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Support System for Preventing Baby Blues and Depression Among Postpartum Women

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ABSTRACT

Background: Psychological problems experienced by women during the postpartum period can be influenced by the low level of support they receive from their husbands and family. The aim of this research is to determine the effect of practicing yoga and facial acupressure on the incidence of baby blues and postpartum depression in Bali. **Method:** The research design is observasional with crossectional study. The number of samples from three health care centres was 25-29 pregnant women from the third trimester until postpartum. The location of the research was carried out at three Community Health Centers in Bali Province. The research sample is women at late of third trimester of pregnancy until the postpartum period who met the inclusion and exclusion criteria. The research period was from May-September 2023. **Result:** The results of the analysis showed that the samples involved were 81 late third trimester pregnant women (gestational age 36-40 weeks until postpartum). The average age of respondents is 28.07 years. Obstetric history in the form of a history of pregnancy was an average of 2.32 times and a history of childbirth was 1.52 times. The most common place of delivery was the private obstetric clinic (46 people/56.79%). More respondents lived with extended families (p value<0.005). On average, husbands' support for their wives is quite strong, the mean is above 6 from the 7 score, and the lowest score is 1 for support for self-confidence, economics, empathy and helping to strengthen the wife. **Conclusion:** Support from husband and family is an important determinant in preventing baby blues and postpartum depression. Midwives are expected to provide education and guidance during pregnancy classes regarding the benefits of support from husbands and families in daily baby care.

Keywords: Yoga, Facial acupressure; Baby Blues; Postpartum Depression; Support system

Introduction

The postpartum period is known as a period of recovery and return of body size the shape of the reproductive organs as before pregnancy. Time required in the postpartum period is 42 days or six weeks from the birth of the baby and placenta. However, the American College of Obstetricians and Gynaecologists suggests that the definition of the postpartum period is extended to 12 weeks after birth or the fourth trimester (1,2). There are several problems commonly experienced by women during the postpartum period, in the form of physical, psychological, social and sexual problems. These psychological problems often arise due to drastic hormonal changes, especially the hormones progesterone and oestrogen (2–5). According to the World Health Organization (WHO), the postpartum period is a critical phase for the survival of the mother and baby. As many as 66% of infant deaths and morbidity occur within the first week of birth, and most infant deaths occur within the first month of birth (2).

The service package provided to postpartum women includes the provision of services. The first 24 hours for mother and baby, ensuring the health of the woman and the new baby birth remains in a health facility within 24 hours and is not sent home before that time (2). Recommendations that have been prepared by WHO (2015) regarding care for postpartum mothers include psychosocial support to prevent postpartum depression, especially in groups of women at risk (after incidents of miscarriages and or stillbirths, unwanted pregnancies. expected/planned pregnancies, lack of social support) (2). Previous studies were obtained that there was a delay by health workers in detecting it as well managing baby blues and postpartum depression (6–8).

Other factors that directly influence the incidence of baby blues and postpartum depression is psychological stress, type of delivery, pregnancy unexpected, parity, age, socioeconomic status, and family support. Another trigger factor is the influence of the therapeutic effect of serotonin which re-inhibits postpartum depression (3,9–11). Baby blues that are not detected early and not getting proper attention will progress to major depressive symptoms even postpartum psychosis. More than 20% are women postpartum experience baby blues which starts from the first to the fifth day postpartum and ultimately affects the attachment between mother and baby. There are more than 5% to 25% of postpartum mothers experiencing a number of symptoms that lead to postpartum depression (12,13).

The aim of the research was to determine the effect of implementing yoga and facial acupressure on the incidence of baby blues and postpartum depression in Bali. The novelty of this study is that there are interventions in the form of facial acupressure and yoga during the postpartum period which are evaluated for their effectiveness in preventing and reducing the incidence of baby blues and postpartum depression.

