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Original Research Article

Unveiling maternal morbidity: insights from a descriptive cross-sectional study of postpartum women

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ABSTRACT

Background: The repercussions of obstetric problems and inadequate management during birth are carried over into the normal 42-day postpartum period, adding to the burden of maternal ill-health, which also includes levels of maternal mortality and complications during postpartum period. Our study was done to determine the common morbidities that postpartum subjects undergo and make awareness to health care practitioners and prevent complicated scenarios.
Methods: Cross-sectional descriptive study was conducted in rural areas of Eraviperoor Grama Panchayath community pathanamthitta, Kerala, India. There were 150 people in the study's sample. The study involved women who are in their postpartum phase (months 0–8).
Results: Our study of 150 participants found that 65% of deliveries were through C-sections. Despite 56% of postpartum women expressing high satisfaction with their overall health, concerns include nipple cracks (80%), urinary tract infections (56%), bacterial infections (12.5%), stitch allergies (6.5%), anemia (18%), leg edema or erythema (2%), difficulty urinating (18%), burning during urination (13%), and breast pain (4%) as prevalent morbidities.
Conclusions: The present findings enable healthcare professionals to examine postpartum women's physical and emotional health more comprehensively, enabling them to enhance their quality of life.

Keywords: C-section, Maternal morbidity, Obstetric problems, Postpartum morbidity, Urinary tract infection

INTRODUCTION

The World Health Organization (WHO) describes the postnatal period as the most critical and yet the most neglected phase in the lives of mothers and babies; most maternal and newborn deaths occur during this period. Mothers and newborns are especially vulnerable during the early postpartum period.[1] Postpartum mother health has failed to receive the same level of scrutiny as neonatal health, despite notable advancements in this area. The majority of deaths involving mothers and newborns occur within the first seven days after delivery.[2] Most studies are carried out in hospitals, and those that are carried out outside of hospitals typically rely on self-reported symptoms and are retrospective in nature, making them insignificant for predicting the incidence of particular morbidities in the population. Incontinence, fistula, pelvic inflammatory disease, genital prolapse, hypertension, hemorrhoids, nerve damage, pituitary failure, anemia, and infertility are among the long-term morbidities/disabilities defined in the literature. Other postpartum morbid consequences include issues such postpartum infection, anemia, perineal tears, urinary tract infection, and depression. If not properly cared for, many of these maternal morbidities and impairments might develop after delivery or in the first one to two weeks after delivery and become chronic. An estimated 15-20 million women globally are estimated to experience these long-term and

postpartum morbidities/disabilities annually.[3] These medical conditions have long-term effects on the mother's health even when they are not life-threatening. While many deliveries occur in hospitals nowadays to minimize complications, disparities in healthcare access and quality still exist, particularly in rural areas. Illiteracy, lack of knowledge about postpartum care, and cultural beliefs can further hinder access to proper care especially in countries like India. In our research, the majority of deliveries occurred in tertiary care hospitals, and the women who participated were from rural areas.[4] In the event of an emergency, postpartum mothers consult their gynecologists if not, they attempt short-term home remedies for relief. It prompts them to assume that these issues are a component of postpartum. Physical incompetence following childbirth is linked to both mental and physical morbidity, which should not be regarded as a normal occurrence. In remote areas, primary healthcare facilities deliver information on postpartum health. However, their limited resources and accessibility hinder them from encompassing all aspects of postpartum care, including educating family members concerning the significance of postpartum health. The purpose of this study is to comprehend the standard postpartum morbidity that is perceived as normal in rural areas because of a lack of knowledge, as well as the solutions that these women sought for momentary respite.

METHODS

A cross-sectional descriptive study was undertaken in the Eraviperoor Grama Panchayath community in Pathanamthitta, Kerala, India. The trial ran from November 2022 to April 2023, roughly six months. Women in the 0–8-month postpartum phase constitute the research's participant sample. Based on the number provided by the nearest community health centre, the sample size was 150.The participants were enrolled in the study based on the inclusion exclusion criteria.

Inclusion criteria

Inclusion criteria was based on women who gave birth and are in their postpartum phase 0-8 months.

Exclusion criteria

Exclusion criteria include postpartum women who informed their unwillingness to participate in the study. Pregnant women, non-pregnant women who are not in their postpartum phase.

Data collection method

The data were collected by making individual interviews where the participants' consents are taken in their local language. The interviews were face to face, done using prepared questionnaires after receiving Institutional Review Board approval from the Nazareth College of Pharmacy under which the study is conducted, and also considered information gathered from the nearest Primary Family health center. The information gathered from the participants included the basic demographic details which includes age group, type of family, literacy, occupation, place of residence, mode of delivery, number of children, list of problems related to breast, list of problems related to bladder, list of infection and overall health satisfaction.

