MOMENTUM

Country and Global Leadership

Landscape Analysis Brief

THE SILENT BURDEN:

A Landscape Analysis of Common Perinatal Mental Disorders in Low- and Middle-Income Countries

INTRODUCTION

Mental health has long fallen behind physical health in attention, funding, and action. Despite the World Health Organization (WHO) including mental health as a fundamental aspect of overall health and as one of its Sustainable Development Goals (SDG),[1] mental health remains underfunded and often ignored in the face of more visible physical health concerns. In addition, health systems have yet to respond to the burden of mental health and the effect of mental health on morbidity and mortality has become too important to ignore. Nearly one billion people throughout the world live with a mental health condition.[2] People living with mental health conditions experience disproportionately higher rates of disability and mortality with more than 80 percent residing in low- and middle-income countries (LMICs).[3,4] Despite global level action plans and even implementation guidance, the translation from policy to actual services has been largely absent—the treatment gap is estimated at nearly 90 percent.[5]

Within Maternal, Newborn, Child, and Adolescent Health (MNCAH), mental health remains underfunded and too often overlooked. The perinatal period is a particularly critical time to identify and address mental health concerns because this period is associated with elevated incidence of mental disorders.[6,7] The literature on perinatal mental health does not use a consistent definition for the perinatal period: the period generally commences with pregnancy, but may be defined as extending up to two years after delivery.[8,9] Common perinatal mental disorders (CPMDs), such as depression, anxiety, and somatic disorders, pose significant and lasting implications for women's health and quality of life. Gender inequality—women's status in families, communities, the health system, and society—is a key driver of CPMDs as well as a barrier to provision of and access to care and support. Vulnerable groups—adolescents, women experiencing GBV, women living in humanitarian settings, women with a history of obstetric trauma, or those living in poverty—have additional unique mental health needs in the perinatal period, and the intersection of these factors can compound risk. Perinatal mental health conditions have implications beyond just the woman—they have been associated with adverse physical, emotional, and neurological development in newborns and children.[10] The global push for universal health coverage (including mental health) and the recent COVID-19 pandemic also have helped to bring the conversation about mental health to the forefront, and the MNCAH community is positioned to better provide women with quality mental and physical health care that is their human right. Given this background, the MOMENTUM Country and Global Leadership (MCGL) team and USAID commissioned, in December 2020, a landscape analysis to better understand the current state of perinatal mental health, CPMDs, and what is being done to address the burden in LMICs.

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METHODOLOGY

A multitiered approach was used for the landscape analysis (LA) to allow for a broad understanding of the current literature on perinatal mental health in LMICs and to examine the relationship between perinatal mental health and maternal, newborn, adolescent, and child outcomes, including promising interventions and implementation strategies. A **scoping review**, used to identify the literature on perinatal mental health in LMICs and the effects on MNCAH, included more than 400 peer reviewed and grey literature articles. **Key informant interviews** (KIIs) were conducted with 60 experts who are currently working and/or living in LMICs in the fields of mental health, MNCAH, faith-based support, humanitarian and fragile settings, nutrition, gender-based violence, stillbirth and perinatal loss, advocacy, and implementation research. Two **focus group discussions** (FGDs) were conducted with experts identified through the Inter-Agency Working Group on Reproductive Health in Crises. A **document analysis**, the last step, was conducted to understand how **relevant mental health policies** shape perinatal mental health programs.

