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Research

Relationship between Social Support and COVID-Related Common Mental Disorders Incidence in Pregnant Women in Banyumas, Central Java

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ABSTRACT

Background: Social restriction and distancing were enforced, to contained the viral transmission of Corona virus Disease-19 (COVID-19). Therefore, normal social activities are stagnant, and give arise to common mental disorders (CMDs) in pregnant women especially in first trisemester of pregnancy. The purpose of this study was to analyze the relationship of social support with COVID-related common mental disorders (CMDs) in pregnant women in Banyumas Regional General Hospital.
Subjects and Method: A observational analytic study using Cross-sectional study approach targeting pregnant women in the Banyumas Regency Central Java, in May to December 2022. The independent variable is social support. The dependent variable is common mental disorders (CMDs). The sampling technique used snowball sampling of approximately 1543 respondents. This study employed the WHO-SSQ-6 and WHO-SRQ-20 questionnaires. The data analysis technique made use of the Chi-square test.
Results: Pregnant women who have low social support have a risk of Common Mental Disorders (CMDs) and are statistically significant (PR= 1.74; 95% CI = 1.83 to 1.87; p<0.001).
Conclusion: Social support has significant correlation with Covid-related CMDs.

Keywords: COVID-19, COVID-related CMDs, Pregnant women, first trisemester

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BACKGROUND

In 11th March 2020, World Health Organization (WHO) was declared a new disease, Coronavirus disease-19 (Covid-19) as a new pandemic, as 32 million people has been infected and 984.590 death has been recorded. Therefore, social restriction and social distancing must be conducted to contain viral transmission. Sudden change of normal social activities give arise to common mental disorders (CMDs) especially pregnant women. Pregnancy is a biological process that systematically alter physiological and psychological processes, consequently, pregnant women are prone to an infection (Zainiyah and Susanti, 2019; Corbett et al., 2020).

Pregnancy and labour are nature occurance in women productive ages. When pregnancy, equilibrium shift happens, phy-

siologically and psychologically. Therefore, pregnant women are vunerable to physical and mental disorders. Conditions of psychological disorders can be experienced by pregnant women, these disorders happened during pregnancy and after childbirth. This condition is influenced by various factors, such as social and family environment (Corbett et al., 2020; Tantona, 2020).

Common mental disorders (CMDs) are psychiatric conditions consisting of: depression, anxiety, adjusment and somatoform disorders that interfere with daily life (Jha et al., 2018). Common mental disorders that commonly experienced by pregnant women are depression and anxiety. Depression is a condition in which individuals lose their sense of happiness and joy, which will develop into physical disorders such as difficulty of sleeping and decreased appetite (Lubis, 2016). Anxiety is a condition when people will think about unpleasent things, it will manifest to individual feeling and emotionality (Sadock et al, 2017).

The World Health Organization (WHO) (2020) states that the incidence of depression of pregnant women is 10%, this case increases in pregnant women in developing countries, which is 15.6%. Depression is a mood disorder that 1 in 4 pregnant women suffer from. Depression during pregnancy has a prevalence of 7.4%-20% in the antenatal phase and 19.2% in the trimester phase I. Research in China shows that 29% of pregnant women in the country, experience anxiety from moderate to severe levels (Wang et al., 2020). Anxiety in 1,795 pregnant women has a prevalence of 6.6% (Hoang, 2014). Then, in 300 pregnant women in India, 20% experienced anxiety (Kusum and Suryakantha, 2013). The incidence of anxiety in pregnant women in Indonesia reaches 373,000,000 or 28.7% of them are anxiety in the face of childbirth, while in Sulawesi there are 15.1% of pregnant women who experience anxiety (Lestary et al., 2021).

In previous research was conducted in Madura region, the anxiety experienced by pregnant women was 31.4% during the pandemic (Zainiyyah & Susanti, 2020). The incidence of depression was obtained from a study involving 196 pregnant women in DKI Jakarta, amounting to 59.7% (Misrawati & Afiyanti, 2020). Then, in Bali, 56.3% of 80 pregnant women experienced depression (Masyuni et al., 2019). There is several factors that triggered depression as follow: poor nutritional intake, poor health access, poor health care, abuse of alcoholic beverages and narcotic substances, and poor self-health (van den Bergh et al, 2020). Poor support from the surrounding family and social environment can directly aggravate the mental health of the pregnant woman (Tantona, 2020). If not handled appropriately and quickly, it will increase the risk of fetal growth and development, so that babies are born with low body weight and / or have disabilities (Pangesti, 2018). Based on description, researchers are interested in conducting research related to Covid-related common mental disorders (CMDs) in pregnant women in Banyumas Regency, Central Java.

