

Perinatal mental illness: A public health priority

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Perinatal mental illness is a public health priority and decades of research and clinical studies have demonstrated that untreated perinatal mental illness is devastating, affecting not just the mother but child and family, including the unmeasurable 'cost' of suffering. A recent study quantified the economic burden of untreated perinatal mental illness in the UK to be £8.1bn per annum, 27% of this burden affecting the mother, but a staggering 72% affecting the developing child (1). The impact of maternal mental illness in low and middle-income countries (LMICs) is even higher than in high income countries, with a prevalence of mental disorders of 15.6% during pregnancy and 19.8% after childbirth (2). While no woman is immune to the development of perinatal mental disorders, poverty, natural disasters, and low social support, migration, extreme stress, exposure to violence, emergency and conflict situations, which are more prevalent in LMICs, generally increase the risks for these disorders.

Maternal outcomes of perinatal mental ill health

Mental ill health during the perinatal period warrants equal attention as physical/obstetric issues during pregnancy, given the potential significance of their effect on pregnancy outcomes (3,4). At a conservative rate, studies show that 1 in 5 women suffer from a mental health problem during the perinatal period (5). Depression, which affects at least 10-15% of women in the perinatal period, can lead to further physical morbidity (5,6). Experiences of lower level but still significant distress such as adjustment disorders also affect a significant number of pregnancies, estimated to be between 15-30% (7). Whilst more severe mental illness such as schizophrenia and bipolar affective disorder affect around two in each thousand pregnancies, the combined level of morbidity across the full spectrum of severity of perinatal mental illness is inadequately resourced in terms of services provision (5).

There is also mounting evidence of increased suicidal ideation during pregnancy, although estimates of this vary widely from 3 to 33% of pregnant women (7). Gelaye and colleagues reported that a majority of studies of maternal suicidality demonstrated that psychiatric illness was a key risk factor for the presence of suicidal ideation (7). In the recent past, suicide rates in Sri Lanka were one of the highest in the world; and data suggest that whilst attempts to reduce general maternal mortality rates over

the last 5 decades in Sri Lanka have been successful (with the maternal mortality rate falling from 500 per 100,000 live births in the 1950's to 30 per 100,000 in 2015), maternal suicide rates have increased from 2002 to 2010 (8). Some regions such as North Central Province have now identified suicide to be the leading cause of maternal death, with a significant 17.8% of deaths due to suicide (9).

Despite recognition of maternal suicide as a leading cause of mortality in the perinatal period, there has been limited change in prevalence over time (10). In some countries such as UK, maternal deaths through suicide has remained a leading cause of death; with almost a quarter of all maternal deaths between six weeks of gestation and a year after birth, being related to mental health problems, and one in seven women having died by suicide (11). There remains little epidemiological data around the magnitude of maternal mental illness the problem in Sri Lanka – maternal suicide, for example has not been included in data collected around overall maternal mortality, but this situation is changing.

Individual, societal, and cultural stigma is a significant barrier to accessing care. Studies have identified stigma as coming from the mother's own beliefs about mental illness as well as external systemic beliefs applied to mentally unwell women (12). Pregnant women may try to conceal their mental ill health owing to fears about ability to look after the baby or the perceived shame of having a mental health diagnosis (13).

Impact on the developing foetus and child

Maternal anxiety and depression in pregnancy have been linked to pre-term labour and intrauterine growth retardation (IUGR), altered heart rate variability, and motor activity, which are often considered a proxy of foetal wellbeing (8,13,14). Later childhood outcomes have included cognitive and behavioural difficulties and problems through to adult life (14,15). It is suggested that the altered in utero environment as a result of perinatal depression can lead to maladaptive programming of the child's own HPA axis and impaired neurocognitive development, resulting in alteration of stress-response and increased risk of diagnoses of later childhood attention-deficit hyperactivity disorder, depression and anxiety (4, 16-19). A prospective longitudinal cohort study showed that prenatal maternal depression is associated with offspring inflammation at 25 years (19).



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Perinatal mental health services

Sri Lanka has a primary health care system which lends itself to refine the existing antenatal and postnatal screening, as well as to offer therapeutic interventions, which focus on the entire family. Screening can focus on pre-existing as well as new onset mental health conditions, and include a range of disorders from anxiety, obsessive compulsive disorders, PTSD, depression, through to risk of relapse of psychotic disorders such as bipolar disorder.

Globally, there is significant interest in the use of screening for perinatal mental illness (20,21). Screening can be helpful in identifying women, but once such women are identified, there need to be services that they can be referred to for further support. The efficacy of screening depends on the training of those who have first contact with pregnant and postnatal women. In Sri Lanka, it has already been found that despite routine use of the locally validated Edinburgh Postnatal Depression Scale by family care workers as part of routine post-partum care, postnatal depression remains significantly undiagnosed. This is most likely because of lack of supervision of the screening and inadequate systems that are able to respond to those who screen positive (8, 21). This suggests both a need for increasing awareness among clinicians and a possible role for establishing perinatal mental health services, which could offer education of clinicians, as well as treatments.

In resource rich settings like UK, dedicated specialist perinatal mental health services offer pre-conception counselling, multidisciplinary care planning for women during pregnancy and postnatally; as well as admission for the most severely unwell, during the last trimester and postnatally with their babies in Mother and Baby Units (MBU). A recent outcomes study has evidenced the benefits of joint admission to an MBU for both mother, baby and the dyadic relationship (22). However, women with mild to moderate psychological problems are managed through shared care.

The integration of mental healthcare into the general physical health care of women of reproductive age has been suggested to be important in the Sri Lankan context, to better identify and manage maternal mental ill health (8). If we use the figure of 5% of the birth rate being the most severely ill women during the perinatal period, in Sri Lanka, where the birth rate was recorded as 334,821 in 2015 (23), there would have been an estimated 16,741 women with significant mental health problems, who would benefit from perinatal mental health services.

James Heckman reported that the highest rates of return to the investment of human capital come from the earliest possible interventions (24). We now have research and clinical evidence to show that investing in and treating maternal mental illness during the perinatal period will bring huge benefits for both the mother and the

developing child. Therefore, by establishing a more integrated mental and physical healthcare system during pregnancy and the postpartum, supported by the primary health care system, with screening of women during pregnancy and in the postnatal period, Sri Lanka has the opportunity to offer a unique footprint and model of delivery of perinatal mental health services. Investing in such services will transform the lives of future generations.

Disclosure statement

None declared.

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