

Postpartum Psychiatric Disorders: A-Two Year Retrospective Review at a Tertiary Health Institution in Damaturu, North East Nigeria

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ABSTRACT

Background: Postpartum psychiatric disorders have devastating consequences not only on the women, but also for the child and family. Not much is known about the magnitude and pattern of these disorders since the entrenchment of relative peace in this geo political zone of the country, hence this study.

Aims and Objectives: The study aimed to determine the clinical, psychosocial and socio demographic characteristics of women diagnosed with postpartum psychiatric conditions in a tertiary health institution in Damaturu, North East Nigeria.

Methods: We conducted a retrospective review between May 2017 and April 2019 of cases with post-partum psychiatric conditions and extracted relevant data using an instrument designed by the authors.

Results: Majority of the participants had vaginal delivery 62/82 (75.6%), were married 68/82 (82.9%), had full term babies 63/82 (76.8%) and developed post-partum psychiatric symptoms less than four weeks after delivery 80/82 (97.5%). Depression was the commonest type of post-partum psychiatric illness 47/82 (57.3%), followed by mania 14/82 (17.1%), bipolar disorders 8/82 (9.8%) and schizophrenia 6/82 (7.3%). The husbands were the primary caregivers in 63.4% of the participants while more than half of them were not booked 45/82 (54.9%).

Conclusion: The study offered some insight into the occurrence of mental health disorders during the perinatal period among women in Damaturu, North East Nigeria. Therefore, there is need for early detection and effective management of post-partum psychiatric disorders in a timely and proactive fashion as this is essential for optimal mental well-being of the mother and child.

Keywords

Post partum psychiatric disorders, Tertiary health institution, Damaturu, North East Nigeria.

Introduction

The World Health Organization (WHO) describes the post-partum period as the most critical and yet the most neglected phase in the lives of mothers and babies, most maternal morbidity and mortality occur during the post-partum period [1]. Post-partum psychiatric disorders are mental disturbances which occur in women of child bearing age within four weeks of childbirth [2]. The disorders are thought to occur three times more commonly in the developing than in developed countries [3].

The peri natal mental health of women living in low- and middle-income countries has only recently become the subject of research [4], in part because greater priority has been assigned to preventing pregnancy related deaths. In addition, some have argued that in resource-constrained countries, women are prevented from experiencing post-partum psychiatric disorders through the influence of social and traditional cultural practices during pregnancy and in the post-partum period [5,6].

Post-partum psychiatric disorders can be mainly divided into three groups: post-partum blues, post-partum depression and the post-partum psychosis and are reported to affect between 1/1000 and 2/1000 women after childbirth [7]. These disorders are serious and common with important implications for the welfare of the family and development of the child [8]. The effects are not only borne by the patients but their children and relatives [9]. They are largely under diagnosed and under treated reiterating the fact that routine screening during post-partum clinic visits should form an integral part of the assessment.

The etiology of post-partum psychiatric disorders is a complex interaction of psychological, social, biological factors in addition to genetic and environmental factors. Puerperal hormone shifts, obstetrical complications, sleep deprivation and increased environmental stresses are possible contributing factors to the onset of the illness [10,11]. Additional risk factors include primiparous patient, family history of psychiatric illness, personal psychiatric history particularly mania [12].

Nigeria records one of the worst rates of maternal and infant morbidity/mortality in the world [13]. However, there is paucity of reports on the magnitude of the full spectrum of mental health morbidity associated with pregnancy and delivery in the country. This study aimed to describe the obstetric and socio demographic profile of women treated for post-partum psychiatric disorders over a two-year period in a tertiary hospital in the North Eastern Nigeria. This review will help to further build on the epidemiology of women's reproductive mental health by utilizing data from this study and contributing to the pool of knowledge needed for robust planning of service delivery to women at risk of post-partum psychiatric disorders.