SUMMARY OF FINDINGS

COMMON PERINATAL MENTAL DISORDERS AND MATERNAL HEALTH

Perinatal mental health has ramifications for a woman's long-term mental and physical health, functioning, and quality of life.[11] Women with CPMDs face numerous health consequences in addition to suffering from mental illness. Women suffering with perinatal depression may face challenges related to adequate nutrition and hygiene, maintaining normal household and social activities, substance abuse, and attendance at routine care visits.[12] Antenatal depression was linked with depression during and after the postnatal period, which can have a lasting effect on the health of a woman and her infant/child.[13] (See Figure 1.) Women with a history of major postnatal depression had a 25 percent risk of a recurrence in a subsequent pregnancy,[14] and postnatal depression was a risk factor for maternal death by suicide (in a global systematic review, 20 percent of mortality in the year after childbirth was estimated to occur by suicide).[15] A depressed mother's ability to make decisions and maintain vital social support also was affected.[12] Anxiety was also a known risk factor for both suicide and depression, and anxiety and depression can reinforce each other.[16,17] Studies have demonstrated that antenatal mood disorders (depression and anxiety) are associated with increased risk of preterm birth and pre-eclampsia,[14,18] conditions associated with increased all-cause mortality and death from cardiovascular disease later in life.[14] This association between maternal mental health and immediate and longer-term outcomes made mental health screening and treatment crucial as early as possible.[19] However, women who experienced perinatal mental health issues may face "branding" and stigma, which can cause hesitation to be screened and/or treated for a mental health condition.[19]

