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Midwives Working During COVID-19 Pandemic and Anxiety

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ABSTRACT

Conducive workplace affects the anxiety level of health workers. This article reviews the association between the midwife's workplace, availability of personal protective equipment and length of work with midwife's anxiety. This is a cross-sectional study, conducted in January-December 2021, located in Klaten, Sample recruited in this study was 135 midwives by stratified random sampling. The midwife's workplace, duration of work time and availability of Personal Protective Equipment were not related to midwifery anxiety. Further research needs to be done with a larger sample size using the case-control or cohort method.

Keywords: anxiety, duration of work time, midwife's workplace, personal protective equipment,

ABSTRAK

Tempat kerja yang kondusif mempengaruhi tingkat kecemasan tenaga kesehatan. Artikel ini meneliti hubungan antara tempat kerja bidan, ketersediaan alat pelindung diri dan lama kerja dengan kecemasan bidan. Desain penelitian yang digunakan adalah cross-sectional. Penelitian dilakukan pada bulan Januari-Desember 2021, berlokasi di Klaten. Sampel yang direkrut dalam penelitian ini adalah 135 bidan dengan teknik stratified random sampling. tempat kerja bidan, durasi waktu kerja dan ketersediaan Alat Pelindung Diri tidak berhubungan dengan kecemasan bidan. Pada penelitian selanjutnya, perlu ditambahkan jumlah sampel dengan menggunakan metode case-control atau cohort.

Kata Kunci: Kecemasan, Durasi Waktu Kerja, Tempat Kerja Bidan, Alat Pelindung Diri

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INTRODUCTION

SARS-CoV-2, which was first announced in Wuhan, China in December 2019, has spread rapidly throughout the world. The impact is felt not only in the health sector, but also in all sectors of life (Kumar et al., 2021). Based on systematic review data on people's psychological status during the COVID-19 pandemic in various countries, it was found that the prevalence of psychiatric problems such as suicide, PTSD and depression has increased (Xiong et al., 2020). COVID-19 infection has an impact on post-pandemic life where psychological problems can trigger other illnesses, such as stress and chronic fatigue (Ren & Guo, 2020).

Psychological problems do not only occur in the general population, but also occur in health workers including midwives who interact with the risks of COVID-19 at work. A review concluded that the prevalence of depression and anxiety among healthcare workers was particularly high during the COVID-19 pandemic (Sahebi et al., 2021). In another systematic review, it is known that health workers are very vulnerable to experiencing sleep disturbances, trauma, anxiety and depression during the COVID-19 pandemic. This creates a crisis in the health system in the future (Marvaldi M, Mallet J, Dubertret C, Moro MR, 2021).

Long hours of work cause health workers to be vulnerable to physical and psychological disorders. In a survey it was found that after the pandemic, 50% of respondents experienced worse health. Nurses who work in an environment that is not conducive are at risk of experiencing deteriorating physical and psychological health. Long working shifts also affect their health. Nurses with long shifts are prone to poor quality of life (Melnyk et al., 2022).

SARS-CoV 2 which can infect humans through droplet and aerosol procedures causes health workers to protect themselves with strict personal protective equipment (PPE). Study was found that the availability of PPE which was not sufficient, could pose a risk of anxiety to health workers (Zhang et al., 2020, Delgado et al., 2020)

As in previous research it was said that a conducive workplace affects the anxiety level of health workers. Midwives are one of the health workers whose role is needed in maternal and child health services during the COVID-19 pandemic. Research on the work environment of midwives and anxiety is rarely researched. This article reviews the association between the

midwife's workplace, availability of personal protective equipment and length of work with midwifery anxiety.

METHOD

This is a cross-sectional study, conducted in January-December 2021, located in Klaten, Sample recruited in this study was 135 midwives who provide midwifery services in Klaten Regency. Midwives working in midwifery education and public health office were excluded from this study. Sampling method was carried out by stratified random sampling. Primary data collection was carried out by a survey regarding place of work, length of time worked in midwifery services and availability of personal protective equipment based on the respondents' perceptions. Patient anxiety is measured by the *Coronavirus Anxiety Scale* (CAS) adapted to bahasa. Data analysis used Fisher test and Kolmogorov Smirnov test. This research has obtained ethical clearance from the Health Polytechnic of the Surakarta Ministry of Health with no. LB. 02.02/1.1/2761/2021

RESULTS AND DISCUSSION

Result

Results of the research are presented below. The characteristics of the respondents are presented in table 1.

