Maternal Depression: A Hidden Burden in Developing Countries

Maternal depression is an all-encompassing term for a spectrum of depressive conditions that can affect mothers (up to 12 months postpartum) and mothers-to-be. These depressive conditions include prenatal depression, postpartum depression, and postpartum psychosis. Maternal depression is increasingly recognized as a worldwide public health issue and can have a negative impact on an individual's life that is far reaching, affecting work, family and the health and development of the baby.[1] Approximately, 10-20% of women experience depression either during pregnancy or in the first 12 months postpartum. Maternal depression can lead to serious health risks for both the mother and infant, increasing the risk for costly complications during birth and causing long-lasting or even permanent effects on child development and well-being. Low- and middle-income countries (LAMICs) are home to more than 80% of the global population, but command <20% of the share of the mental health resources.[2] Worldwide depression affects 121 million people. At its most, severe depression can lead to suicide and is responsible for 850,000 deaths every year, and by 2020, depression will be the second leading cause of disability (World Health Organization [WHO], 2001) and by 2030; it is expected to be the largest contributor to disease burden. Depression is particularly common among women. Although, depression is the leading cause for both males and females, the burden of depression is 50% higher for females than males.[3]

The most common mental health condition to affect perinatal women and mothers worldwide is depression. Strong evidence from LAMICs, using culturally-validated measures, indicates that depression in pregnancy and the postnatal period is at least as prevalent as in high income countries, if not more so.[4] The prevalence of maternal depression in LAMICs is estimated to be between 15% and 57%, respectively. Antenatal clinics can expect at least one in five pregnant women to experience mental health problems, especially depression and anxiety.[5] There is increasing evidence that common mental health problems, including depression and anxiety, are two to three times more prevalent among pregnant women and mothers of infants in resource constrained settings than in high-income countries. Depression is associated with substantially reduced quality-of-life and functional capacity for these women.[6]

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Depression remains under-detected and under-treated during prenatal care with potential sequelae persisting well beyond the perinatal period. Psychiatric disorders and substance use during pregnancy are associated with adverse outcomes for mothers and their offspring. Information about the epidemiology of these conditions in this population is lacking.[7] Maternal depression may be a major contributor to the burden of suicide, which is among the leading causes of death in young women of reproductive age. Depression during pregnancy may negatively influence social functioning and postnatal mental health of mothers. Antenatal depression is the strongest risk factor for postnatal depression and it increases in severity from the first to the second trimester, negatively affecting fetal development and neonatal outcome.[8]

Commonly identified predictors of maternal common mental disorders in South Asia include low socio-economic status, lack of social support, adverse life events, disappointment with the sex of the baby and a bad relationship with a mother-in-law or partner. In India, estimates of maternal depression among women accessing antenatal care range from 11.9%-23%.[9] Low self-esteem, antenatal anxiety, low social support, negative cognitive style, major life events, low-income, and a history of abuse were the risk factors found to be strongly associated with antenatal depression. A recent meta-analysis found that life stress, lack of social support, and domestic violence were strongly associated with antenatal depression.[10] In Indian (and more broadly South Asian) context family and relationship problems, low social status accorded to women and girl infants have been implicated as key determinants for depression in pregnant women. Family male gender preference, unplanned pregnancy, a history of depression and feeling anxious in pregnancy were independently associated with an increased likelihood of depression, whilst support from family and friends, being satisfied with pregnancy and being multiparous were associated with a reduced likelihood of depression.[11]

Maternal depression in the prenatal and postnatal periods predicts poorer growth and higher risk of preterm birth and low birth weight, infant under-nutrition and stunting and higher rates of diarrheal diseases and poorer cognitive development in children. Despite mounting evidence of the impact of maternal mental health on women and children, prevention, and treatment have been slow to enter into maternal and child health (MCH) programs as rightly described as the neglected

"m" in MCH programs.[12] Mental health is closely linked to achieving the Millennium Development Goals of improving maternal health, reducing child mortality, promoting gender equality and empowering women, and reducing poverty.[7] The WHO's mental health Gap Action Program has recently produced evidence-based guidelines for the treatment of depression in the primary health care setting in LAMICs, including in the context of pregnancy and the postnatal period.[13]

Universal screening of mothers during pregnancy is ideal, but may not be feasible and health workers or clinicians are likely to screen based on perceived risk factors. Maternal and infant health policies, a priority in low-income countries, must integrate maternal depression as a disorder of public health significance. Interventions should target mothers in the antenatal period and incorporate a strong gender-based component.[11]

