Maternal mental health: present and future

Introduction
An estimated 1.1 billion people suffer from mental health and substance abuse related problems worldwide which means that about 1 in 6 people suffer from problems of mental health or substance abuse. Fourteen percent of the global disease burden has been attributed to neuropsychiatric disorders such as depression and other mental illness. The World Health Organization defines mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community”.

The immediate implication of this is that 1 in 6 people are not able to realise their own potential and are not able to contribute to their communities. Related costs of this include the cost which is borne by family members, the community and even the country. Mental health and its effect on communities becomes even more critical when care givers such as mothers of infants have mental health problems. This has a debilitating effect at two levels one on the health of the mother and second on the health of the infant who is in her care.

Mental health in general and maternal mental health in particular, may seem like an individual illness which is not communicable to others and hence not an aspect which needs to be handled by public policy. A critical fallacy with this argument is that the major causes leading to and the consequences of poor mental health are social and economic which come under the purview of policy.

Globally policy aimed at addressing mental health issues were few and far between. Even the Millennium Development Goals (MDG) had no explicit mention of mental health and well-being. It is only in 2015 with the Sustainable Development Goals (SDG’s) that the importance of mental health and well-being has been recognised. As part of health goals of the SDG’ target 3.4 states “By 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being”. A step finally in the right direction but as with all first steps there are many hurdles which will now need to be tackled in the dealing with the issue. There are problems related to identification, diagnosis and financing for mental health. “No health without mental health” is a slogan which aptly summarises the importance of and the interconnection between mental illness and other ill health. The health goals, especially the maternal health goals cannot be achieved till mental health issues are addressed.

The needs for each person’s mental health varies with their gender and the life stage that they are in for example adolescents may have very different mental health
needs from an older person and similarly the mental health needs of a woman through pregnancy are very different from the needs of women in other stages of life. Additional social and cultural factors combine differently to affect a person’s mental health. In this article we discuss issues related to maternal mental health in developing countries with a special focus on the region of south Asia.

**Maternal mental health**
The World Health Organization defines maternal mental health as “a state of well-being in which a mother realizes her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to her community”. Maternal mental health can be affected both pre and post-natal. An estimated 23% of women suffer from some form of mental health issue during either their pregnancy or post pregnancy.

A meta-analysis of the causes of mental health issues among Low and Middle Income Countries (LMIC) found that about 20% of mothers in developing countries experience clinical depression after childbirth. Harpmen et al who were investigating this further in their recent meta-analysis on the causes of mental health problems in LMICs identify socioeconomic disadvantage (odds ratio [OR] range: 2.1–13.2), unintended pregnancy (1.6–8.8) being younger (2.1–5.4) being unmarried (3.4–5.8); lacking intimate partner empathy and support (2.0–9.4); having hostile in-laws (2.1–4.4); experiencing intimate partner violence (2.11–6.75); having insufficient emotional and practical support (2.8–6.1); in some settings, giving birth to a female (1.8–2.6), and having a history of mental health problems (5.1–5.6). Protective factors included having more education (relative risk:0.5; P = 0.03) a permanent job (OR: 0.64;95% CI: 0.4–1.0); being of the ethnic majority and having a kind, trustworthy intimate partner (OR: 0.52; 95% CI: 0.3–0.9).

Looking deeper into the risk factors one observes that these factors are still very prevalent in developing countries. Factors such as being young mothers with no formal employment are serious issues in India. For example, in India 26% of women were married before the age of 18. The employment rates among women also remains very low with only about 25% of women are employed in the formal sector. The literacy rates among women is 68.4% but the percentage of women who have more than 10 years of education is only 35.7%. A very small percentage of women have the education or the jobs which would provide them with the protective forces against poor mental health.

Dealing with maternal health issues requires both individual and social policy changes and some of the issues which arise will need policy intervention while some will require social change. In the next few sections we delve deeper into what the issues are and how they can be tackled better.

**Limited resources and unlimited wants**
The classic problem of economics also applies to health financing and to funding for mental health. Resources available of health care being scarce has meant that the amount which can be spent on mental health is even smaller. Estimates done by Patel et al done in 2007 find that poor countries spend less than 1% of their health budgets on mental health. This has not changed too much as noted in the WHO mental health atlas which finds that both Human and financial resources allocated are limited public expenditure on mental health are very meagre in low and middle-income countries and more than 80% of these funds go to mental hospitals. This is also reflected in the number of health workers for every 100000 the number of mental health workers in less than one
while there are 72 mental health workers per 100000 in high-income countries. Similar disparities exist in outpatient services, child and adolescent services and social support.

