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[ORIGINAL ARTICLE]

Prevalence of Maternal blues in Primiparous and Multiparous Women Using Maternal Blues Suryani Scale : An Observational Study

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ABSTRACT :

Aim: To study the prevalence of Maternal Blues in Primiparous and Multiparous women using the Maternal Blues Suryani Scale.

Relevance of Study - Maternal Blues, if not detected and taken care of in time, can progress to major clinical postpartum depression, and it has adverse effects on the development and health of the infant and mother, such as that mothers might become triggered to engage in self-injury, suicide, or abandoning their babies.

Methodology- 102 females were selected according to this observational study's inclusion and exclusion criteria. Out of these, 51 women were primiparous, and 51 were multiparous. Written consent was obtained from the subjects before the study. The entire procedure was explained to the participants, and demographic details of the patient were taken. Participants were given printed copies of the Maternal Blues Suryani Scale in their language and a pen. Participants were asked to read each statement in the scale carefully and then tick the appropriate answer.

Result- A total of 102 women were the participants in this study. Of these, 51 were primiparouswomen, and 51 were multiparous women. The mean age of Primiparous women was 21.35, and that of Multiparous was 27.52. The mean % of Maternal Blues in Primiparous women is 55.15%, and that in Multiparous women is 52.03%.

Conclusion- The prevalence of Maternal Blues is slightly higher in Primiparous(55.15%) women than in Multiparous women(52.03%).

Keywords- *Maternal Blues, Baby Blues, Primiparous women, Multiparous women, Postpartum Depression*

Introduction

Childbirth is considered a significant physical, emotional, and social stressor in a woman's life. Following days to weeks after childbirth, most women experience some mental disturbance like mood swings and mild depression[1]. Maternity Blues (MB), also known as baby blues, postnatal blues, or postpartum blues, include low mood and mild, transient, self-limited depressive symptoms[2].The depression usually follows a latent period of about three to four days. The mother is weepy, anxious, and agitated. Maximum depression and tearfulness occur on the fifth postpartum day (Kendall et al., 1981)[3]. Women classified as having "maternity blues" are 12 times more likely to be diagnosed as depressed at 4 weeks and 10 times more likely to be diagnosed as depressed at 8 weeks postpartum than those not classified as having "the blues."[4]. High postpartum scores for maternity blues are associated with high antenatal progesterone concentrations on the day before delivery[5].

Severe postpartum blues are identified as an independent risk factor for subsequent postpartum depression.[6] Maternity blues is a strong predictor of postpartum depression. The higher the blues score, the higher the risk of postpartum depression.[7] Unrecognized, it can lead to the development of postpartum depression (PPD), which negatively affects maternal morbidity and mortality rates due to increased suicidal tendencies[8]. In other words, MB should be perceived as an end-stage of potential PPD

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occurrence[9]. Postpartum depression has long-lasting adverse effects on the emotional and cognitive development of children of affected women.[10] While women experiencing baby blues tend to recover quickly, PPD tends to be longer and severely affects women's ability to return to normal function. PPD affects the mother and her relationship with the infant.[11]

The prevalence rates of MB reported in the literature vary from 40% to 80%.[12] The proportion of those who experience a depressed state after delivery differs between primiparas and multiparas.[13,14,15] On a global scale, the prevalence of postpartum depression (PPD) differs by country and is greater than previously thought[12]. According to Stein's criteria, 67% of postpartum women have been diagnosed as suffering from MB.[16] Postpartum blues (PPB) are likely to be the predictors of postpartum depression by 15% to 20%. The progression of postpartum blues to significant depression must be prevented due to the risk that mothers might become triggered to engage in self-injury, suicide, or abandoning their babies.[17] The global prevalence of postpartum depression (PPD) is currently estimated at 17.7%[18]

There is a significant difference in average age between primiparas and multiparas, and there are reports that both being young and being old are risk factors for PPD. The differences in MB and social support by parity and their impact on PPD are unclear.[19,20] According to the literature, it was parity, not age, that was associated with anxiety or PPD. Poor quality of marriage/relationship in terms of intimacy, partner similarity, and disappointment negatively correlates with the risk for postpartum blues. Regarding social support, expected support and the conviction that the patient will receive helpful instructions are protective factors for postpartum blues[21]. To provide adequate support for depressive maternal women, it is essential to confirm the differences in social support and depressive states in the perinatal period between primiparas and multiparas.[10]

In this study, we used the Maternal Blues Scale by Suryani Manurung and S. Setyowati to identify the maternal blues in primiparous and multiparous women. It is based on a practical interaction domain with infants to measure postpartum attachment bonding to predict postpartum blues. It is based on factors involving the mother's roles and tasks and social, cultural, and economic support.[15]

Methodology

Study design: Cross-sectional study

Study population: Primiparous women and Multiparous women

Sampling technique: convenient sampling Technique

Sample size: n = 102

Sample size formula: $n = z_1^2 pq/d^2$

$p = 0.35$　$q = 1\text{-}p$

$z_1 = 1.96$　$d = \pm 0.12$

Study duration: 6 months

Place of Study: Dr. Ulhas Patil College of Physiotherapy, Jalgaon.