Routine antenatal and postpartum health services provide an opportunity for heightened and psychologically informed mental health care. Even in the poorest countries, there is some provision for antenatal, perinatal, postpartum, and infant health care and other primary health care services. Interventions to improve maternal mental health and related child survival, health and development can be integrated into these existing services.[7] There is increasing evidence from LAMICs that treatment for common mental disorders can be delivered by lay or community health workers, as well as by community groups. A recent trial from Pakistan showed that cognitive behavior therapy delivered by community health workers to depressed women in the third trimester of pregnancy reduced the incidence of major depression in the postpartum period, and such methods could be adapted for other community health workers in rural settings.[14] All resource-constrained countries need cross-sectoral approaches, not only the integration of mental health care into primary perinatal health care, but also strategies to reduce poverty and domestic violence and to promote equality of participation in education and income-generating occupations. The approach must be multistranded, including research, education, community-based interventions, health service development, health system strengthening, and social policy formation.[7] Early treatment of prenatal and postnatal depression (maternal depression) could benefit not only the mother's mental health, but also the infant's physical health and development.

Health plans play an important role in ensuring early identification of maternal depression and coordinating management of care following a diagnosis. Health plans have an opportunity to pinpoint those at highest risk by encouraging obstetricians, pediatricians, primary care physicians and other health care professionals to screen for maternal depression, raising awareness of maternal depression through patient education in maternity programs and offering access to nurse case management during pregnancy and the postpartum period. Such simple interventions could have a substantial impact on the number of maternal depression diagnoses and would aid in the prevention of further complications and unnecessary costs. There are few studies conducted in the developing countries on sociodemographic and other predictors of maternal depression, which have a huge impact on MCH. It is essential that every country obtain local evidence concerning the problem and develop low-cost, nonstigmatizing, accessible interventions to address it. Taking into consideration the huge burden of the problem and with the available few research studies, there is a need to deal with all the missed opportunities in diagnosis and treatment of maternal depression with multipronged strategies and interventions to reduce its hidden burden.

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References

1. Jellinek M, Patel BP, Froehle MC, editors. Bright futures in practice: Mental health. Vol. I. Practice Guide. Arlington, VA: National Center for Education in Maternal and Child Health; 2002. p. 308-16.
2. Patel V, Prince M. Global mental health: A new global health field comes of age. JAMA 2010;303:1976-7.
3. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005;62:593-602.
4. Fisher J, Cabral de Mello M, Patel V, Rahman A, Tran T, Holton S, *et al*. Prevalence and determinants of common perinatal mental disorders in women in low-and lower-middle-income countries: A systematic review. Bull World Health Organ 2012;90:139G-4.
5. Qiao Y, Wang J, Li J, Wang J. Effects of depressive and anxiety symptoms during pregnancy on pregnant, obstetric and neonatal outcomes: A follow-up study. J Obstet Gynaecol 2012;32:237-40.
6. Report of a UNFPA/WHO international expert meeting: The interface between reproductive health and mental health. Hanoi, June 21-23, 2007. Geneva: Department of Reproductive Health and Research World Health Organization; 2009.
7. Vesga-López O, Blanco C, Keyes K, Olfson M, Grant BF, Hasin DS. Psychiatric disorders in pregnant and postpartum women in the United States. Arch Gen Psychiatry 2008;65:805-15.
8. Hoffman S, Hatch MC. Depressive symptomatology during pregnancy: Evidence for an association with decreased fetal growth in pregnancies of lower social class women. Health Psychol 2000;19:535-43.

9. Chandran M, Tharyan P, Muliyil J, Abraham S. Post-partum depression in a cohort of women from a rural area of Tamil Nadu, India. Incidence and risk factors. Br J Psychiatry 2002;181:499-504.
10. Lancaster CA, Gold KJ, Flynn HA, Yoo H, Marcus SM, Davis MM. Risk factors for depressive symptoms during pregnancy: A systematic review. Am J Obstet Gynecol 2010;202:5-14.
11. Patel V, Rodrigues M, DeSouza N. Gender, poverty, and postnatal depression: A study of mothers in Goa, India. Am J Psychiatry 2002;159:43-7.
12. Rahman A, Patel V, Maselko J, Kirkwood B. The neglected 'm' in MCH programmes – Why mental health of mothers is important for child nutrition. Trop Med Int Health 2008;13:579-83.
13. WHO. Mental Health Gap Action Programme Implementation Guide (mhGAP-IG) for Mental, Neurological and Substance Use Disorders in Non-Specialized Health Settings. Geneva: World Health Organization; 2010.
14. Rahman A, Malik A, Sikander S, Roberts C, Creed F. Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: A cluster-randomised controlled trial. Lancet 2008;372:902-9.

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