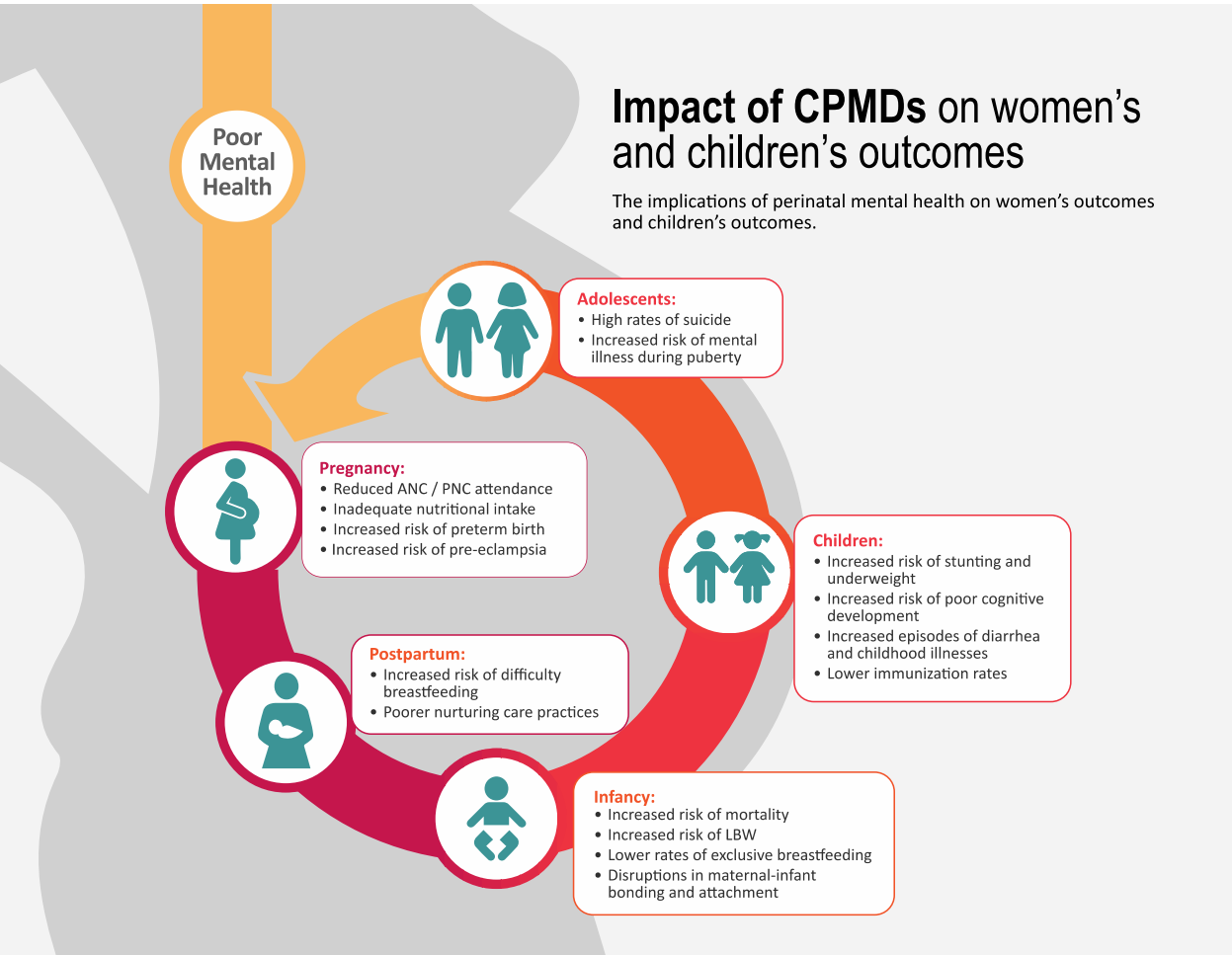
COMMON PERINATAL MENTAL DISORDERS AND NEWBORN AND CHILD HEALTH

Maternal mental health problems affect not only women, but also the physical, emotional, and neurological development of newborns and children.[10] Studies from LMICs found that depressed mothers had a higher risk of preterm births and low-birthweight babies, setting the stage for higher childhood mortality.[6,†] A study from Taiwan found that children were at 1.47 times greater risk of death if their mothers had postnatal depression,[20] and among a cohort of Ghanaian mothers postnatal depression was highly associated with infant mortality.[21] The presence of CPMDs in mothers also appears to increase the risk of stunting and wasting in children. A meta-analysis of studies in LMICs

[†] Note that having a small or sick newborn also increases the risk of CPMDs; a study conducted in Kirehe District of Rwanda revealed half of mothers of small and sick newborns had poor mental health.

found that mothers with depressive symptoms had approximately a 50 percent higher overall estimated risk of having a stunted or underweight child.[22] Mothers' mental health also appears to affect children's cognitive development. A systematic review from 16 LMICs suggested that CPMDs were negatively associated with a child's fine and/or gross motor, cognitive, language, behavioral, and global development.[23] In some cases, CPMDs may disrupt maternal-infant bonding and attachment.[24,25] There also appears to be an association between CPMD and common childhood illnesses, as well as care-seeking behavior. Several studies noted that children of depressed mothers have more frequent episodes of diarrhea and other illnesses compared with infants of non-depressed mothers. The presence of CPMDs also affects the extent to which mothers seek immunization services or care for ill children. Finally, women with depression were significantly more likely to report insufficient milk and stop exclusive breastfeeding, even though depression was not associated with actual reduction of milk production.[26] (See Figure 1.)

FIGURE 1: HOW CPMD AFFECTS HEALTH OUTCOMES



RISK FACTORS

The landscape analysis identified several risk factors for CPMDs in LMICs. These risk factors stem from broader social determinants, such as economic or gender inequality, to more individual experiences, such as a history of stillbirth. Exposure to multiple risk factors, often the case in LMIC settings, for prolonged periods puts a woman at greater risk for CPMDs.

GENDER

Gender inequality is arguably one of the most important risk factors for poor mental health—and one that has an impact on nearly every aspect of a woman's life. CPMDs were most common in those settings where gender inequity was more pronounced and where women had little autonomy.[12,27,28] Women who bore an unequal burden of household chores, child-rearing, and live with the additional pressure associated with multigenerational households, were more likely to experience postpartum depression and other related perinatal mental health conditions.[19,27,29] Women with limited reproductive choice and who felt pressured by husbands and in-laws to have male children were at greater risk of developing CPMDs.[6,19,29,30,31,32,33] Gender inequality is woven through each of the categories of risk factors (below) and should be recognized as one of the most profound risk factors for women globally.

SOCIOECONOMIC, POLITICAL, AND POLICY CONTEXTS

Women living where economic inequality, racial, ethnic, and religious persecution is rampant, as well as those living in a humanitarian crisis, experience poorer maternal mental health outcomes.[6,12,19,34,35] The overlap of cultural, sociopolitical, economic, and environmental factors influence women's access to services, social support, freedom from gender-based violence, nutritional status, and their babies' ability to grow and thrive.[6,16,27,28,33,35] Also, a lack of national mental health policies that prioritize mental health services prevents women from accessing care and increases and prolongs psychological distress.[36,37]

AGE (ADOLESCENCE)

For pregnant adolescents, multiple studies from LMICs have found rates of perinatal mental illness as high as three times that of older women.[38,39] Early and/or forced marriage, particularly among adolescents and women who were married in adolescence, and especially for adolescents in humanitarian settings, were commonly associated with CPMDs.[40] The responsibility of marriage and having children at a young age, marital discord, or unplanned pregnancies increased the risk of mental health disorders.[41,42,43]

