REVIEW ARTICLE

PERINATAL MENTAL HEALTH: BURDEN, CHALLENGES AND PROSPECTS

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ABSTRACT

Introduction: Maternal health has traditionally focused on mortality and physical health morbidity, this approach has inspired several initiatives which significantly enhanced the health outcomes of women in child bearing age globally. More recently, the significance of mental health has become relevant to maternal health and most mental health difficulties of women occur peripartum. An understanding of this problem is valuable to the practice of obstetrics. Method: A non systematic review of the literature was undertaken to identify scholarly works on the subject which was predetermined to answer the issues related to the topic. Conclusion: The mental health problems of women in the perinatal period are huge and growing particularly, in the low and middle income countries. The burden and consequences associated with this group of disorders is borne by the mother, child and the wider society. The global effort in Providing perinatal mental health services to women in a comprehensive and integrated manner has proved difficult due to poor policy, stigma, misconceptions and lack of collaboration. Despite these challenges there is hope in the growing local and global evidence supporting the effectiveness of cheap intervention across diverse economic and social contexts. Integrating mental health into primary health care through the mhGAP, task shifting and interdisciplinary collaboration between obstetricians and mental health physicians can be an important starting point.

Key words: Perinatal; Mental health; Burden; Challenges; Prospects

INTRODUCTION

Maternal health has traditionally focused on mortality and physical health morbidity, this approach has inspired several initiatives which significantly enhanced the health outcomes of women in child bearing age globally. The most recent global estimates of the maternal mortality ratio show a decline from 385 per 100?000 live births in 1990 to 216 per 100?000 in 2015, with 303?000 maternal deaths in 2015. However, within the same period women worldwide have experienced a rapidly growing burden of chronic and non-communicable diseases (NCDs).[1]

Access this article online

Quick Access Code

WEBSITE: www.kjmsmedicaljournal.com

DOI: 10.36020/kjms.2019.1301.001

In 2013, among women aged 15–49 years, NCDs accounted for 44% of deaths and almost 65% of disability-adjusted life years compared with 7% of all deaths and 5% of all Disability Adjusted Life Years DALY associated with maternal disorders.

Mental health problems constitute a significant contributor to NCD burden and are very common during pregnancy and after childbirth all over the world. About 25-30% of women in developing countries, and about 10% in developed countries, have a significant mental health problem during pregnancy and after childbirth.[2]

High rates of mental health problems in pregnant women and mothers have been reported from many countries in Africa such as Ethiopia, Nigeria, Senegal, South Africa, Uganda, Zimbabwe and many others.[2] Social determinants are an important cause of mental health problems in pregnant

women and mothers. Women, especially those living in developing countries are more exposed to risk factors, which increase their susceptibility to develop mental health problems. Some of these include poor socioeconomic status, less valued social roles and status, unintended pregnancy and gender-based violence.[3] Rates of mental health problems are at least 3 to 5 times higher in women exposed to intimate partner violence.[4]Following rape, nearly 1 in 3 women develop posttraumatic stress disorder compared with 1 in 20 non-victims.[4] Pre-existing psychological disturbances often surface as depression, substance abuse or attempts at suicide, particularly when combined with a pregnancy that is unwanted.

There is evidence to suggest poor maternal mental health awareness among the public particularly, as it concerns prenatal maternal mental health and the effect on the future development of the child.[5] Awareness of mental health issues of pregnant women is quite low among experts in maternal health.[6]This is not surprising since non recognition by non-psychiatrists of mental health conditions in general and its consequences on the overall patient care has been well documented.[7]

As a result of the increased awareness of the significant mental health burden of women, maternal mental health has begun to receive the attention of the global health community, governments and the wider public. There is a huge push by a world-wide advocacy effort to have a World Maternal Mental Health Day recognized by the WHO and the international community in general.[3]This shift has been brought about through changes in global health governance system such as the post 2015 agenda for development goals, where (World Health Organization) WHO put forward Universal Health Coverage (UHC) and emphasized Healthy Life Expectancy (HLE) related indicators and not just maternal mortality as a priority in its maternal health policy initiatives.[4]

Over the last decade, a number of influential organizations have called for the integration of mental, neurological and substance use (MNS) disorders into large scale public health programmes. Although progress at the implementation level has been slow, the development of a number of evidence-based, potentially scalable interventions in the MNS field provides new impetus to develop strategies for integration with broader programmes.