Many countries also have a severe shortage of qualified mental health professionals training them is also an additional expense. In India as per recent government data reported by the Business Standard the entire mental health workforce including, doctors, nurses and social workers is only 7000 people whereas the requirement is for 54000 professionals. In Uganda the total personnel working in mental health facilities were 310 (1.13 per 100,000 population). Out of all the medical doctors only 0.8% of medical doctors and 4% of the nurses are specialized in psychiatry. A similar situation also exists in Ghana where there are only 18 psychiatrists, 1,068 Registered Mental Nurses, 19 psychologists, 72 Community Mental Health Officers and 21 social workers working in mental health.

This is further complicated by social and cultural aspects which make it difficult to reach people who need help. In the scale of priorities for a family to spend money on the mental health of the mother may not be as critical as other requirements.

Cost to the economy
Mental illness has a direct cost which is borne by the individual but the indirect cost of it is borne by the entire economy. The 2010 Global Disease burden which measures the diseases which contribute the greatest to mortality ranked mental illness as the 5 greatest contributor to mortality. DALY is a measure of the number of years of healthy life lost due to a disease. It is a measure when compared across diseases provides a measure of the lifespan of an individual in the absence of disease in the population. The WHO calculates that the Disability Adjusted Life Years (DALY) caused due to mental illness and behavioural disorders is 7.4% . This means that 7.4% of lives lost due to disability is due to mental illness.

The indirect cost which is borne by the society includes the cost of care of unwell individuals and the loss of productive individuals to the economy. Individual who are not able to work to their fullest capacity. In addition, the mental health of individuals who are caregivers to people dependent on them can have an impact on the health of the ward under their care. Care givers such as mothers and their mental health is critical for the health of the infant. WHO in their report on mental health note that both 10% of pregnant women and 13% of women post pregnancy suffer from women across the world suffer from mental health issues and this number goes up to 15.6 % of pregnant women and 19.8% of women after child birth in LMICs. The major mental health issues which mothers suffer from is depression.

Early research on the effects of maternal mental health on the health of infants in High Income Countries (HIC) found that mothers mental health effects the sociopsychological well-being of the child. In LMIC in addition to this it also effects the physical well-being of infants too. Children whose mothers have mental issues have higher instance of stunting, wasting and diarrhea. For many children the immunisation schedules of the infant get disturbed as the mother is incapable of following up on the schedule. Caring for a child requires a constant presence and involvement from the primary care giver which in most cases in the mother hence it was long suspected that maternal depression would influence the infant's health.

Social and cultural factors
Depression is one of the major mental health issues that women suffer, and social
and cultural factors combine in special ways which add additional burden on women. Family structures where couples live with their in laws, relationship with their intimate partner, domestic violence and desire for a male child are all known to impact the mental health of women.

In South Asian cultures there is an inherent preference for male children. Having a male child is associated with prestige, wealth and power for a family. Women are expected to have male children to carry on the lineage of the family and this can cause a lot of stress in a woman's life. If a woman has a female child there is pressure to have more children till she has a male child. In addition to the pressure of producing a male child many women do not have access or lack the ability to choose contraceptives and family planning methods. A glaring factor which is reflected in the recent round on National Family Health Survey (NFHS). The NFHS round 4 finds that only 47.8% of women have access to modern contraceptive methods whereas the unmet need for contraceptives in India is 12.9%.

The Economist in its November issue on suicides notes that young women in China and India have traditionally had higher rates of suicide compared to their contemporaries in other parts of the world. This they find has been changing and decreasing over time. An interesting fact which emerged in their finding was that when women move out of villages into cities the traditional family hold over them breaks giving them more choices of how to live their lives.

Another disturbing trend which is emerging is that suicide rates among urban housewives in India is one of the highest compared to any other group. An unfortunate deviation which happens in India is that between the states, the suicide rates among women in relatively richer and more developed states is higher. This also holds true for men in developed states in India. Explanation for this anomaly have included the fact that urbanization has led to changes in traditional roles and support systems the new urban areas may not yet have the support structures for people or people may not know how to access support for their needs.

Mental illness has been a very stigmatised illness. A lack of understanding of its causes and its manifestation have led to its stigmatisation. Stigma associated with mental health prevents people in many cultures from accessing help for mental illness. A reduction in the associated stigma will require a conscious effort on the part of the community and an acceptance of its debilitating effect on a human being.

Economic status
Research done in developed countries had found that there was a direct relationship between economic status and mental health and a similar effect was believed to exist in LMIC's. Patel et al in their work on mental health in developing countries identify a vicious cycle of mental health and poverty. Economic poverty, malnourishment, low education leads to depression, anxiety and addiction which in turn leads to lower productivity and poverty.

