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Husband's Role in Perinatal Depression during the New Normal Period of the Covid-19 Pandemic in Sewon Sub-District

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A B S T R A C T

The Covid-19 pandemic has greatly impacted the welfare and health of the community, which also lead to a perinatal mental health problem. Perinatal depression is not only due to hormonal fluctuations experienced by perinatal women, but also by the emotional challenges of having to keep a vulnerable newborn baby alive, while the mother gets little rest. Since a woman often lacks rest, the husband's participation in perinatal care can reduce stress on perinatal women. This study aims to determine the relationship between husband's participation and the incidence of perinatal depression during the Covid-19 pandemic. This was an observational analytical study with a cross sectional approach. The study population involved perinatal women and their husbands in Sewon Sub-District. Twenty-eight perinatal women lived in Sewon Sub-District participated in this study. The samples of 0-1month postpartum women were selected through simple random sampling technique. Data were analyzed using chi square test. The results revealed that 51.4% respondents had mild postpartum depression because their husbands participated in infant care. The chi-square value was 17,754 (higher than X2 table of 5.591) with a p-value of 0.000<0.05. Thus, Ho was rejected, meaning that there was a relationship between husband's participation in infant care and postpartum depression in Sewon Sub-District.

Pandemi Covid-19 sangat berdampak pada kesejahteraan dan kesehatan masyarakat, hal tersebut menjadi permasalahan kesehatan mental perinatal. Depresi Perinatal tidak hanya disebabkan oleh gejolak hormonal yang dialami oleh ibu perinatal, namun juga oleh tantangan emosional karena harus menjaga bayi baru lahir yang rentan agar tetap hidup, sementara ibu sendiri hanya mendapatkan sedikit istirahat. Dengan kondisi ibu yang kurang istirahat dibutuhkan partisipasi suami dalam perawatan perinatal dapat mengurangi stress pada ibu perinatal. Tujuan dari penelitian ini untuk mengetahui hubungan partisipasi suami dengan kejadian depresi perinatal pada saat pandemi Covid-19. Penelitian ini dilakukan dengan metode analitik observasional dengan pendekatan cross sectional. Populasi dalam penelitian ini yaitu ibu pada masa perinatal dan pasangannya di Kecamatan Sewon. Dua puluh delapan ibu perinatal dari Kecamatan Sewon berpartisipasi dalam penelitian ini. Sampel menggunakan simple random sampling usia 0-1 bulan pascapersalinan. Analisis data menggunakan chi square. Hasil ditemukan responden depresi postpartum rendah dikarenakan suaminya ikut berpartisipasi dalam pengasuhan bayinya sejumlah 51,4%. Nilai chi-square sebesar 17.754 dengan p-value 0.000. Hal ini menunjukkan p-value 0.000 < 0,05 atau X^2 hitung (17.754) lebih besar dari X^2 tabel (5.591), sehingga Ho ditolak artinya ada hubungan antara partisipasi suami dalam pengasuhan bayi dengan depresi postpartum di Kabupaten Bantul.

Introduction

The World Health Organization (WHO) declared Severe Acute Respiratory Syndrome Coronavirus-2 (SARS CoV-2) a 2019 new coronavirus (Covid-19) as an international public health emergency in January 2020, and on March 11, 2020, it was declared a global pandemic (Cucinotta & Vanelli, 2020; World Health Organization, 2020). Due to the rapid spread of Covid-19 and an increase in cases in various regions in Indonesia, finally the President of the Republic of Indonesia declared an emergency response status along with Large-Scale Social Restrictions Policy in the context of accelerating the management of Covid-19 in the Regulation of the Minister of Health of the Republic of Indonesia Number 9 of 2020 (Unicef, 2021). Previous studies on similar epidemics, namely Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome Coronavirus (MERS) reported that social isolation and disruption of health services had a negative impact on mental health and psychological well-being (Jeong et al., 2016; Liu et al., 2012).