SUBJECTS AND METHOD

1. Study Design

A observational study with cross sectional design was conducted in Banyumas Regency, Central Java, in May to December 2022.

2. Population and Sample

Target population of this study: Pregnant woman in Banyumas Regency, Central Java in 2022. Sampling technique used: non-probability method is snowball sampling which is carried out online. The samples size in this study were 1543 samples of pregnant women in Banyumas Regency in 2020. Inclu-

sion criteria: Women who have been declared pregnant, who have had a pregnancy checkup and there are definite signs of pregnancy, pregnant women who can access the online questionnaire through the google form. Exclusion criteria, pregnant due to victims of sexual abuse, complications during pregnancy, and pregnant women have a history of mental disorders.

3. Study Variables

The independent variable is social support. The dependent variable is common mental disorders (CMDs).

4. Operational definition of variables

Social support is perception of individual that's is liked, valued, and accepted as part **of society.**

Common mental disorders (CMDs) is depressive and anxiety disorders classified in ICD-10 as neurotic, somatoform and stress-related disorders as well as mood disorders.

5. Study Instruments

In this study, for measuring the variables use: Social support: using SSQ-6 (Social Support Questionnaire-6). CMDs: using Self Reporting Questionnaire-20 (SRQ-20).

6. Data analysis

Data analysis used the Chi-Square test

7. Research Ethics

The research ethics was obtained from Ethical Committee of Faculty of Medicine Jenderal Soedirman University, reference number: 001/KEPK/PE/V/2022

RESULTS

1. Sample Characteristics

Based on finding in this research, univariate analysis showed the characteristics of respondents are known that the age of respondents in this study was the most at 20-35 years old by 1347 respondents (87.3%). The level of education of respondents, the most studied high school / equivalent as many as 738 (47.8%) in this study. Then, as many as 1209 (78.4%) of her jobs as housewives. It is known that as many as 640 (41.5%) of the respondents' husband's work are workers. It is known that as many as 1373 (89%) respondents live in rural areas. It is known that as many as 927 (60.1%) 26 respondents have incomes below the minimum wage. It is known that as many as 971 (62.9%) mothers have been pregnant several times. It is known that as many as 656 (42.5%) mothers are pregnant in trisemester II (15-27 weeks). It is known that as many as 1502 (97.3%) pregnant women have never contracted COVID-19. It is known that as many as 838 (54.3%) respondents have high social support. It is known that as many as 1315 (85.2%) respondents do not have CMDs.

Table 1. Sample characteristics (continous data)

Variabel	Category	(n)	(%)
Age (year)	<20	29	1.9
	20-35	1347	87.3
	>35	167	10.8
Education levels of pregnant women	Not completed	16	1
	Elementary	141	9.1
	Junior high school	357	23.1
	Senior high school	738	47.8
	University	291	18.9
Occupation of pregnant women	Housewives	1209	78.4
	Labor	23	1.5
	Farmer	2	0.1
	Merchant	50	3.2

Variabel	Category	(n)	(%)
Occupation of husband	Worker	256	16.6
	Others	3	0.2
	Unemploy	13	0.8
	Labor	571	37
	Farmer	41	2.7
	Merchant	250	16.2
	Worker	640	41.5
	Others	28	1.8
Living location	Urban	170	11
	Rural	1373	89
Household income	<minimum wage	616	39.9
	>minimum wage	927	60.1
Parity	Primigravida	572	37.1
	Multigravida	971	62.9
Gestational age	TM I (0-13 weeks)	235	15.2
	TM II (14-27 weeks)	656	42.5
	TM III (28-42 weeks)	652	42.3
Covid-19 history	Yes	41	2.7
	No	1502	97.3
Level of social support	Low	705	45.7
	High	838	54.3
Common mental disorders (CMDs)	Yes	228	14.8
	No	1315	85.2

2. Bivariate Analysis

The results of the bivariate analysis in table 2 describe that pregnant women who have low social support have a risk of Common Mental Disorders (CMDs) and are statistically significant (PR= 1.74; 95% CI = 1.83 to 1.87; p<0.001).

