# The Vulnerable Newborn of a Mentally III Mother in a Resource-Limited Setting

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# **Abstract**

Mental illness is not uncommon in women of childbearing age. Pregnancy, delivery and the postpartum state could precipitate mental illness in predisposed women or worsen psychiatric symptoms in those known to have mental ill-health. Maternal mental illness exposes the infant to neglect, abuse or outright harm. We aimed to report a case of a neonate born to a mentally ill mother and to highlight the challenges of management of the mother-infant dyad in a resource-constrained- setting. The hospital records of the mother and that of her baby were summarized and the literature was reviewed to contextualize the report. The index newborn suffered neglect, late presentation, under nutrition, neonatal jaundice, anaemia, and late-onset neonatal sepsis with meningitis. Postpartum maternal mental illness poses a significant challenge to the management of the mother-infant dyad. This calls for the deployment of more human and material resources that will ensure integrated and comprehensive care for a better mother-infant dyad in resource-limited settings.

**Keywords:** Keywords: Mother-newborn dyad; postpartum psychosis; resources-limited setting.

### Introduction

Motherhood can be exciting but at the same time highly demanding physiologically and socially. This peripartum period is delicate and could predispose to new-onset and/or relapse of mental illness. Globally. about 13% of women in the immediate postpartum period experience some form of mental disorder.<sup>1,2</sup> These values are even higher in developing countries where it occurs in 19.8% after childbirth. 1.2 Mental disorders in mothers are usually accompanied by intrapersonal and interpersonal mal-functioning.<sup>2</sup> This predisposes their newborns to neglect, abuse and outright harm in the short run. In the long run, the infants could grow into mentally unfit adults. This is, because, they are deprived of the normal mother-child interaction which is one of the determinants of the future mental health of children.4 Parental mental illness if not recognized and treated may increase the risk of transmitting mental illness to offspring later in childhood and adolescence. <sup>1-5</sup> In Nigeria, the impact of maternal mental illness on the health of neonates and older children is under reported. The management of postpartum psychosis is also not routinely incorporated into the practice of neonatology. This is a case of an infant born to a mother with postpartum psychosis. The challenges of the management of the mother-infant dyad and how they relate to our resources-limited setting were highlighted.

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# Methodology

The hospital records of the mother and that of her baby were summarized and the literature was reviewed to contextualize the report.

# Case presentation

A 28-day old term baby girl presented to the neonatal unit with a history of excessive cry, downward deviation of both eyes, diarrhoea and vomiting of one-week duration. She had multiple caregivers whose personal hygiene was poor. The baby was being fed with a diluted breastmilk substitute using a single feeding bottle which was often not cleaned between meals.

The mother was a 20-year-old primigravida and the pregnancy was booked at four months and supervised at a general hospital. Although she was not screened for mental illness during the antenatal period, she did not display obvious features of psychosis. Labour was normal and delivery was conducted by a nurse in the booking hospital. The baby cried at birth and breastfeeding commenced about 3 hours thereafter. The mother began to display abnormal behaviour on the seventh day after delivery. This was characterized by restlessness, auditory hallucinations, persecutory delusion and refusing to care for her baby. She was consequently diagnosed with schizophrenia on the eight-day postpartum and admitted into the psychiatric unit of Ahmadu Bello University Teaching Hospital.

The mother was commenced on antipsychotics and also received obstetrics review and care. She was given haloperidol tablets, 5mg twice a day and Trihexyphenidyl (Artane) 2.5mg daily. Eleven days into admission, she was still neglecting her baby and complained of pain and stiffness on account of which her medications were reviewed and changed to olanzapine 10mg nocte and artane was increased to 2.5mg twice a day. On the other hand, the baby's feeding became very poor and the baby received mainly water and an occasional small quantity of breastmilk. The baby developed jaundice on the 3<sup>rd</sup> day of life which persisted for a week and resolved spontaneously.

There was no known risk factor for mental illness in the mother. She was not gainfully employed. Father was a 30-year-old subsistence farmer with a diploma certificate.

At presentation baby weighed: 3.7 kg, her length was

51 cm, the occipitofrontal circumference was 37 cm and the chest circumference was 34 cm. She was pale, highly irritable, had full and tense fontanelles and sagittal sutural diastasis, and sun-setting eyes, global hypertonia and suboptimal primitive reflexes. There were no other abnormalities or outward evidence of injury to the baby.

She was diagnosed with late-onset neonatal sepsis (LONS) with meningitis and evolving hydrocephalus. Other considerations were antipsychotic drug toxicity; and intracranial haemorrhage secondary to accidental head injury. Her complete blood count showed anaemia (packed cell volume = 30%), relative lymphocytosis and dysmorphic red blood cells. She also had hyponatraemia (110mmol/L) and a slightly elevated CSF protein (500 mg/L). Her transfontanelle ultrasound scan showed normal findings. The baby was admitted to the neonatal intensive care unit while the mother was still being treated at the psychiatry ward. The grandparents took turns to provide care to both mother and baby.

She received intravenous antibiotics, dexamethasone and phenobarbitone among others. The baby was on formula feeds until 48 hours after admission when the mother was given parole to enable her to stay with her baby in the unit. There was a challenge getting the mother to breastfeed or express the breastmilk as she slept for long periods under the influence of the antipsychotic drugs. Baby remarkably improved and was subsequently discharged to follow-up. The parents and the maternal grandmother were counselled on how to support the mother-baby pair at home. The grandmother was taught how to support the mother during breastfeeding and both were taught how to express breastmilk for top-up feeding with a cup and spoon.

#### Discussion

This case depicts the challenges of providing care to babies of mothers with postpartum psychosis in resource-constrained settings. First, the mother was not screened for mental illness during the antenatal care. Psychiatric Screening is not routinely carried out in resource limited-settings during antenatal visits. The world health organization recommends that all women should be screened for mental illness during pregnancy and in the peripartum period. <sup>2.6</sup>

Secondly, the mother presented late; about ten days following the onset of frank symptoms of psychosis. The late presentation may be connected to the

underlying myths and beliefs ascribed to the aetiology of mental illness in our setting. There is the belief that psychiatric illness is caused only by demons and therefore not amenable to orthodox care. <sup>10</sup> The late presentation, in this case, had contributed to the worsening of the mother's symptoms which in turn negatively affected the mother-infant dyad.

Thirdly, no multidisciplinary team was arranged to tackle this case from the beginning of the management. The mother was initially being managed separately in the psychiatric ward until eleven days later when the decision to involve the paediatricians and obstetricians was made. This was when the child became very sick and the mothers' condition was not responding to treatment.

Integrated, multidisciplinary care could have prevented severe symptoms in the mother and reduced the negative impact of the mother's illness on the baby. The challenges the baby faced were related to early maternal deprivation. This disrupted optimal breastfeeding and subjected the child to the complications of mixed feeding including infection. This was further compounded by multiple caregivers with poor personal hygiene.

The lack of a dedicated caregiver also made it difficult to ensure good food, water and environmental hygiene. These were believed to have predisposed the child to infection and the attendant sepsis. Prolonged maternal deprivation is also known to cause separation anxiety disorder and other behavioural problems later in life. <sup>5,12,13</sup> Lastly, this case illustrates the need for facilities providing care for mentally ill mothers and their infants in resource-limited areas to have a more holistic and integrated approach.

## Conclusion

Postpartum maternal mental ill-health is not uncommon and infants of these mothers are vulnerable to harm and challenges of nurturing. For better outcomes; efforts should be made to screen mothers both during pregnancy and postpartum and to bridge the gap in care to ensure holistic, integrated and comprehensive mother-infant dyad care.

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