1. Methodology

1.1. *Design.*

The type of research is mixed method, namely using an approach quantitative-qualitative (Mixed method). Research design in the first year (2023) is a type of observational study, namely crossectional study. The research instrument used a questionnaire containing questions regarding the

characteristics of the respondent and the type of support received during pregnancy until postpartum.

1.2. *Context*

This research includes independent variables in the form of respondent characteristics (age, education, income, partner support, obstetric history) and the dependent variable is the score of baby blues and postpartum depression symptoms using the EPDS scale (14). During postpartum, respondents were asked to provide responses or statements regarding problems experienced related to baby blues and postpartum depression. The measurement instrument uses a self-reported questionnaire. Education and intervention media use videos, modules and job sheet guidelines interchangeably.

The research location used was the Buleleng Regency Health Center, namely in the Sawan II Community Health Center area, Denpasar City Health Center, namely in the UPTD I Public Health District, East Denpasar subdistrict. The community health center in Tabanan Regency that was involved was one community health center, namely the Tabanan III Community Health Center, which was previously very active and supported the implementation of research in 2021. The community health centers in the Special Capital Region of Jakarta that were involved were the Duren Sawit Community Health Center and the Cakung Community Health Center. The research time is planned for 2023 from May-October.

1.3. *Population and Sample*

The study population was pregnant women in the final third trimester (gestational age 36-40 weeks) and postpartum mothers in the districts or cities selected for the study, namely Tabanan District, Buleleng District and Denpasar City. The research sample was pregnant women from the third trimester to the postpartum period who met the inclusion and exclusion criteria who were willing to be involved in this study. The number of samples of 81 people is the total sample.

1.4. Data Collection

Data were collected from July to September 2023. Researchers have obtained ethical approval from the Denpasar Ministry of Health Polytechnic Ethics Commission in 2023 before data collection with letter number: LB.02.03/EA/KEPK/0659/2023. Researchers were assisted by three enumerators who had been trained previously. Respondents were collected by the coordinator midwife at the community health center, and attended the pregnant women's class every Saturday and according to agreement. An average of 7-12 pregnant women were gathered at each meeting session. Data collection on respondents was carried out 2-3 times, namely during the pretest and intervention, then during the posttest, namely during the postpartum visit. The enumerator has asked for the respondent's telephone number, making it easier to carry out follow-up and evaluation.

1.5. Data Analysis

STATA data analysis was used. Data analysis for univariate analysis, for analyze the data characteristics of respondents/subjects and the effectiveness of facial acupressure and yoga with proportion. Bivariate analysis uses correlational analysis.

1.6. Ethical Considerations

Research ethics is carried out by applying research ethical standards includes: respect for person, beneficence and justice. Respect for person: by means of the respondent giving consent after being given an explanation. Respect data confidentiality, maintain the dignity of respondents. Provide freedom for respondents to stop participating at any time without any sanctions or acts of coercion and threats. Beneficence: research conducted and interventions provided that provide direct or indirect benefits are carried out in accordance with ethical provisions. Justice: the researcher's efforts to act fairly.

2. Results

2.1. Characteristics of respondents in the intervention group

From the respondent characteristics analysis, it was found that the average age of the respondents overall was 28.07 years. The lowest age was 18 years and the oldest was 41 years. The highest average husband's income was ten million Rupiahs at three health centres. The highest respondent income was 3,5 million Rupiahs. The lowest income for husbands and respondents was no income or 0 rupiah. The highest level of education of respondents was at undergraduate level, were respondents at UPT. Puskesmas Tabanan III (4 people/14.81%) and UPTD. Puskesmas I District of East Denpasar (4 people/13.79%).