Poverty per se being a cause for mental health problems has had mixed evidence. Das et al in their study on mental health across eleven developing countries find that in some countries there was an association between material poverty and mental health while in others the association was not found. The main factors they identify as causes of mental health issues which are consistent across these countries is older, female, widowed who already are in poor health.

Low levels of education have been identified as a causal factor in various
studies noted in this article. Education may be linked to better social networks, access to information and services and hence may allow women to deal with mental health issues better.

**Maternal mental health and the effects on children health**

Studies which have found a strong link between the mental health of the mother and the health of infant children. Maternal health starts effecting the health of the unborn child, mothers with mental health issues tended to have low birth weight babies. It has been found that infants whose mothers are depressed tend to be smaller, weaker than children of non-depressed mothers. There is some debate about the direction of this occurrence. Research also indicates that having weaker and smaller babies causes depression among mothers.

Harpman et al in their paper on the effects of maternal mental health on infant well-being find that poor mental health of mothers was associated with the malnourishment among children. Their research studied women across India, Vietnam and Ethiopia where the same methodology was used to study all the women. In their study across these countries they found that there was a strong relationship between stunting of children which is height for age and the mental health of the mothers. the odds ratios (OR) for the association of maternal CMD with child stunting are: India 1.4 (95%CI 1.2 to 1.6), Peru 1.1 (0.9 to 1.4), Vietnam 1.3 (0.9 to 1.7), and Ethiopia 0.9 (0.7 to 1.2).

The association between mental health of the mother and stunting in the child seems to be higher among Asian countries compared to others. In Vietnam there was also a relationship found between wasting, which is the measure of weight as per height and the mental health of the mother. Similar results were also found in a study done in Pakistan by Rahman et al. where they found that postnatal depression among mothers were connected directly with poor health of infants.

**Identification and Measurement**

The first step in treating mental health is the identification of mental health problems. The severe taboo associated with these issues does not allow people to openly admit there is a problem. This might become a greater issue for women who are not educated and have limited access to health facilities. One of the suggestions for tackling with this issue has been to integrate an initial screening for mental health as part of the routine antenatal care check ups thus allowing women to be screened while ensuring that they are not stigmatised for seeking care.

As per the WHO's World Mental Health Atlas 2017 only 37% of member states regularly compile data on mental health at least from public facilities. Further only 20% of Member States reported that indicators are available and used to monitor implementation of most of the components of their action plans.

There has been a lot of research and work done on mental health in developed nations but relatively little was done on Low and Middle Income Countries (LMIC). This has changed over the last two decades and the result from these studies indicate that % LMIC have the highest levels of mental health problem in the world. This numbers may be conservative estimates as the reporting of mental illness among LMIC still continues to remain very low. The stigma surrounding mental illness is a major deterrent to reporting issues related to mental health.

**Solutions**

Mental health cannot be viewed in isolation of physical health or the social space that
an individual inhabits. An individual’s mental wellbeing is connected to her physical well-being at the same time her mental wellbeing contributes to her physical wellbeing. The interdependency between the two means that it is essential to take care of both and ask for help when needed. Stigma around mental health prevents people from asking for help when they need it while changing the norms around mental health stigma will take time there are some solutions which can be adopted in the current scenario.

Situation such as maternity which are prone to impact the mental health of a person should be tracked during the course of her pregnancy. To do this mental health tracking could be incorporated into routine maternal health check-up. During the antenatal care visits of a pregnant woman she can be screened for mental health.

For new mothers integrating mental health checks within their postnatal check-ups could be a simple and effective method to identify women who are suffering from postnatal depression.

People are willing to talk about their mental health issues only in closed circles and with people they trust. Community Health Workers (CHW) who are part of the community and understand local values and customs can play a major role in the identification of mental illness. Sangath an NGO in India is training CHW’s to identify people who may be suffering from mental health issues in the community. They are then referred for treatment if needed.

Having a caring partner is associated with better mental health outcomes, Intimate partner violence has been identified as a major cause of depression among women. Providing women with the resources and support to leave an abusive relationship could be a very helpful way of dealing with the situation.

Being part of the community CHW’s could also be provided additional training to identify where women might be at a greater risk. Being part of the community, they would have better access and will also be able to identify women at risk.

While these are some effective solutions for identifying mental health problems, there still needs to be a lot more investment into training mental health professionals and building facilities for psychiatric care. These solutions will require planning, investment and creating an awareness of the deep need for better mental health facilities. Creating and balancing funds for mental health facilities is the need of the hour and as we move towards a healthier world.

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