INCOME INEQUALITY

Evidence demonstrates a direct link between mental health and poverty, intertwined in a complex negative cycle: poverty increases the risk of poor mental health conditions and having a poor mental health condition increases the likelihood of experiencing poverty.[44] Poverty is one of the most significant risk factors of maternal depression and anxiety.[33,45] Extreme poverty, when compounded with violence, low levels of social support, unplanned pregnancy, or having children in adolescence, often led to CPMDs.[46] This risk increased during the COVID-19 pandemic.[47] Women living in poverty had a harder time finding transportation, gaining access to family planning services, and were more likely to use alcohol and drugs.[28,48,49,50,51,52]

FOOD INSECURITY

Food insecure women are more at risk of CPMDs, which in turn makes it difficult to break the cycle of food insecurity.[33,53] Research suggests that malnutrition and nutritional deficiencies lead to maternal mental health disorders, with some research indicating a bidirectional relationship.[54,55,56] Other research suggested that inadequate access to nutritious foods during and after pregnancy was a source of stress.[30,57] Women were often the gatekeepers of food security and heavily involved in the production and preparation of food for their families. Mothers in food insecure settings were more likely to experience distress.[49,57] An underweight mother is more likely to suffer from depression, although the direction of potential causation in this relationship is not clear.[50,58]

EXPERIENCES WITHIN THE HEALTH SYSTEM

A woman's negative experience with the health care system during her perinatal period is linked with poor perinatal mental health.[59] Disrespect, mistreatment, and abuse experienced by women during pregnancy and childbirth has recently been shown to affect perinatal mental health.[60,61] Women experiencing disrespectful care or mistreatment were more likely to be diagnosed with depression and were less likely to return for postnatal care.[60,61]

OBSTETRIC TRAUMA

Obstetric trauma—miscarriage, stillbirth, having a small or sick newborn, and other traumatic birth experiences such as emergency cesarean sections—were risk factors for CPMDs.[19,28,62,63,64] Caring for a sick child or child with development disabilities is also associated with maternal depression.[65,66] Women unable to time, space, or limit their births had histories of miscarriage or abortion, and those who had limited access to sexual and reproductive services, notably family planning, were more likely to experience anxiety and depression.[32,41,67]

SOCIAL COHESION AND SOCIAL CAPITAL

Poor social support from family and friends and social isolation also were significant risk factors for many perinatal mental health conditions.[12,19,28,68,69] Poor relationships with in-laws, particularly mothers-in-law, and a limited social network during and after pregnancy were associated with anxiety, depression, and suicide ideation.[12,27,29,69] Some studies show that a lack of social support especially during a difficult pregnancy and birth increased a woman's risk for CPMDs.[6]

RELATIONSHIP QUALITY WITH INTIMATE PARTNER

Spousal discord and intimate partner violence (IPV) are key risk factors of CPMDs. In inequitable spousal relationships, where the woman's needs and wants were overlooked and she was abandoned or neglected, women were more likely to experience CPMDs.[19,30,68,70,71] Women whose husbands/partners were not involved in taking care of the baby or refused to cover expenses related to food and children were at higher risk for CPMDs, particularly if the baby was small and sick.[12,22,30,34] Several studies show that physical violence during pregnancy or a history of IPV increased the odds of antenatal depression, and any form of violence was significantly associated with postpartum depression.[12,28,69,72] Women who experienced physical and sexual IPV during pregnancy were more likely to suffer from postpartum depression.[73,74,75] *"Perinatal mental health troubles … [are] associated with IPV,"* a key informant said. *"A lot of it is understandably about disempowerment, lack of control, and that is just reemphasized over and over again in other problems women face. So, if you have no control over your fertility, then you will feel disempowered and out of control. If you have an abusive partner, you will feel controlled by him. If you are very poor and can't decide what to spend your money on, whether your kids go to school, you'll feel disempowered, [and] all of these would be factors for depression and other adverse mental health."* — (Researcher)

Protective Factors

Just as exposure to certain factors increase a woman's risk of CPMD, these protective factors can mitigate a woman's risk:

- **Economic prosperity**: higher educational attainment, stable employment for the woman and her partner, and access to health services including family planning.[19]
- **Social support** and caring family and personal relationships that enable women to express their concerns, receive advice, and thus allay anxiety.[76]
- **Good partner relationships:** fathers actively participating with childcare and treating women with kindness, sensitivity, and affection.[19,77]
- **Health providers competent in maternal mental health issues:** throughout the continuum of care, having providers who are empathetic and have the necessary skills to screen and address CPMDs and refer when their needs exceed the provider capabilities.[78]
- Key informants described the importance of faith-based health care, or other models of care that **take a holistic approach to wellness**, and a culturally acceptable, whole-person response.

IMPLEMENTATION

WHAT INTERVENTIONS ARE BEING IMPLEMENTED?

While much work is happening in the field of mental health globally, less attention is given to CPMDs and the perinatal period explicitly. However, there are guidelines, manuals, initiatives, and projects being introduced and implemented throughout LMICs that inform the maternal and mental health fields. Some initiatives work at the community level, whereas others are delivered in health facilities. Most approaches involve task shifting from specialized mental health professionals to more generalized or lay health workers, such as midwives or community health workers. The majority involve a stepped care model, in which serious cases with more specialized needs are referred if there is more specialized care available at a referral location. All aim to meet women where they seek care, given their context and entry points. Most interventions use a local adaptation of cognitive behavioral therapy; others include problem solving therapy, behavioral activation, group-based programs, family-based programs, parenting skills, mother-baby sessions, or play-based support. Providers generally need to be trained in a variety of skills, such as mental health and psychosocial support (MHPSS) and trauma informed care. Increasingly, programs are incorporating technology to address some of the emerging challenges both at the community level and facility level. Table 1 provides and illustrative summary of programs with rigorous evidence of outcomes.

TABLE 1: SUMMARY OF PROGRAMS WITH RIGOROUS EVIDENCE OF EFFECTIVE OUTCOMES

Program/Intervention	Context	Evidence on maternal outcomes	Evidence on child outcomes
Group psychoeducation‡	In India by local women.[79]	Improved depression symptoms.	Improved exclusive breastfeeding rates. Reduced rates of child infectious illnesses.
	In China by researchers.[80]		
	In Iran by unspecified providers.[81]		
Thinking Healthy Program (adapted cognitive behavioral therapy)	In rural Pakistan by Community Health Workers (CHWs).[82]	Improved depression symptoms and care seeking. Improved depression symptoms.	Improved exclusive breastfeeding rates. Reduced rates of child infectious illnesses.
	In India by peers.[83]		
	In slums in Pakistan, in groups by psychologists, combined with child development education.[84]		
Group cognitive behavioral therapy	In South Africa by mentor mothers.[85]	Improved depression symptoms.	
	In Iran by specialists.[86]	Improved anxiety symptoms.	
Interpersonal psychotherapy	In China by midwife educators.[87,88]	Improved depression symptoms.	
	In Uganda, within peer groups with trained facilitators.[89]		
Newborn care educational program	In South Africa by local women.[90]	Improved depression symptoms.	Improved child weight-for-age.
	In Jamaica by CHWs.[91]		
	In Nepal by unspecified providers.[92]	Improved anxiety symptoms.	

‡ Interventions listed under "Group psychoeducation" and "Newborn care educational program" may differ in exact content.

WHAT ARE THE BARRIERS TO SUCCESSFUL PERINATAL MENTAL HEALTH PROGRAMMING?

Several clear barriers keep women from seeking care and treatment and receiving needed care. The most common barrier groups include culture norms, human resources, and health and financial systems.