During the COVID-19 pandemic, pregnant and postpartum women must face the accompanying quarantine measures and disruptions in medical practice. This can cause adverse effects in the form of mental disorders before and after childbirth (Rosyida et al., 2021). Prenatal and postnatal psychological disorders may cause disruption of physical activity, nutrition, and sleep/rest of pregnant and postpartum women. It will further affect the mood of pregnant and postpartum women which leads to negative consequences to women in the form of perinatal depression as well as to infants and children. Psychological disorders includes cognitive, emotional, behavioral, and behavioral outcomes and also reduced physical activity (Coussons-Read, 2013; Cuijpers et al., n.d.; Yan et al., 2020). During the Covid-19 pandemic, the psychological well-being of women during the postpartum period is often neglected (Chen & Lucock, 2022). Data derived from previous studies on mental disorders among pregnant and postpartum women concluded that barriers in utilizing midwifery services such as access to healthcare facilities were influenced by treatment costs, lack of transportation facilities, long distances (Nisar et al., 2016) and husband's participation (Firouzan et al., 2019). Timely intervention is helpful in reducing mental disorders (Xiang et al., 2020)

The prevalence of perinatal-postnatal depression varies in developed countries, ranging from 10-15% during the first year of birth. Based on 47 studies conducted in 18 low- and middle-income countries, the prevalence of postpartum depression was 18.6% (Z. Wang et al., 2021). A study released by the Maternal Mental Health Alliance in 2014 revealed that an estimated 10-20% of women worldwide suffered from perinatal mental illness (Perinatal Mental Health | Maternal Mental Health Alliance, n.d.), and 31% of them had a previous mental health problem (Bailey & Gaskin, 2021). However, in Indonesia there is no data on cases of perinatal mental health disorders. The search results on the Indonesian Ministry of Health's website with the keywords of postpartum depression only showed national health profiles regarding the mild emotional mental disorder in general, and no cases of depression were found, specifically in perinatal period.

Husband's participation is one of the factors that influence the incidence of perinatal depression among perinatal women. Husband's participation is a process of responding with actions that support

both behavior and psychology to a difficulty or problem experienced by his partner (Antoniou et al., 2021). Physiologically and epidemiological evidence showed that husband's participation in perinatal care could reduce stress experienced by women (Ghosh et al., 2010). Furthermore, another study revealed that pregnant women who got support from their families and husbands would have an increased affection for the fetus during pregnancy, thereby reducing the level of depression and postpartum anxiety compared to women who lacked support from their husbands or families (Ross, 2012). Husband's involvement in perinatal care will help assert women's autonomy and support women's capacity to care for themselves and their babies (Tokhi et al., 2018).

The effect of husband's participation on the incidence of perinatal depression during the new normal period of the Covid-19 pandemic should be considered, especially in the context of the success of the SDG's program to reduce infant and maternal morbidity or mortality rates. A husband who actively participates in the form of psychological and behavioral support can facilitate access to the use of perinatal care and preparation for referral. Thus, this study is designed to analyze the relationship between husband's participation and the incidence of perinatal depression during the new normal period of the Covid-19 pandemic in Sewon, Bantul, Yogyakarta, Indonesia.

Methods

From December 2020 to May 2021, an analytical survey was conducted in Sewon Sub-District, Yogyakarta, Indonesia. The researchers applied an observational analytic method with a cross sectional approach. The population of this study involved women in the perinatal period and their husbands who lived in Sewon Sub-District, Yogyakarta, Indonesia. The survey was conducted on twenty-eight postpartum women and their partners, with the following criteria: 1) being in the postpartum period; 2) had no health problems, both physical and mental and/or medication; and 3) the women and partners were willing to participate in this study. Postpartum women who experienced perinatal depression or second pregnancy and were excluded from the study. 28 study samples were selected through a simple random sampling technique out of 40 people in the population. There were two variables observed, namely the incidence of perinatal depression as the dependent variable and the husband's role as the independent variable.

Before the researchers conducted the study, permission at the institution was made and data were then collected. Data were collected using a questionnaire and EPDS sheets. After the data were obtained, statistical test through chi-square test was conducted with the SPSS software. Data collection during the covid-19 pandemic was carried out by filling in data through a google form which was distributed and validated by video calls by researchers. The data were then processed according to research ethics by editing, coding, scoring, tabulating to obtain percentages.