Statistical analysis

The data collected were entered in the Microsoft excel-2018 version and the results were analyzed as tabular form and percentage.

RESULTS

A total of 150 patients was studied over a period of 6 months. The patients were randomly divided into two groups i.e. Amikacin (AM) group and Gentamicin (GM) group with equal number of populations.

Table 1: Social demographic details of the patient (n=150).

Variables	Number (%)
Age group (years)	
21-30	80 (53)
31-40	60 (40)
41-50	10 (7)
Type of family	
Joint	62 (41)
Nuclear	88 (59)
Literacy	
Primary education	6 (4)
Secondary education	10 (6)
Tertiary education	134 (90)
Occupation	
Student	4 (3)
Worker	105 (70)
Homemaker	41 (27)
Place of residence	
Rural	115 (77)
Urban	35 (23)
Mode of delivery	
Normal vaginal	52 (35)
C-Section	96 (64)
Vacuum delivery	2 (1)
Place of delivery	
Private hospital	100 (67)
Government hospital	50 (33)
Number of children	
1	65 (43.33)
2	70 (46.67)
3	14 (9.33)
4	1 (0.67)

Among 150 postpartum women enrolled in the study only 25 women had specific problem related to breast which were 80% with nipple crack, 8% with no milk, 4% had difficulty to feed, 4% with difficulty to produce milk first time and 4% with breast pain, which is evident from Figure 1.

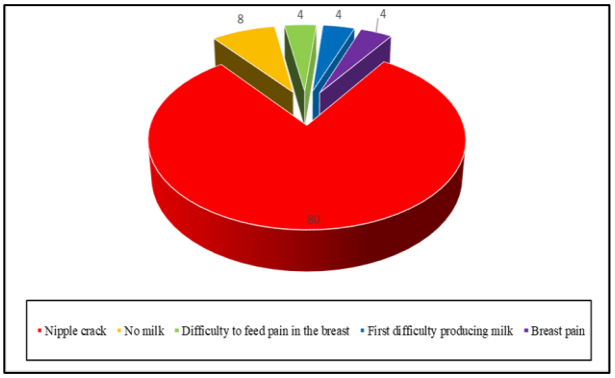

Figure 1: Distribution of morbidity associated with the breast.

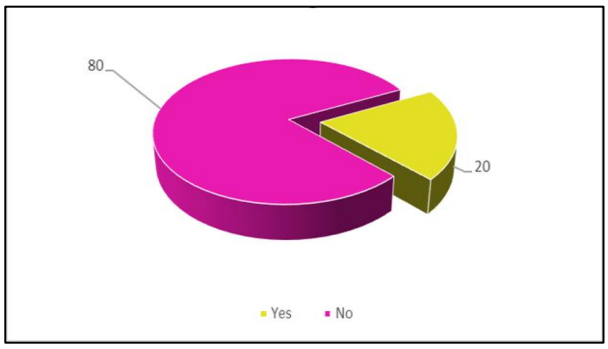

Figure 2: Distribution presence of edema in postpartum subject.

Among the study population only 20% of them have edema in leg during the postpartum period while the rest 80% have no edema on leg as shown in Figure 2.

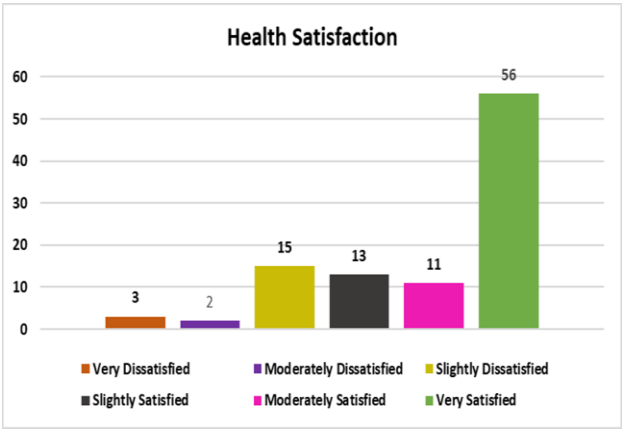

Figure 3: Distribution on the overall health satisfaction of the postpartum women.

Figure 3 shows the overall health satisfaction of the postpartum women among which 56% is very satisfied with health and at least 2% was moderately satisfied with over health.

Table 2: Distribution of specific problem related to bladder.

Morbidity related to bladder	Number (%)
Difficulty in urination	2 (11)
UTI	10 (56)
Diuresis	1 (5.5)
Itching	1 (5.5)
Leaking	1 (5.5)
Stitch difficult	1 (5.5)
Vaginitis	2 (11)

From Table 2 out of the 150 subjects only 18 ladies had problems associated with bladder which include 11% with difficulty in urination, 56% with UTI, 5.5% with diuresis, itching, leaking, stitch difficulty and 11% with vaginitis.