To help decrease the global mental health (GMH) treatment gap, the World Health Organization (WHO) developed the Mental Health Global Action Plan Intervention Guide (mhGAP-IG) through a systematic review of evidence followed by an international participatory consultative process. The mhGAP-IG comprises straightforward, user-friendly, diagnosis-specific clinical guidelines for providing evidence-based practices (EBPs). The guidelines are meant to be used by non-specialized health care providers after adaptation for national and local needs. This program has been conceptualized for our local setting and forms the backbone of all efforts at integration initiatives in Nigeria.[5]

Despite the existence of these guidelines, dissemination and implementation of EBPs and translation of scientific findings into health policy have been lagging in LMICs. Interrelated challenges that contribute to these deficiencies and also exacerbate the GMH treatment gap include shortages of mental health workers, lack of research capacity, stigmatization of mental illness, and the soloing of mental health services apart from other health services for physical health conditions.[5]

Awareness of the psycho biological, policy and organizational processes involved in the management of perinatal mental health disorders may help foster collaboration between mental and maternal health experts with a view to bridging the knowledge and practice gap across disciplines and improving the overall health outcomes of women.

Psycho biological changes of pregnancy and mental health

Pregnancy is invariably associated with significant physiological changes which have direct and indirect effect on the psychological state of the pregnant woman. Apart from these physiological changes however, there are social-economic factors associated with pregnancy which also affects the psychology of the pregnant mothers. The combined effect of physiological, psychological, social and

economic factors acts to bring about a mental health outcome of any particular pregnancy. A harmonious combination of factors which usually obtains in majority of pregnancies results in good mental wellbeing during pregnancy and the post-partum period. A disharmony results in the opposite with mental health problems during pregnancy which persist into the post-partum period with negative consequences for the wellbeing of the child.[6]

Pregnancy Related Hormonal Effect on Mental Health

Several hormonal changes occur in pregnancy affecting notably; Human Chorionic Gonadotropin (hCG), Progesterone, Estrogen and prolactin. Hormonal changes can affect neurotransmitter levels and function and through this, completely alter the way the pregnant woman perceives the world through the senses of smell, sight and taste.[7]Sex hormones have been implicated in neurite outgrowth, synaptogenesis, dendritic branching, myelination and other important mechanisms of neural plasticity. Ovarian hormones can act on multiple receptor types, such as voltage-gated ion channels, including $GABA_{A,}$[8] NMDA,[9]serotonin[10]and dopamine receptors.[11]The changes in the body which these hormones bring about also have effect on body image in some women, which in turn has both direct and indirect psychological consequences.

Social Issues of Pregnancy and Maternal Mental Health

Pregnancies thatare unplanned or unwanted due to social or economic factors appear to contribute to psycho social distress in pregnant women.[7]Mothers reporting unplanned pregnancies commonly experience poorer quality relationships with partners, and may receive lower levels of social support relative to those who planned their pregnancy. Also, higher levels of marital conflict and lower participation of the child's father in childcare are more likely.[8]

Psychological demands of pregnancy

Although a woman can be afflicted by any of a number of psychological disturbances; she is more likely to suffer certain types of psychological distress at one stage of her pregnancy than at another. This is due to the peculiarity of the difficulties and demands which different stages of pregnancy brings to bear upon the pregnant woman.[9]

Psychological Issues Related to Labour and Delivery Child birth is a significant life event for women and the painful experience of childbirth is dependent upon several factors and an individual woman's perception and ability to cope with this pain is influenced by a multitude of factors, such as; her age, cultural beliefs and past experiences.[10] The understanding of how these factors interact to influence a woman's experience of labour may be relevant to designing patient specific labour care which has been found to improve labour outcomes both for mother and baby.[11]

Perinatal Depression

Perinatal depression constitutes the second leading cause of disease burden among women globally.[12]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.[13] In a recent study conducted in Northeastern Nigeria, a prevalence of postnatal depression was estimated at 22.4%, this is said to be associated with unemployment, lack of support from husband and when pregnancy was unplanned.[14] However, an earlier study in the north central parts of Nigeria found a relatively higher rate of postpartum depression in about 45.2% of the women sampled.[15] These figures are evidently higher than the global average which underscores the need to give this important health condition the attention it deserves.

The cardinal symptoms of depression and the inner psychological disturbances resulting from it significantly disrupt the ability of the woman to function effectively in the important area of maternal functioning.

