

RESEARCH ARTICLE

Perinatal death triples the prevalence of postpartum depression among women in Northern Uganda: A community-based cross-sectional study

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Abstract

Introduction

Deaths during the perinatal period remain a big challenge in Africa, with 38 deaths per 1000 pregnancies in Uganda. The consequences of these deaths can be detrimental to the women; some ending up with postpartum depression. We examined the association between perinatal death and postpartum depression among women in Lira district, Northern Uganda.

Methods

We conducted a community-based cross-sectional study of 1,789 women. Trained research assistants screened women for postpartum depressive symptoms on day 50 postpartum using the Edinburgh postpartum depression scale (EPDS). Socio-demographic, economic, birth and survival status of the neonate were collected during pregnancy and within one week postpartum. We used generalized estimating equation for the Poisson family with a log link using Stata to estimate the prevalence ratio of the association between postpartum depressive symptoms (EPDS scores ≥ 14) and perinatal death. Mothers who lost their babies between 7–49 days postpartum were excluded.

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Results

Of the 1,789 participants symptomatically screened for postpartum depression, 377 (21.1%) [95% confidence interval (95%CI): 17.2%, 23.0%] had probable depressive symptoms. The prevalence of postpartum depressive symptoms among the 77 women who had experienced perinatal death (37 stillbirths and 40 early neonatal deaths (≤ 7 days of life)) was 62.3% [95% CI: 50.8%, 72.6%] compared to 19.2% [95% CI: 17.4%, 21.2%], among 1,712 with live infants at day 50 postpartum. Women who had experienced a perinatal death were three times as likely to have postpartum depressive symptoms as those who had a live birth [adjusted prevalence ratio 3.45 (95% CI: 2.67, 4.48)].

Conclusions

The prevalence of postpartum depressive symptoms, assessed by EPDS, was high among women who had had a perinatal death in Northern Uganda. Women experiencing a perinatal death need to be screened for postpartum depressive symptoms in order to intervene and reduce associated morbidity.

Introduction

Postpartum depression is a public health problem worldwide, with adverse health consequences to the mother and her family. The burden of postpartum depression varies across countries. A systematic review and meta-analysis reported a pooled prevalence of 18.7% with a 95% confidence interval (95% CI) of 17.8–19.7% [1] among women in low- and middle-income countries and a considerably lower prevalence in high-income countries, only 9.5% (95% CI 8.9–10.1) [1].

Postpartum depression is a mood disorder with clinical manifestations which include: inability to sleep, sleepiness, mood swings, change in appetite, fear of harm, sadness, excessive crying, feeling of doubt, guilt and helplessness, difficulty concentrating and remembering, loss of interest in hobbies and usual activities and recurrent suicidal thoughts [2]. Postpartum depression is different from postnatal blues, in that postnatal blues set in within 2–3 days and resolve by 10 days postpartum [3].

In recent years, postpartum depression has drawn public attention because of the negative effects on the affected women which include woman's social and occupational functioning [4,5], physical health [6], relationship with her spouse, quality of life [5,7], and her long term emotional balance [8]. Although some women are reported to improve from postpartum depressive symptoms, a considerable proportion may experience chronic mental health problems [9–11]. Several factors have been associated with the development of postpartum depression. These can be classified into “biological (change in hormones, age of mother), physical (chronic health problems), psychological (prenatal anxiety, stress, lack of social support, poor marital relationship, stressful life events), obstetrics/pediatrics (unwanted pregnancy, parity, history of loss of pregnancy and poor infant health), and socio-cultural (status of mother, polygamy and poverty)” [12,13]. Evidence associates perinatal death to existence of postpartum depression [14].

Globally, about five million pregnancies end in perinatal deaths yearly with the majority (98%) occurring in sub-Saharan Africa and Asia [15–17]. Perinatal death is often defined as the birth of a stillborn baby from 28 weeks of pregnancy or an early neonatal death, death of a