Subjects: A cross-sectional study was conducted on 102 postpartum women on a postpartum day at Obstetrics and Gynecology Ward, Dr. Ulhas Patil College Physiotherapy. Of these 102 women, 51 were Primiparous women, and 51 were Multiparous women. The criteria for inclusion were 1)Postpartum Day 5 of Multiparous women, 2)Postpartum Day 5 of Primiparous women, 3)Women who were willing to participate, and the participants were excluded if they 1)had any postnatal complications, 2)had any severe pain3)had any psychological history and 3)were not willing to participate.

Procedure: Before the commencement of the study, permission and ethical clearance were taken from the institutional ethical committee of Dr. Ulhas Patil College of Physiotherapy & concerned hospitals. Written consent was taken from the subjects before the study. The entire procedure and purpose of the Study Study was explained to the participants. Subjects were screened according to the inclusion and exclusion criteria. Demographic details of the patient were taken. Participants were given printed copies of the Maternal Blues Suryani Scale in their language and a pen. Participants were asked to read each statement in the scale carefully and then tick the appropriate answer. Evaluation of the participants was done.

Statistical Analysis: 102 femaleparticipants were a part of this study. The obtained data on outcome measures were noted and entered in MS Excel before being statistically analyzed. All the results are shown in tabularform and graphical format to visualize the

statistical difference more clearly.
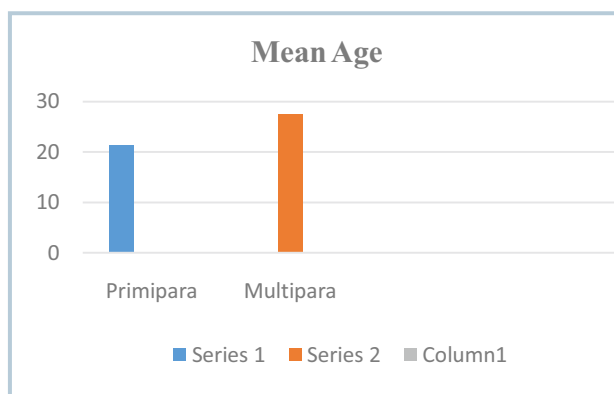
Table 1. : Parity-wise distribution of participants

Parity	No. of Participants
Primiparous	51
Multiparous	51

Parity wise Distribution
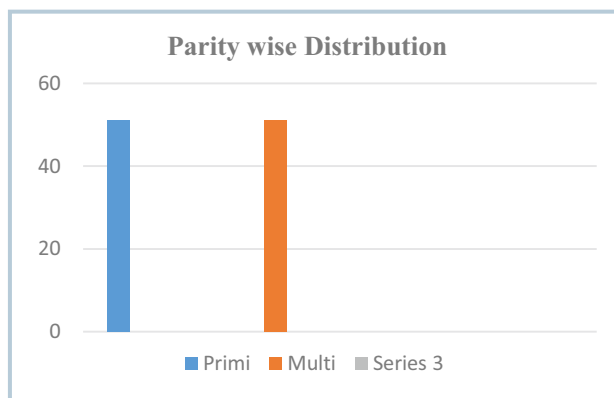
Graph 1 : Parity-wise distribution of participants
Comment: Of the total 102 participants, 51 were primiparous, and 51 were multiparous
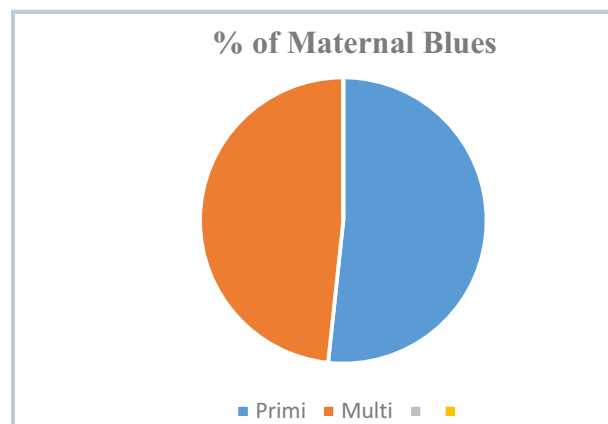
Table 2 : Age-wise Distribution

Parity	Mean Age
Primiparous	21.35
Multiparous	27.52

Mean Age

Graph 2 : Age-wise Distribution

Comment: The mean age of Primiparous women was 21.35, and that of multiparous was 27.52

Table 3. Maternal Blues in Primiparous and Multiparous Women

Parity	% of Maternal Blues
Primiparous Women	55.69%
Multiparous Women	52.03%

% of Maternal Blues

Graph 3 : Maternal Blues
Pie Diagram of Maternal Blues in Primiparous and Multiparous Women

Comment: The prevalence of Maternal Blues in Primiparous women is 55.69%, and in Multiparous women is 52.03%.