In addition to the economic and human costs of maternal depression, children of depressed mothers are at risk for health, developmental, and

behavioral problems, thereby contributing to inter-generational disadvantage that accumulates throughout the life span. Addressing mental health concerns such as maternal depression could play an important role in achieving the Millennium Development Goals set by the United Nations (three out of the eight goals refer specifically to women and children.[16]

There is good evidence that maternal prenatal stress, anxiety and depression are associated with an increased risk of adverse emotional, behavioral and cognitive outcomes in the child.[17]Studies, including large cohorts, which allow control for multiple confounders, including both prenatal paternal and postnatal maternal mood, suggest that a component of this is due to fetal programming18. The underlying mechanisms for such fetal programming are still not well understood but alterations in the function of the placenta are likely to be important. More recently an association has been found between prenatal anxiety and an up regulation of the expression of the placental glucocorticoid receptor.[18]

PSYCHOSIS

These are a group of mental disorders that are hardly missed by most Obstetricians because the symptoms are bizarre and often florid in nature. As a result, it is quite common to have pregnant women to receive a diagnosis of puerperal psychosis or pregnancy induced psychosis. Even though it is relatively easy to diagnose postpartum psychosis, not all diagnosis of postpartum psychosis made in obstetric practice is accurate. The diagnosis of psychosis in pregnancy in quite a number of times turn out to be incorrect as most unusual behavior or experiences are quickly termed psychosis. (anecdotal evidence)

The cardinal symptoms of psychosis are; hallucination, delusion and gross abnormal behaviours. The presence of any of the three symptoms with a loss of touch with reality is diagnostic of a psychotic state.[11]

Effect of Maternal mental health on the child

While it is recognized that psychiatric disorders are complex biological, familial, and societal illnesses, recent research has established that one origin of these disorders is during fetal development.[19] Even subtle problems in fetal brain development can predispose the child to mental illness in adulthood.[19] The neuro developmental theory explains why it is vital to have the environment of the growing foetus secure because, it is in this stage of intrauterine life that the basic architecture of the brain is laid and important brain pathways connecting important areas are constructed. Thus, the quality of the fetal environment during sensitive periods can dictate the vulnerability of individuals to a broad array of diseases across the life span.[20] Fetal programming is widely accepted as part of the inheritance of obesity, metabolic disease, and diabetes. Similarly, fetal programming of psychiatric disorders is an emerging domain of robust research.[20]

Therefore, investigators and clinicians support treating depression during pregnancy to mitigate depression's effects on both the mother and her child. For example, exposure to depression during the fetal period has been shown to increase the risk for depression in offspring at age 16 by 4.7 times compared with unexposed offspring, even when the mother recovered from depression after birth.[21]The relationship between maternal depression and child developmental adversity is a continuum that begins during pregnancy.

CHALLENGES

The challenges to the management of perinatal mental health disorders are both structural and attitudinal. The lack of collaboration between different disciplines of medicine has resulted in the lack of recognition of mental health problems among obstetricians. Emphasis on stand-alone psychiatric hospitals reduces access to perinatal mental health services.

Non Recognition of Mental Health among Non Psychiatrists

A local study suggests a high level of non-recognition of psychiatric disorders, particularly when they co-occur with general medical conditions. About 98% of general hospital doctors in the general hospital Maiduguri could not diagnose mental disorders co-occurring with non-mental health conditions.[22]

The table below summarizes the presentation of depression in pregnancy and how common

IDENTIFYING DEPRESSION PREGNANCY

SYMPTOMS	PRESENTATION IN THE NON-PREGNANT	PRESENTATION IN THE PREGNANT
Sadness	Intense feeling of unhappiness clearly	Sadness is likely to be assumed as normal moodiness of pregnancy
Lack of energy	Demonstrable inability to carry daily activities of life	Missing of antenatal care (ANC) visits, poor use of ANC drugs in a
Lack of enjoyment	Things that the patient loves doing becomes uninteresting	Poor participation in ANC activities; DIMINISHED desire for baby Shopping
Diminished libido	Lack of sexual desire or drive severe enough	It may be difficult to detect due to ascribing of observed changes in sexual behaviours to pregnancy
Poor appetite	Diminished desire to eat	Anorexia may be attributed for this psychological state
Weight loss	Demonstrable reduction of weight	May be missed due to overall weight gain in pregnancy; may be attributed to poor foetal growth

Lack of Interdisciplinary Collaboration and Stigma

Stigma and discrimination are not just a phenomenon that affects patients who suffer psychiatric illness. It also affects the profession of psychiatry as a practice and by extension the consideration given to mental health in the processes of policy formulation. Mental health receives low priority in the area of collaboration with other specialties due in part to the stigma as well as the isolation of mental health from other specialties through the establishment of stand-alone specialist psychiatric hospitals. There is a strong movement aimed at reduction of specialist psychiatric facilities and merging with general medical practice.

Misconceptions

A major challenge to the implementation of mental health as a component of the overall maternal health system is the high degree of misconceptions associated with mental health in general and maternal mental health in particular. The most damaging misconceptions have been suggested by Atif Rahman and colleagues to include; maternal depression is rare, maternal depression is not a priority to maternal health, only specialists can treat maternal depression or psychosis and it is not possible to integrate maternal mental health into maternal and child health care programs. In an evidence based and systematic approach Atif and colleagues were able to debunk the misconceptions through the proceeding arguments.