Methods

This was a two-year retrospective case note reviews of women diagnosed with post-partum psychiatric disorders between May, 2017 and April, 2019 in Yobe State Specialist Hospital, Damaturu, Nigeria. Each case was critically evaluated and reviewed by a consultant psychiatrist and the diagnosis of post-partum psychiatric disorder was made using the International Statistical Classification of Diseases and Related Health Problems, 10th edition (ICD-10). Case notes were retrieved manually from the health record department of the hospital. The hospital is a 300 bedded referral institution with facilities and mental health professionals (two full time consultant psychiatrists, five visiting consultant psychiatrists, five psychiatric nurses and clinical psychologists) to care for the mentally ill in Yobe State, neighboring states in the north eastern region of Nigeria and the West African sub region as well. Other clinical services such as nephrology, cardiology, urology, orthopedic surgery etc. are also rendered in the hospital.

A proforma was developed by the researchers to collect relevant information from the case notes based on literature such as age, marital status, level of education, gravidity, parity, gender of the baby etc. The questionnaire also contained questions on family size, family history of mental illness, marital satisfaction and relationship with spouse in the family

The study was approved by the Research and Ethical Committee of Yobe State Specialist Hospital, Damaturu. All the data collected were coded and analysed using the Statistical Package for Social Sciences version 21 software.

Results

A total of 82 women were included in the study whose age groups showed 42.7% were between 20 and 27 years as shown in table 1. Majority of the participants were Muslims 85.4% (70/82) and married 82.9% (68/82). Half of the respondents were full housewives 50% (41/82) and had cordial relationship with their spouses 51.2% (42/82). About a quarter of them had tertiary education 24.4% (20/82).

Table 1: Socio demographic characteristics of the patients (N=82).

Demographic factors	Groups	Freq.	%
Age (years)	10-19	20	24.4
	20-29	35	42.7
	30-39	21	25.6
	40-49	6	7.3
	Total	82	100.0
Number of times delivered	First	3	3.7
	Second	17	20.7
	Third	19	23.2
	Fourth	18	22.0
	Fifth and above	25	30.5
	Total	82	100.0
Religion	Islam	70	85.4
	Christianity	12	14.6
	Total	82	100.0

Marital Status	Single	2	2.4
	Married	68	82.9
	Separated	5	6.1
	Divorced	5	6.1
	Widowed	2	2.4
	Total	82	100.0
Tribe	Kanuri	38	46.3
	Hausa	21	25.6
	Fulani	14	17.1
	Yoruba	5	6.1
	Igbo	3	3.7
	Others	1	1.2
	Total	82	100.0
Education	No formal education	22	26.8
	Primary	26	31.7
	Secondary	14	17.1
	Tertiary	20	24.4
	Total	82	100.0
Employment Status	Employed	28	34.1
	Unemployed	12	14.6
	Full housewife	41	50.0
	Student	1	1.2
	Total	82	100.0
Family Type	Polygamous	49	59.8
	Monogamous	33	40.2
	Total	82	100.0
Number of Children	1-4	53	64.6
	5-8	22	26.8
	9 or more	7	8.5
	Total	82	100.0
Quality of Spousal Relationship	Not applicable	2	2.4
	Cordial	42	51.2
	Not cordial	38	46.3
	Total	82	100.0

Table 2 shows the distribution of psychosocial and clinical variables of the women. A little above half of them reported perceived social support 56.1% (46/82), poor marital satisfaction 52.4% (43/82), history of assault 51.2% (42/82) and no history of previous abortion or miscarriage 54.9% (45/82). Majority did not have co morbid medical illness 64.6% (53/82) while half of them did not plan the index delivery 50% (41/82).

Variables	Groups	Frequency	Percent
Perceived social support	Yes	46	56.1
	No	36	43.9
	Total	82	100.0
Planned index delivery	Yes	41	50.0
	No	41	50.0
	Total	82	100.0
Desirability of pregnancy	Yes	42	51.2
	No	40	48.8
	Total	82	100.0
Marital satisfaction	Good	39	47.6
	Poor	43	52.4

Co morbidity	Total	82	100.0
	Yes	29	35.4
	No	53	64.6
	Total	82	100.0
History of substance use	Yes	31	37.8
	No	51	62.2
	Total	82	100.0
History of Assault	Yes	42	51.2
	No	40	48.8
	Total	82	100.0
History of abortion/miscarriage	Yes	36	43.9
	No	45	54.9
	Missing	1	1.2
	Total	82	100.0

Table 2: Psychosocial and Clinical variables N=82.