Table 2. Bivariate Analysis Between Level of Social Support and Occurance of CMDs Using Chi-Square Test

Independent Variable	CMDs				PR	95% CI		p
	Yes		No			Upper Limit	Lower Limit	
	N	%	N	%				
Level of Social Support								
High	97	11.6	741	88.4	1.74	1.83	1.87	< 0.001
Low	131	18.6	574	81.4				

DISCUSSION

The results of this study show that there is a relationship between social support and the incidence of common mental disorders (CMDs) in pregnant women related to COVID-19 in Banyumas Regency, with a p value of 0.000 so that it can be interpreted that there is a relationship between the two variables. The results of this study are also in line with Bedaso et al. (2021), social support is related to the incidence of CMDs, such as anxiety and depression in pregnant women. Mental health relationships are influenced by several sociodemographic factors, including: a woman's education level, economic status, and employment. Pregnant women who are in poverty and do not have a job will experience depression (Alipour et al., 2018). The husband's job also has an effect on the mental health of pregnant women. Gene-

rally, the incidence of mild mental disorders is mediated by financial and employment problems of both husband and wife (Dadras et al., 2020; Alipour et al., 2018). Moreover, pregnant women living in rural areas have difficulties such as accessing health services, malnutrition, and less rest time due to farming or raising livestock. In addition, pregnant women in rural areas will experience several physical problems such as anemia, bleeding, and the risk of giving birth to premature babies (Shams et al., 2022; Nwafor et al., 2021). Then, from broader aspect the incidence of mild mental disorders in low to middle-income countries is common (Woldetsadik et al., 2019; Shams et al., 2022).

In psychodynamics of depression can be seen from various aspects. The biological and temperamental vulnerability of the individual, the quality of a person's earliest attachment relationships, and adverse childhood experiences that may have triggered frustration, shame, loss, helplessness, loneliness, or guilt. The impact of such experiences and feelings during the formative developmental stage on individual perceptions of themselves and others is seen as creating a dynamic vulnerability to depressive disorders, including narcissistic vulnerability, conflicting anger, overestimated expectations of oneself and others, and maladaptive defense mechanisms. Psychoanalysis explains that depression focuses on temperamental factors, self-esteem sensitivity, adverse events of early life, current losses and disappointments, and anger. Depression is the result of hostility towards others that becomes directed towards oneself, an idea that remains a core dynamic in the view of most psychoanalytic experts. Depressed patients are believed to show a predisposition, based on initial bad temper or experience, towards hatred and distrust of others Fear and guilt about their anger, such patients suppress their hostility and project it externally. Then feel hated by others and explain this dislike caused by shortcomings or negative attributes (Charis and Panayiotou, 2021).

Based on the results of the study, low social support had a CMDs incidence of 131 (18.6%), while high social support had a lower incidence of CMDs of 97 (11.6%). Lack of social support increases the risk of anxiety and depression in pregnant women. Studies prove that social support is a protective factor from anxiety and depression during pregnancy. Social support, especially from couples, is a buffer for pregnant wives/mothers in facing difficulties during the transition phase to parenthood. Problematic relationships with partners, only increase the burden on women so that pregnancy and motherhood are getting heavier (Biaggi et al., 2016; Maghfirah and Arlianti, 2022). Then, the incidence of CMDs in the social support group was high, lower than the low social support group. High social support is obtained from the affection and care and appreciation of others. It creates inner comfort for the individual who gets it. Social support can also be obtained through cultural elements, one of which is Javanese culture (Rahmawati et al., 2020).

Culture provides social support through cultural rituals. The ritual includes prayers and families accompanying and supporting each process. Javanese culture, especially those who are Muslims, carries out the process of ngapati or ngupati in the first 4 months. Then, when entering the age of 7 months of pregnancy, a mitoni or tingkepan procession is held. Where the whole of this procession aims at the process of baby safety during pregnancy and childbirth. In addition, this ritual is a gathering place for large families, neighbors, and relatives so that pregnant women do not feel alone in facing the pregnancy process. In addition, this pro-

cession is a symbolization that pregnant women are expected to be present and accepted in the environment, thus calming pregnant women when they feel anxious. (Rahmawati et al., 2020). However, how the cultural factor influence in modulating CMDs in pregnant women remain unknown. The result in this study showed, there is a relationship between social support and the incidence of COVID-related common mental disorders (CMDs) in pregnant women in Banyumas Regency.

AUTHOR CONTRIBUTION

Yudhi Wibowo conceived and designed the researchs. Purwa Riana provide the literature and basic theory of social dynamic of CMDs. Fadel Rahman analyzed the data. Fadel Rahman wrote the paper.

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CONFLICT OF INTEREST

There is no conflict of interest.

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