The misconceptions are presented below:

Maternal Depression is Rare

'A common perception is that depression is a construct of affluent Western societies that is infrequent or non-existent in traditional communities. Perinatal depression (during pregnancy and in the year after birth) has been reported in all cultures. Rates vary considerably, but the average in high-income countries about 10% to 15%. A recent meta-analysis shows that the rates in low- and middle-income countries (LMICs) are even higher, ranging from 18% to 25%. Contributing factors related to depression in women include poverty and persistent poor health; a poor relationship with a partner (including intimate partner violence); insufficient practical or emotional support from the family; few confiding relationships and lack of assistance in crises; social adversity; limited control or participation in financial decisions or reproductive health, including crowded living conditions and lack of employment; and coincidental adverse life events, such as financial difficulties, unwanted pregnancy, or illness in the child.[23]

Maternal Depression is Not Relevant to MCH Programmes

Depression is the leading contributor to the global burden of disease (more years of life lived with disability, reduced productivity including unemployment, increased physical illness,

Systematic reviews from high-income countries provide evidence of the effectiveness of both psychological therapies and pharmaco therapy in the treatment of perinatal depression.[23]

Over the last decade, the evidence for the effectiveness of non-mental health specialist-led interventions (e.g., involving nurses, health visitors, and midwives) in high-income countries has been building. Efforts to improve maternal mental health through such interventions in developing countries are promising. Several successful randomized controlled trials have been delivered by lay health workers, a critical resource in settings in which formally trained health professionals are often scarce.[13,23]

PROSPECTS

A mental health component could be incorporated as an integral part of maternal health policies, plans and activities in countries. Mental health approaches are simple to integrate into ongoing maternal health services and require strengthening of basic health-care systems.[24] There are simple, reliable and affordable tools for the recognition of mental health problems in women during pregnancy and after childbirth within the context of primary health care the Edinburgh perinatal depression scale, the Hamilton depression and anxiety scales, the Beck Depression and anxiety inventories are all useful easy to use tools that can be used to screen for mental disorders in obstetric practice.

A series of community-based interventions have been demonstrated to be useful and effective for women with mental health problems during pregnancy and after childbirth.[25] For example, health care providers working in sexual and reproductive health services and caring for pregnant women can be trained to recognize symptoms and signs suggestive of a mental health problem and provide counseling to the women about stress as well as provide effective psychological support and other interventions. A small proportion of women with severe impairment in daily functioning would require specialist support and prescription of psycho tropic medicines. Referral and a supervisory system will need to be put in place to ensure that appropriate support services are available. The World Health Organization (WHO) and United Nations Population Fund (UNFPA) have jointly initiated a programme to integrate mental health needs into existing maternal and child health policies, plans and activities. Simply, there can be "no health without mental health." Programmes aimed at achieving MDG 5 should integrate mental health approaches within their strategies for improved maternal and mental health.[24]

Local evidence, suggests midwives can be trained to provide basic mental health service for perinatal depression The Expanding care for perinatal women with depression study (EXPONATE) conducted in southern Nigeria shows the effectiveness of such an approach.[25]Consultation liaison psychiatric practice is where psychiatrists are either embedded within an obstetric teal (Liaison) or are called to co-manage an obstetric case with the obstetrician (consultation). This approach is likely to be beneficial through improvement of service delivery and the exchange of skills between the obstetric and psychiatric teams.

Traditional birth attendants who have taken over some tasks in the maternal health care delivery system can be trained to also detect mental health problems in the postpartum period leading to early detection and treatment thereby reducing morbidity.

Policy formulation for example, formulation of strategic framework for perinatal mental health could be a good idea. These identified strategies and prospects require funding and manpower which are in short supply at the moment in our developmental history. The huge brain drain is also a factor. As is the lack of consistency in government policy.

CONCLUSION

The mental health problems of women in the perinatal period are huge and growing particularly, in the low- and middle-income countries. The burden and consequences associated with this group of disorders is borne by the mother, child and the wider society.

The global effort in Providing perinatal mental health services to women in a comprehensive and integrated manner has proved difficult due to poor policy, stigma, misconceptions and lack of collaboration. Despite these challenges there is hope in the growing local and global evidence supporting the effectiveness of cheap intervention across diverse economic and social contexts. Integrating mental health into primary health care through the mhGAP, task shifting and interdisciplinary collaboration between obstetricians and mental health physicians can be an important starting point.

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