Table 1. Characteristics of The Respondents

characteristics	n	%
Age		
20-35	39	28,9
36-60	96	71,1
Education		
Diploma III /Associate Midwife	95	70,4
Diploma IV/ Bachelor Midwife	9	6,7
Profession	31	22,9
Marital Status		
Married	119	88,1
Not Married	16	11,9
Total	**135**	**100**

Source: Primary Data

Based on table 1, the majority of respondents are aged 36-60 (71.1%). Most of the respondents (70.4%) graduated from Diploma three in Midwifery and most of them were married (88.1%) . Results of the bivariate test are presented in Table 2

Table 2. Relationship between Work Place, Length of Work and Availability of Personal Protective Equipment (PPE) with midwifery anxiety

Variables	Anxiety				
	Disfunctional		Non Disfunctional		*p*
	n	%	n	%	
Work Place					1,000*
Community Health centers/ primary clinic/ midwifery Independent practice	4	4,8	79	95,2	
Hospital	1	3,6	27	96,4	
Primary clinic and midwifery independent practice	2	8,3	22	91,7	
Length of working					0,999*
Less than 7 hours	2	10	18	90	
More than 7 hours	5	4,3	110	95,7	
Availability of personal protective equipment (PPE)					
Adequate	5	4,5	106	95,5	0,607**
Inadequate	2	8,3	22	91,7	
Total	**7**	**5,2**	**128**	**94,8**	

Source: Primary Data; *)Kolmogorov smirnov test; **)Fisher test

Based on table 2, where the midwife works, the length of working hours and the availability of personal protective equipment are not related to the anxiety of the midwife (p value> 0.005).

Discussion

Our main finding is that the midwife's place of work, the midwife's working hours and the availability of PPE are not related to the midwife's anxiety. This finding is possibly due to they have been undergoing a pandemic for a year before this research was carried out. They had adapted to the situation, already had experience and the social system and leadership supported them at that time. Availability of infrastructure, PPE and also leaders who are able to meet these needs gives a sense of security to midwives who work in hospitals and health centers. It is known that 95.5% of midwives who did not experience dysfunctional anxiety stated that PPE was fully available Based on the narrative review of (Giorgi et al., 2020) health workers' mental problems mitigation needs to be done. These mitigation measures are in the form of completing workplace facilities and infrastructure, implementing health protocols in the context of preventing infection and providing PPE on a regular basis. The role of the workplace leader is required to plan for these needs and take the necessary actions to monitor the physical and mental health of the midwife in the workplace.

There is evidence that psychological interventions and workload affect mental health. This was examined in multidisciplinary respondents such as

doctors, nurses, midwives, caregivers, and social workers (Gray et al., 2019). In a cross-sectional study it is known that the role of the leader is very important to improve and increase the quality of health services. Comfort in work is influenced by leadership style at work (Sabbah et al., 2020). Based on a quasi-experimental study involving 272 office workers, an intervention was carried out for 6 months by applying a social ecological model and a healthy workplace based on WHO guidelines. The results of the study show that workplace institutions play a role in supporting the creation of a healthy workplace environment and facilitating health promotion in the office (Ryu et al., 2020).

Satisfaction of health workers at work can reduce the prevalence of anxiety during a pandemic. This was conveyed in a study (Teo et al., 2021) conducted in Singapore during the peak 6 months of the pandemic and the lockdown was imposed, it was found that there was a slight increase in stress and fatigue, while anxiety did not increase. Increased stress and anxiety occur in health workers who work for long durations. However, health workers who feel valued at work and a solid team can reduce anxiety.

The midwives who were respondents in our study worked in primary care and hospitals. Midwives working in primary care also work as independent practice midwives. Our findings show that there is no relationship between the midwife's workplace and anxiety. This is not in accordance with research in Wuhan where female workers who work in primary hospitals are prone to having psychological disorders (Dai et al., 2020).

In our study, working hours (≥ 7 hours per day) were not associated with midwifery anxiety. This is inconsistent with research (Lang et al., 2020) which found that nurses more often suffer from anxiety than doctors, live in isolation after work, and have relatives diagnosed with COVID-19. Anxiety related to gender and working hours (≥ 5 hours per day). Meanwhile, the meta-analysis (Torquati et al., 2019) concluded that mental disorders and depression are prone to occur in women who work shifts.

As is known in our research, 71.1% are aged 35-60 years where they have a lot of experience and 88.1% of midwives are married. This allows for a good coping system during a pandemic. Many factors affect midwives' anxiety during a pandemic. In the study (Rumeysa E et al., 2020) it was found that female doctors who are single, young with limited experience have a high level of anxiety. Doctors who have children have lower anxiety scores. In study (Salopek-Žiha et al., 2020), nurses over 40 years of age

sought social support as a stress management technique during the COVID-19 pandemic.

In our study it was found that the availability of personal protective equipment was not related to midwife anxiety. Our research was carried out 1 year after the world was declared a pandemic. According to research (Park et al., 2022) at that time, anxiety levels were lower compared to the beginning of the pandemic before the COVID-19 vaccination. The demand for PPE is not as much as it was at the start of the pandemic. According to (Baskin & Bartlett, 2021), health workers must have high resilience to face various challenges in the world of health. High resilience can prevent them from psychological disorders such as anxiety, PTSD and depression.

Our study has limitations including the small number of samples, the case group which causes a slight bias in conducting the analysis.

CONCLUSION

The midwife's workplace, duration of work time and availability of PPE were not related to midwifery anxiety. Further research needs to be done with a larger sample size using the case-control or cohort method**.**

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