form of primary data and secondary data. Primary data were obtained using a questionnaire filled out by research subjects. The instrument used was a questionnaire.

#### 6. Data Analysis

Univariate analysis was carried out to see the frequency distribution and characteristics of the study subjects.

## RESULTS

Table 1 shows that characteristic of 83 subjects shows, most of them in early adulthood (26-35 years old), the average is 34 years old. Most of the subjects work in Community Health Center (45.8%) and Hospital for COVID-19 referral (27.7%) and the majority had >10 years in health work field with the averages about 11 years experiences in health care area.

Table 2 showed the majority of subjects experienced anxiety with varying levels as follows: minimal (50.6%), mild

(32.5%), moderate (13.3%), and high (3.6%).

**Table 2. Description of Coping Mechanism among Midwives**

Coping Mechanism	Frequency (n)	Percentage (%)
Adaptive	78	94,0
Maladaptive	5	6,0
Total	83	100,0

Table 3 shows the majority of midwives had adaptive coping strategy (94%). Only a few midwives had maladaptive coping strategy (6%).

## DISCUSSION

### 1. Anxiety level

The results showed that most of the respondents experienced minimal anxiety, which was 50.6% and there were 3 respondents with severe anxiety. The instrument for measuring the level of anxiety in the study used GAD-7 (Generalized Anxiety Disorder). GAD-7 consists of 7 questions that describe anxiety as a feeling of worry, inability to control anxiety, difficulty relaxing and sitting still, being irritable and afraid of things that seem like bad things will happen.

Anxiety is defined as a vague fear accompanied by feelings of uncertainty, helplessness, isolation, and insecurity. Anxiety is fueled by the unknown and accompanies all new experiences (Stuart, 2016). The high and massive spread rate is accompanied by an increasing death rate, the COVID-19 pandemic can be a triggering factor for anxiety, especially for health workers who serve patients. Several contributing factors for health workers include high demand for care, mortality rate, increasing number of cases, high workload, risk of transmission to self

and family to widespread the media information (Alnazly et al., 2021).

In addition, research related to the mental health of health workers in the second wave of the Covid-19 pandemic illustrates that most health workers in China experience symptoms of depression (60,2%), anxiety symptoms (49,6%) and insomnia (41,1%). However, correlation studies show that anxiety is not related to the department of work and profession, but is related to the race of the respondents (Zhao et al., 2021).

Research in Italy illustrates that the nursing profession in the ICU experiences symptoms of anxiety and insomnia greater than other professions during the service during the COVID-19 pandemic. Factors that affect anxiety and insomnia are fears of transmitting the virus to families who live in the same house. While the factors of age, length of work and gender and length of work did not affect. However, more than half of the research respondents feel protected while providing services because of the policies imposed by stakeholders (Stocchetti et al., 2021).

Research that describes the anxiety of health workers working in hospitals in Indonesia concludes that there is no anxiety experienced by respondents based on the gender, age, work unit and length of work.

Researchers conclude that health workers have adapted psychologically because of the adequacy of PPE, knowledge and experience in dealing with COVID-19 (Apriliany, 2020). Other studies also illustrate that 70% of health workers do not experience anxiety during health services during a pandemic (Musyarakah et al., 2021).

In this study, half of the subjects (50.6%) experienced a minimal level of anxiety. Minimal anxiety is categorized if the respondent gets a score of 0-4 on the GAD-7 questionnaire. So, most of the 7 questions in GAD-7 are answered with no choice at all. The anxiety experienced by respondents has a strong attachment to coping adaptations made by individuals. In table 1.6 most of the respondents fall into the category of adaptive coping mechanisms in dealing with the COVID-19 pandemic.

## **2. Coping mechanism**

The results of the study describe that most of the respondents perform adaptive coping mechanisms. The adaptive coping mechanisms used by most of the subjects include, instilling optimism that the pandemic will end soon, spiritual approaches by worship and prayer, practicing relaxation techniques to reduce anxiety before work and sharing anxiety with family and closest friends to receive social support.

Activities categorized as maladaptive coping mechanisms carried out by most of the subjects were diverting attention with social media which were categorized as unproductive actions, increasing the frequency of sleep, being alone and silent. Coping mechanism is an individual response to the changes experienced. Adaptive coping mechanisms are defined as those that support

the function of integration, growth and learning to achieve goals. Categories of adaptive coping mechanisms include talking to others, solving problems effectively, relaxation techniques, balanced exercises and constructive activities. Meanwhile, maladaptive mechanisms are defined as activities that are the opposite of adaptive coping mechanisms (Nasir and Muhith, 2011).

The cross-sectional multi-countries study on the types of coping mechanisms for health workers during the pandemic illustrates that 70% of health workers received family support and continue to instill a "positive way of thinking" during health service activities. Spiritual approaches in the form of praying, maintaining healthy eating patterns and sleeping patterns are also carried out to support adaptive coping mechanisms (Htay et al., 2021).

Effective and sustainable coping strategies are very important to keep health workers feeling capable during the work. Based on a systematic review of the mental health of health workers during the pandemic, some of the main coping mechanisms include psychological support from relatives, colleagues, patients and stakeholders, availability of PPE (Personal Protective Equipment), spiritualism and time for hobbies (Scortegagna et al., 2021).

In this study, the adaptive coping mechanism included in the external factor is social support from the closest system in life. This support is given to people around who have a close emotional relationship. These external factors encourage individuals to have optimism to prevent mental health threats. Social support from the closest system is an interpersonal interaction

of positive affection, affirmation and assistance in the form of attention and opinion assistance (Santoso, 2020).

#### **AUTHOR CONTRIBUTION**

Noviyati Rahardjo Putri was the main author who collected and processed the data. Rufidah Maulina, Nurul Jannatal Wahidah and Siti Nurhidayati examined the conceptual framework and the study methodology.

#### **CONFLICT OF INTEREST**

There is no conflict of interest in this study.

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