Table 3: Distribution of specific infection during postpartum period.

Infection	Number (%)
Bacterial infection	2 (25)
Drug induced allergy	1 (12.5)
Stitch allergy	1 (12.5)
Vaginal and fungal infections	2 (25)
Vaginitis	2 (25)

Table 3 shows the distribution on specific infections during the postpartum period from the total research individual only 16 subjects had specific infections of which 25% with bacterial, vaginal, fungal infections and vaginitis. 12.5% with drug induced allergies and Stich allergies.

Table 4: Distribution of anemic condition during postpartum period.

Anemic conditions	Number (%)
Yes	27 (18)
No	123 (82)

About 18% of the study enrolled women's have anemic condition and the rest 82% was normal as shown in Table 4.

DISCUSSION

In this cross-sectional descriptive study about 150 participants were involved who were in their postpartum period of 0-6 months. The problem of postpartum morbidity receives little research because it is thought to be typical following childbirth. According to our research,

postpartum care is necessary, and issues following childbirth should not be viewed as typical.

As women age, they become less likely to conceive due to physical and mental health problems, so for this reason it is good to have babies during the early 20's and in 30's, and postpartum morbidity is more common in the 20-30 age group as most of them are new mothers, but most of the issues can be managed during this period whereas it would be difficulty in late 30's. The majority of the registered participants are from rural areas, have established nuclear families, and have completed postsecondary education; however, is there any connection between the above-mentioned point and postpartum care? Yes, since, despite their postpartum education, the patients are unaware of these challenges and view their problems as typical, also age, family, type of education is also a contributing factor for postpartum morbidity which is similar to study conducted by Mutihir et al.[5,10] It's unfortunate that societal norms and misconceptions surrounding pregnancy and postpartum can inhibit women from sharing their experiences and seeking help when needed. This reluctance to disclose problems was indeed hindering data collection and ultimately impeded efforts to address postpartum morbidity effectively.

The majority of issues that were frequently mentioned have to do with the bladder, breast, and infections. Out of 150 participants, only 25 experienced problems with their breasts, 18 had problems with their bladders, and 8 had infections. Nipple cracks account for 80% of reported breast problems. When it comes to bladder problems, the most common complaints were difficulty in peeing and vaginitis. Other infections, such as bacterial and fungal infections, were also linked to these problems and may be the primary source of pain and irritation. Most of the time, these problems can affect one's physical and mental health, and occasionally, if they are not properly addressed, they might eventually result in postpartum depression. Breast-related ailments were more prevalent in postpartum women; according to our research, nipple cracking is the most common issue and as time progresses mothers tend to stop breast-feeding.[6,9] More commonly reported bladder condition was UTI, difficulty peeing and vaginitis which is also another problem related to urinary incontinence and perineal pain and irritation which is similar to study conducted by Patra et al urinary incontinence in more common during 9-14 months after delivery.[7,10] In our research it was found the participants were prone to infection such as bacterial, fungal infection which was due to less cleanliness and hygiene may be a reason associated, which is mostly self-limiting and some even took medical care.[8]

Anemic condition and edema in leg occurred after delivery, edema in leg was self-limiting as it was the outcome of pregnancy. Out of 150 people 27 had anemic condition which is more when compared to study done by Assarag et al. In our study, we could not compare Hb rates because these were self-reported studies, we were unable to find a cause for postpartum anemia.[11]

Realizing how the body changes and how long it takes to heal after pregnancy and childbirth is crucial for women to have reasonable expectations for their postpartum journey.[12]

After giving birth, 56% of the women expressed great satisfaction with their general health, and the majority of them expressed excitement for their newfound role as mothers, when asked at the end of the study about their level of happiness with their lives. The majority of new mothers are unaware of what life is like after giving birth; instead, they worry more about their child, which takes up more of their time, and they eventually start to view their concerns as less important and as for this reason mother also find it difficult to speak about their physical and mental and suppresses it with themselves.[10]

Additionally, addressing myths and misconceptions about pregnancy and postpartum through education and awareness campaigns can help empower women to advocate for their own health needs and seek support when necessary. By challenging outdated beliefs and providing accurate information, we can work towards breaking down barriers to effective postpartum care and support.

CONCLUSION

Postpartum period and the associated problem are topics which have not gained much attention as it is considered normal. It had a huge impact on the women's physical and mental health. Most of the research published is based on the depression associated during the period of postpartum and some research was done to identify the common morbidity after giving birth. Our research is an insight which gives a rough information to the healthcare provider not to consider postpartum related morbidity as typical, also this could also be a reason for developing postpartum depression. Even proper education should be given to families as well, so women would have felt that they are cared too. Our research not only contributes valuable insights into the challenges women face during the postpartum period but also underscores the urgent need for broader societal shifts in attitudes and perceptions surrounding maternal health.

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