Table 1. Respondent Characteristics

No	Health Care Center (n)	μ	SD	Variance	Skewness	Min	Max	Kurtosis
1	Age (years)							
	Sawan II (25)	27,28	6,32	39,96	0,23	18	39	1,95
	Tabanan III (27)	29,37	6,18	38,16	0,24	18	41	2,35
	East Denpasar I (29)	27,55	6,52	42,54	0,68	18	40	2,20
	n = 81	28,07	6,33	40,14	0,38	18	41	2,14
2	Partner's or Husband's income (Rp)							
	Sawan II (25)	1800000						
	Tabanan III (27)	3168519	2787098	7,77	1,16	100000	10000000	3,58
	East Denpasar I (29)	2700000	2299379	5,29	2,10	0	10000000	7,77
	n = 81	2578395	2165019	4,69	2,17	0	10000000	7,83
3	Respondents income							
	Sawan II (25)	276000	430387,4	1,85	1,43	0	1500000	4,00
	Tabanan III (27)	655555,6	1136233	1,29	1,48	0	3500000	3,60
	East Denpasar I (29)	748965,5	1141473	1,30	0,99	0	3000000	2,21
	n = 81	571851,9	986041,5	9,72	1,60	0	3500000	4,15
4	Education level of respondent							
		Elementary		Junior High School		Senior Hugh School		University
		n	%	n	%	n	%	n (%)

Data on table 2 below, show that the average number of pregnancies for respondents is 2.32 and the average number of births is 1.52. The lowest number of pregnancies was 1 and the highest was the fifth pregnancy. The place of delivery most frequently chosen by previous respondents was the maternity clinic (46 women/56.79%).

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Table 2. History of Pregnancy and Childbirth among Intervention Group

No	Health Care Center (n)	μ	SD	Variance	Skewness	min	max	kurtosis
1	Gravida							
A	Sawan II (25)	2.72	1.17	1.38	0.09	1	5	2.45
B	Tabanan III (27)	2.44	0.93	0.87	0.16	1	5	3.47
C	East Denpasar 1 (29)	1.86	0.87	0.77	0.92	1	4	3.33
	n = 81	2.32	1.05	1.10	0.45	1	5	2.79
2	Parity							
A	Sawan II (25)	1.72	1.17	1.37	0.09	0	4	2.45
B	Tabanan III (27)	1.44	0.93	0.87	0.16	0	4	3.47
C	East Denpasar 1 (29)	1.63	1.12	1.22	0.17	0	5	2.78
	n = 81	1.52	1.03	1.66	0.11	0	5	2.67

4	Birth place							
		Hospital		Health care center		Midwifery private practices		Private Obstetric Clinic
		n	%	n	%	n	%	n (%)
A	Sawan II (25)	2	8.00	0	0.00	4	16	3 (3.70)
	Tabanan III (27)	4	14.81	6	22.22	5	18.52	12 (44.45)
	East Denpasar 1 (29)	2	6.90	7	24.14	5	17.24	15 (51.74)
	n = 81	8	9.88	13	16.05	14	17.28	46 (56.79)

2.2. Husband/Partner and Family Support

On average, husbands' support for their wives is quite strong with a mean score of above 6 out of a maximum score of 7, and the lowest score is 1 for support for self-confidence, economics, empathy and helping to strengthen the wife. The next low score with score = 2 is on affectionate support, comfort, caring for the wife's feelings and sharing household tasks after the baby is born.

Table 3. Partner's/Husband's Support During Pregnancy to Postpartum Period

No	Health Care Center	Nuclear Family			
		Yes (n %)	No (n %)	Pearson Chi Square	Sig
A.	Live with Nuclear Family				
1	Sawan II (25)	21 (84.00)	4 (16.00)	22.25	0.000*
2	Tabanan III (27)	6 (22.22)	21 (77.78)		
3	East Denpasar 1 (29)	10 (34.48)	19 (65.52)		
	n = 81	37 (45.68)	44 (54.32)		