Table 3a shows a little above half of them were diagnosed with depression 57.3% (47/82), 17.1% of them had mania, 7.3% had schizophrenic like disorder and 9.8% were diagnosed with bipolar disorder. Majority of them had no family history of mental illness 78% (64/82) while a little above half of them had no complication during delivery 56.1% (46/82). A little above two fifths of them reported onset of symptoms one to two weeks after delivery 42.7% (35/82).

Variables	Groups	Frequency	Percentage
History of stillbirth	Yes	35	42.7
	No	47	57.3
	Total	82	100.0
Complication during delivery	Yes	36	43.9
	No	46	56.1
	Total	82	100.0
Psychiatric diagnosis	Acute psychotic episode	2	2.4
	Depression	47	57.3
	Mania	14	17.1
	Schizophrenia like	6	7.3
	Polymorphic	2	2.4
	Bipolar	8	9.8
	Not otherwise specified	3	3.7
	Total	82	100.0
Onset of Symptoms after delivery	Less than 1 week	7	8.5
	1 - 2 weeks	35	42.7
	2 - 4 weeks	38	46.3
	More than 4 weeks	2	2.5
	Total	82	100.0
Duration of post-partum symptoms before presentation	Less than 1 week	33	40.2
	1 - 2 weeks	41	50.0
	2 - 4 weeks	8	9.8
	Total	82	100.0
Family History of Mental Illness	Yes	18	22.0
	No	64	78.0
	Total	82	100.0

Table 3a: Showing Distribution of Other Clinical Variables.

Table 3b shows majority of them had no previous history of mental illness 80.5% (66/82), had no previous history of puerperal related

mental illness 78% (64/82), had full term delivery 76.8% (63/82) and vaginal delivery 75.6% (62/82). A little above half of the participants were unbooked 54.9% (45/82).

Variables	Groups	Frequency	Percentage
Previous mental illness	Yes	16	19.5
	No	66	80.5
	Total	82	100.0
Previous history of puerperal related mental illness	Yes	18	22.0
	No	64	78.0
	Total	82	100.0
Gender of baby	Male	38	46.3
	Female	44	53.7
	Total	82	100.0
Gestation period	Pre term	9	11.0
	Full term	63	76.8
	Post term	10	12.2
	Total	82	100.0
Delivery method	Vaginal	62	75.6
	Caesarean section	15	18.3
	Instrumental	5	6.1
	Total	82	100.0
Booking Status	Booked	37	45.1
	Unbooked	45	54.9
	Total	82	100.0
Primary caregiver	Husband	52	63.4
	Mother	15	18.3
	Other relatives	15	18.3
	Total	82	100.0
State of the child	Alive and well	57	69.5
	Alive and sick	19	23.2
	Dead	6	7.3
	Total	82	100.0

Table 3b: Showing Distribution of Other Clinical Variables.

Discussion

This was a retrospective study of case files of women who were diagnosed with post-partum psychiatric disorders using the International Statistical Classification of Diseases and Related Health Problems, 10th edition (ICD-10) diagnostic criteria and presents the North Eastern Nigeria perspective on the pattern of post-partum psychiatric disorders.

The findings from this study revealed that majority of the women were predominantly between the age brackets 10-29 years, this might be due to early marriage which still remains a cultural practice in the Northern Nigeria [14] and many girls married when they were twelve years old or younger [15]. The mother's young age is a significant risk factor for post-partum psychiatric disorders, this is because the period of post-partum is very stressful as the new mother needs to cope with the care of the newborn and home, as such older mothers may have better coping strategies than the younger mothers [16]. The finding in our study differs from that of

Nager et al. [17] who found that older maternal age is associated with increased risk of post-partum psychiatric disorders.