Results

Table 1. Distribution of respondents by demographic characteristics

Description	N (28)	Percentage (%)
Age		
20-24	6	21.4
25-29	8	28.6
30-34	12	42.9
35-39	2	7.1
40-44	0	0
Employment Status		
Private employee	3	10.7
Teacher	5	17.9
Housewife	9	32.1
Factory Worker	4	14.3
Farmer	2	7.1
Healthcare Worker	5	17.9
Level of Education		
Junior High School	2	7.1
Senior High School	17	60.8
Academy (D1/D2/D3/D4)	3	10.7
College (S1/S2/S3)	6	21.4
Daily Living		
Family	16	57.1
Independent	12	42.9

Source: Primary Data

Based on the table on demographic characteristics, regarding employment status, it was found that most of respondents (42.9%) aged 30-34 years and 32.1% were housewives. Regarding the level of education, most of respondents (60.8%) had a level of education of High School/MA/Vocational High School/equivalent. Furthermore, regarding daily living, most of respondents (57.1%) lived with their families.

Table 2. Cross tabulation of the relationship between husband's role and perinatal depression

	Husband's Participation								
Perinatal Depression	**Yes**	**%**	**No**	**%**	**N**	**%**	**X^2 count**	**(P)**	**X^2 table**
Mild	14	51.4	0	0	14	51.4	17.754	.000	5.591
Moderate	4	14.3	6	20	10	34.3			
Severe	1	2.9	3	11.4	4	14.3			
Total	19	68.6	9	31.4	28	100			

Source: Primary Data

Based on table 2, 51.4% respondents had mild perinatal depression because all of their husbands participated in infant care. The chi-square value was 17,754 (higher than X2 table of 5.591) with a p-value of 0.000<0.05. Thus, Ho was rejected, meaning that there was a relationship between husband's participation in infant care and postpartum depression in Sewon Sub-District.

Discussion

The results of the study in Sewon Sub-District among 28 respondents can be observed in table 2. In general, it was revealed that husband's participation had an effect on the incidence of post-partum depression. In this study, it can be observed in table 1 that regarding maternal age, 42.9% of respondents aged 30-34 years. At that age range, women are considered to have mental and reproductive function maturity. Meanwhile, based on the employment status, it was found that most of respondents were housewives by 32.1%. Based on the characteristic of education as one of the influential factors for

behavior, it is believed that higher education will affect one's knowledge to create positive behavior changes (Notoatmodjo, 2010). The results of this study showed that most of respondents had husband participation as many as 19 respondents (68.6%). Out of them 14 respondents (51.4%) had mild postpartum depression, 4 respondents (14.3%) had moderate postpartum depression, and 1 respondent (2, 9%) had severe postpartum depression. These findings were influenced by the level of education of respondents who had junior high school/MTs education by 7.1% and most of respondents had a level of education of high school/MA/equivalent as many as 17 respondents (60.8%). Therefore, the process of curiosity or seeking information and communication with partners was getting better.

The husband's words/attitudes towards his wife after giving birth and the husband's participation in helping with household chores certainly had a major impact on wife's mood. The fluctuating emotions or moods of postpartum women are influenced by hormonal changes, and it requires the husband's participation in caring for, entertaining, and supporting physical and mental health. If married couples live with their parents (especially mother-in-law), the wives in the postpartum period have to deal with mother-in-laws and husbands. In such circumstances, the husband must maintain a balance between being grateful to his parents and comforting his wife, and sometimes this balance is difficult to maintain, thus, causing a detrimental stimulant to the wife (Y. Y. Wang et al., 2017). This is in accordance with the result of a study conducted in Hongkong (Lau & Wong, 2008) which found that family-related social support, which was dominated by marital relations, followed by relationships with mother-in-law was the most important factor in the incidence of postpartum depression.

In mainland Chinese society (Li et al., 2020) as many as 17.3% of respondents were identified to have significantly more symptoms of postpartum depression, with the influential factors of intensive involvement of mother-in-law in participants' lives (living with, caring for them, or discriminating the women), lacked of husband's support, cesarean delivery, and insufficient breastfeeding (formula feeding). The husband's active participation during pregnancy helps strengthen the couple's relationship during the postpartum period. Active husband involvement consists of four interrelated elements, namely helping with a positive attitude, providing instrumental support, emotional support, and positive responses to important moments. These four elements are considered to increase trust, create more mature relationships, greater love, as well as good communication (Eddy & Fife, 2021).