Results:

This study involved 102 women, 51 of whom were primiparousand 51 of whom were multiparous. The mean age of primiparous women was 21.35, and that of multiparous women was 27.52. The mean percentage % of Maternal Blues in Primiparous women is 55.15%, and that in Multiparous women is 52.03%.

Discussion:

The present study aimed to determine the prevalence of maternal blues in primiparous and multiparous women. The study resulted in a prevalence of 55.69% in primiparous women and 51.48% in multiparous women, which shows that maternal blues is more prevalent in primiparous women than in multiparous women.

A study conducted by Yukako M. et al. in 2020 to evaluate the prevalence of the difference in rates of maternal blues in Primipara and Multipara women in Japan concluded thatprimiparas had higher rates of experiencing MB and higher rates of PPD than did multiparas. This coincides with the present StudyStudy.[12]

Maternity Blues (MB), also known as baby blues, postnatal blues, or postpartum blues, include low mood and mild, transient, self-limited depressive symptoms[2]. The depression usually follows a latent period of about three to four days. The mother is weepy, anxious, and agitated.Maximum depression and tearfulness occur on the fifth postpartum day (Kendall et al., 1981)[3]

Maternity blues is a strong predictor of postpartum depression. The higher the blues score, the higher the risk of postpartum depression.[7] Unrecognized, it can lead to the development of postpartum depression (PPD), which negatively affects maternal morbidity and mortality rates due to increased suicidal tendencies[8].

A study conducted by Woolhouse. H et al. in 2015, to describe the prevalence of maternal depression from pregnancy to 4 years postpartum and the risk factors for depressive symptoms at 4 years postpartum, concluded that women with one child at 4 years postpartum report significantly higher levels of depressive symptoms than women with subsequent children which coincides with the present StudyStudy.[15]

A study conducted by Abiodun O. et al. in 2006 to explore early postpartum mood changes and their correlation with postnatal depression in African women concluded that African women at risk of postnatal depression could be identified in the early postnatal period by incorporating simple screening methods that coincide with the present StudyStudy.[4]

A study conducted by Valentia T. et al. in 2023 to offer an overview of the knowledge available of MB in terms of definitions, diagnosis tools, pathophysiological mechanisms, and all significant clinical aspects concluded that an appropriate and early diagnosis of MB in clinical settings can give the possibility of assisting mothers with adequate psychological support, making a prompt identification of an eventual shift to the most severe mood disorders, which coincides with our StudyStudy.[2]

A study conducted by MariolaBidzun et al. in 2016 to identify factors increasing or decreasing the risk of postpartum blues concluded that Maternal disappointment with marriage/relationship, neuroticism and introversion, poor quality of sleep, fear of childbirth, and seeking social support are among the factors signaling the need for careful observation for signs of possible postpartum mood disorders, which coincides with our StudyStudy.[21]

High postpartum scores for maternity blues are associated with high antenatal progesterone concentrations on the day before delivery[5]. The experience of the Blues may be related to increased secretion of hypothalamic adrenocorticotrophic hormone (ACTH) secretagogue peptides after the reduction in negative-feedback inhibition on the maternal hypothalamus caused by withdrawal of placental CRH during pregnancy.[22]

The present study found that maternal blues is slightly more prevalent in primipara than in multipara women. It can be due to multiple reasons, such as first-time experience of pregnancy and having a child, fear of being able to take care of the baby, fear of losing importance after the birth of the baby, having no time for self, etc.

Clinical postpartum depression can be prevented by early diagnosis of maternal blues through simple screening tools like the maternal blues suryani scale, which covers the internal and external factors and also the mother-infant relationship.

Conclusion: The prevalence of Maternal Blues is slightly higher in Primiparous(55.15%) women than in Multiparous women(52.03%).

Limitations:

1. Participants should have been included from various other maternity hospitals.

2. The factors examined in this study were limited, as we did not examine the sex of the baby, literacy rates, financial status of participants, etc.

Clinical Implications: Early detection of postpartum depression will be beneficial in improving healthy baby-mother relationships. Physiotherapeutic interventions like relaxation, massage, yoga, aerobic exercises, and aqua therapy can help enhance their physical, mental, and emotional health. Awareness and promotion of Antenatal classes like early bird and postnatal classes will also be beneficial in providing proper counseling and educating women and their partners/families.

Future Scope: There is a need for a Study on the relationship between Maternal Blues and;

1. Mode of Delivery,

2. The gap between pregnancies,

3. Sex of child,

4. Paternal Blues

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