The study also showed that post-partum mental disorders were common among women with higher parity. This agrees with the finding of Nielsen et al. [18] who reported that higher parity was found to be associated with the development of post-partum psychiatric disorders. One reason for this is that, mothers who need to care for more children at home may experience more stress, thereby predisposing them to psychological distress in puerperium.

Majority of the women with post-partum psychiatric disorders in the study were married. Though, many researchers have reported that being married or in a stable partner relationship could have a protective effect [19,20], it could be argued that marriage itself can be a risk factor for post-partum psychiatric disorders where there is marital disharmony or poor spousal relationship as reported by almost half of the respondents [21].

The findings in the study also showed that majority of the respondents with post-partum psychiatric disorders were unemployed and full housewives who were not gainfully employed. This agrees with the findings of Kheirabadi et al. [22] who found unemployment to be significantly associated with increased rate of post-partum psychiatric disorders. One possible explanation to this is that, unemployment may be particularly detrimental to the mental health after childbirth because of financial worries and anxiety for the future related to the baby.

Our study found that post-partum psychiatric disorders were most common among women who did not desire the pregnancy. This tends to support the findings of Mohammed et al. [23] who found that unplanned or undesired pregnancy was an associated factor in the development of post-partum psychiatric disorders among Jordanian women. The reason for this might be that, the mothers were not psychologically prepared and might have difficulty in providing effective and responsive care to their infants, thereby leading to the development of psychological distress

Marital dissatisfaction has been reported in many related studies as risk factor for post-partum psychiatric disorders [24,25]. This was also found in this current study as more than half of the respondents with post-partum psychiatric disorders reported poor marital satisfaction. This finding may be explained by the fact that marital satisfaction is an essential component of emotional and psychological well-being and it has a positive association with general happiness and perception of overall individual health [26]. In the present study, a little above half of the respondents with post-partum psychiatric disorders had history of assault. This is in keeping with the findings of Noor et al. [27] who also found that women exposed to assault or violence are at higher risk of developing mental health problems in puerperium due to the adverse ripple effects of assault on the psychological well-being of nursing mothers.

Depression is the commonest psychiatric diagnosis among women

with post-partum mental health disorders in this study. This agrees with the findings of Uwakwe and Okonkwo [28] who also reported that depression is commonest in the post-partum period. Half of the respondents in this study reported that their pregnancies were not planned, this often have a greater effect on maternal health by negatively affecting mother's psychology and bring economic burden which in turn leads to post-partum depression [28]. However, our finding in this study differs from the findings of Adewunmi and Gureje [29] who found preponderance of schizophrenia among patients in the puerperial period, this might be due to the difference in study design and the time of evaluation.

Majority of the participants developed post-partum psychiatric disorders within the first two to four weeks after delivery and most of them presented for treatment within one month of onset of illness. This however differs from the findings of Altshuler et al. [30] who reported onset of symptoms and late presentation within three months post-partum. The reason for this difference could be partly associated with the fact that at the time of the current study, there was a robust mental health awareness in all health care facilities in Yobe State of Nigeria such that many people access mental health services easily as both full time and visiting psychiatrists were on ground to attend to the mental health needs of the people.

In our study, we found female children to be more commonly born to women with post-partum psychiatric disorders, this agrees with the findings of Agrawal et al. [31] who found female gender of the babies to be positively correlated with the post-partum psychiatric disorders. Most of the women with post-partum psychiatric disorders in the study were also unbooked, this tends to support the findings of Veena et al. [32] who suggested obstetric factors such as being unbooked, problems during pregnancy as vulnerability factors in the development of post-partum psychiatric disorders.

Strengths and Limitations

The study was the first retrospective work on post-partum psychiatric disorders in a multi-speciality hospital in the North East Nigeria, though is limited to the extent to which records about the patients are kept and the design of the study also limits the inference of causality.

Conclusion

There is need for healthcare professionals to regularly screen women in puerperium as this period is a time of increased risk for the onset or exacerbation of mental health disorder. Therefore, early screening, diagnosis and timely management are very important and must be considered as mandatory part of postpartum care.

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