The results of the current study among 28 respondents showed that husband's participation was related to the incidence of Postpartum Depression. The husband's continuous support during the delivery process is considered beneficial to reduce maternal dissatisfaction with the delivery process. One study found that the male partner of postpartum women was a significant source of factors associated with PPD symptoms among women (Kakyo et al., 2012). Another study revealed that women who were supported by their husbands reported lower anxiety and lower rates of depression (Sapkota et al., 2013). Pregnant and postpartum women as a special vulnerable group are more likely to suffer from psychological problems after experiencing an emergency which will increase the risk of mental disorders (Thapa et al., 2020). In a study conducted by (Anchan & Janardhana, 2020) on the effect of lifestyle-based training for married couples on postpartum anxiety and postpartum depression among

189 couples, it was found that training carried out for both parties was more effective in reducing depression and anxiety scores than training for only the wife.

Husband's participation is also formulated in the SIAGA campaign with the aim of reminding husbands about the importance of proper care and emergency preparedness for mothers during pregnancy, childbirth, and postpartum. However, it was found that the husband's participation was more effective when accompanying women during antenatal care visits in Indonesia. A husband must always be ready to help and prepare for any complications such as providing enough money for treatment and preparing blood donations, in addition to ensuring the partner gets adequate rest and proper nutrition and helps identify danger signs (Ginja et al., 2018).

In a clinical trial on the effect of husband's participation in physiological childbirth classes on the quality of life of pregnant women, the husband's involvement expected by the couple were not only through supports access to health services both during pregnancy and postpartum checkups, but also supports proper nutrition during pregnancy and helps the wives in completing household chores (Tokhi et al., 2018). In addition, a study conducted by (Dehcheshmeh et al., 2014) reported an increase in quality-of-life scores, especially around mental health. In a clinical trial among 442 pregnant women in Nepal, it was found an effect of prenatal health training on maternal use of health services and their readiness for delivery. It was shown that health-related information and behaviors were superior to women who were trained together with their husbands, compared to women who were trained alone or not trained at all (Mullany BC et al., 2009).

Likewise, family support is a significant factor in maternal depression. Mothers who had strong family support were less likely to experience PPD (Ria et al., 2018). Support is the most powerful and consistent personal predictor of personal adjustment. Families are the main source of support for postpartum maternal health (Reid & Taylor, 2015). Based on a Cochrane (2012) review entitled psychosocial and psychological interventions to prevent postpartum depression, one of the limitations of the study was that couples were not specifically involved in any preventive intervention (Dennis & Dowswell, 2013).

During the Covid-19 period, pregnant and postpartum women were at risk for infection and Covid-19 symptoms (Shuman et al., 2022). Increased anxiety and confusion about the risk of infection can affect the women's mental health in terms of emotional, social, and physical aspects (Goyal & Selix, 2021). Previous studies during the Covid-19 period found many descriptions of stressors affecting mental health after childbirth (Thapa et al., 2020; Zanardo et al., 2020). A study further reported that there was an increase in postpartum depression during the Covid-19 pandemic, but this had no effect on the bond between mother and baby (Erten et al., 2022). Although postpartum women experience stress due to restrictions during the COVID-19 pandemic, it also had positive effects to women such as spending more time with babies, getting more rest, as well as having more time for breastfeeding and bonding with their babies (Wilson et al., 2022).

Therefore, the husband's participation during the COVID-19 pandemic is the main strength in this study. For further research, training intervention can be carried out by involving husbands in an effort

to prevent perinatal depression, since the pregnancy period, in accordance with the principles of clinical trials. The limitation of this study was regarding the characteristics of the respondents which need to be further analyzed, namely education and the availability of instrumental or emotional social support such as a place to live with mother-in-laws which can also affect the maternal outcomes**.**

Conclusions

Based on the results of the study, it was revealed 51.4% of husbands actively participated in caring for the infant. The statistical analysis obtained a p-value of 0.000. Thus, there was a significant relationship between husband's participation in infant care and the incidence of perinatal depression during the Covid-19 pandemic. It is expected that husbands are willing to be involved in perinatal care and provide positive motivation and care since because family support, especially the husband's participation, can psychologically help postpartum women so that they are motivated to maintain their health during the perinatal period. It is also necessary to hold health promotion to married couples regarding the pattern of infant care and the period that the mother will go through after giving birth, so as to establish good communication, and husbands are encouraged to play an active role.

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