B	Partner's/Husband's support (n = 81)				
		Mean (μ)	SD	Min	Maks
1	Feeling love	6.58	1.09	2	7
2	Comfortable	6.60	1.03	2	7
3	Trusted	6.25	1.65	1	7
4	Instrumental support	6.69	0.87	3	7
5	Financial support	6.52	1.13	1	7
6	Informational support	6.54	1.00	3	7
a	Birth place	6.62	0.81	3	7
b	Danger signs	6.33	1.11	3	7
c	Maternal and baby care	6.55	0.85	3	7
d	Sharing role	6.58	0.91	3	7
e	Take care of the wife's feelings	6.59	0.98	2	7
f	Empathy	6.65	0.98	1	7
g	Teamwork	6.67	0.90	2	7
h	Strengthen the wife	6.39	1.50	1	7

Sources: Primary Data Analysis (2023)

The results of the correlation analysis between husband's support and the score from the EDPS show that the higher the husband's support, the lower the respondent's depression score. In the table below, the results of the correlation analysis are displayed.

Tabel 4. Analisis Korelasi antara Dukungan Suami dengan Skore EDPH

Suuport	Emotional	Instrumental	Informational	Reward
Emotional	1,0000			
Instrumental	0,8334	1,0000		
	0,0000			
Informational	0,7480	0,7653	1,0000	
	0,0000	0,0000		
Reward	0,7533	0,7148	0,7399	1,0000
	0,0000	0,0000	0,0000	

Discussion

Respondent Caharacteristics

The characteristics of the research respondents showed that the average age of the respondents was 28.07 years, with the youngest = 18 years and the oldest = 41 years. The average monthly income of respondents is 3.5 million rupiah, with the lowest income being 0 rupiah and the highest being ten million rupiah. The respondent's highest level of education is high school/equivalent. The respondent's history of pregnancy was 1 time and the highest was five times. The most frequently chosen birthing place is the maternity clinic. Respondent characteristics are an important determinant in the high incidence of baby blues and depression in the postpartum period. This is stated by various complex factors, namely internal and external factors, including: primigravida; previous history of depression; worry; relationship with husband/partner and family that is not harmonious; low family support, especially husband/partner (3,5,8,11,15).

Another condition is a history of previous birth complications, including sociodemographic factors in the form of the woman's very young age, low socioeconomic status, low level of education and the quality of antenatal care including the attachment between pregnant women and health workers (5,16,17). Support from husbands and families is very important for pregnant women to feel safe and comfortable. Low support from husband/partner and family support is known to reduce women's self-confidence and attachment to the baby to be born (18–21).

Husband and Family Support

The support needed by women during pregnancy to postpartum includes emotional/psychological support, instrumental support, economic support, appreciation support and information support (2,40,41). Based on the results of research on a broader scale, it is known that adequate support from a partner/husband can prevent psychological problems in women during the postpartum period. Another impact is increasing attachment or bonding attachment between mother and baby, increasing self-confidence, self-esteem and preventing anxiety, fear, and success in exclusive breastfeeding (22–28).

The social support provided by the husband/partner during the pregnancy period has a positive impact in the form of increasing happiness, quality of life, life satisfaction and well-being. The results of a wider scale study found that there is a positive relationship between adequate social support and the mental or psychological well-being of the mother pregnancy until the postpartum period (10,17,29–33). Adequate forms of emotional, instrumental and informational support from partners/instruments for pregnant women have an impact on acceptance of their pregnancy. Pregnant women who receive sufficient social support from social networks have a greater potential to accept and pay attention to changes related to pregnancy. This in turn can foster positive behavioral outcomes that encourage engagement in good prenatal care practices and acceptance of motherhood (7,9,14,34,35).

Conclusion

Baby blues and postpartum depression experienced in the postpartum period have a

negative impact on a woman's health. The impacts range from mild to severe. Strategic efforts and policies need to be developed starting from the basic service level to the referral level. Family empowerment, especially husbands and closest family, needs to be improved through ongoing education and guidance. Pregnancy class programs that have been taking place in health service facilities are equipped with innovative and effective media to increase the support system for pregnant women until the postpartum period.

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