- **Cultural norms:** Stigmatization of mental illness is a large and complex barrier in most settings. Women are stigmatized, which may reduce uptake of services and quality of respectful care. Because motherhood is so often considered the "natural" and most prized role for women, women who experience CPMDs may be judged harshly and may themselves feel guilt and shame. *"There is huge internal stigma,"* a key informant said. *"And that internal stigma almost mimics depression in some ways, or perhaps feeds off depression in some way. So, I think we have to also target the guilt, the shame, and this very pathological internalization of experiencing mental distress or illness. And it may be that external stigma is, perhaps in many settings, not as much as the internal stigma."*
  — (Psychologist)
- **Poverty and food insecurity:** No intervention targeting CPMDs alone will be able to overcome the impact of poverty—not being able to feed children or not having money to pay for rent or transportation. A daily struggle to survive often overrides the effect of any intervention.
- **The role of women in society:** The lack of autonomy that puts women at greater risk for perinatal mental health disorders also can be a barrier to accessing services. Women's ability to make decisions for themselves and their level of financial independence and empowerment remains a significant factor in hindering women's participation in any intervention/program or group session.
- **Human resources:** Almost every intervention included discussion about the overburdened health system: staff shortages, limited or non-existent supplies and equipment, insufficient infrastructure, and a sense that the "system" cannot take on another "issue."[93] Staff burnout in health facilities is a primary concern—COVID-19 has exposed and intensified this reality.[94] Even if they did have time, they did not have the training or lacked confidence in their ability to manage women's mental health needs. Also, because providers often come from the same communities that women do, they are not immune to the stigma of mental illness (KII 1, FGD 1). Providers hold their own beliefs of mental illness, and these at times prevent them from even engaging in conversations with women about what they are experiencing.[95]
- **Voltage drops:** Another challenge is voltage drops, or when an "intervention loses some degree of its potency or fidelity when moving from efficacy to effectiveness in the real world."[96] A similar challenge was noted when moving an intervention that worked well in an urban setting to a rural one, mostly because of turnover of trained implementing staff.
- **Lack of data:** Data is largely unavailable on mental health services, treatment, and even intervention strategies. A base understanding of what treatment or services women use, how often they attend, fidelity of the intervention, and follow-up to women who don't attend are nearly impossible to ascertain in most settings. At the regional level, there was less evidence from Latin America, the Caribbean, and West and North Africa.
- **Financial support:** Funding for integrated maternal mental health services within the system is a clear barrier to almost every intervention and is well documented.[97,98] Another common barrier is the burden of out-of-pocket costs to women and providers.
- **Lack of coordination:** Key informants working in the humanitarian sector often mentioned poor coordination or disconnect between maternal health and mental health programming.

On Measurement of CPMDs

In perinatal mental health, the detection and measurement of CPMDs makes use of screening tools that are often contextually adapted and are confirmed through a clinical assessment. However, the landscape analysis found:

- Several different tools were used, with varying cut-off points, to categorize and measure CPMDs making comparison and aggregation of prevalence estimates very challenging.[99,100]
- Key informants described how structured screening tools that are popular in high-income settings may not be acceptable or practical to apply in many lower-income health settings.
- Certain debates remain about the best ways to define and identify mental illnesses across different cultural contexts, where distress may be expressed differently.[34,99,101,102]

POLICY ANALYSIS

Of the 19 countries reviewed, and of those that included a plan for childhood or adolescent mental health, only five discussed perinatal mental health in particular, typically very briefly. Even when policy did exist, key informants stressed the importance of implementation once a policy is developed: *"What are policies after all? […] They are tools. They can be left in a shelf and nothing happens. Until somebody decides that this tool is useful and I want to use this tool to do something—you see, policies alone are useless."* — (Clinical Researcher)

DISCUSSION

WHAT ARE THE CORE AND ADAPTABLE ELEMENTS OF SUCCESSFUL INTERVENTIONS IN LMICS?

Using a modified version of the consolidated framework for implementation research (CFIR), Table 2 draws upon the literature and the qualitative data to identify some of the most significant core and adaptable components and contextual considerations in successful CPMD program implementation.[103] They are grouped by where in the health system they were implemented—at the community or facility level.

TABLE 2: CORE ELEMENTS OF SUCCESSFUL INTERVENTIONS

Core Elements of Successful Interventions:

Community Level Components

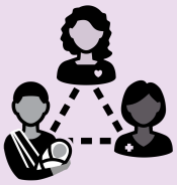
Stepped Care (inclusive of a clear referral system)

Stepped care is an effective and crucial approach to ensure that as many women as possible receive psychosocial support and have access to basic mental health services and that women who need more specialized treatment have access to that care.[104]

Detailed Assessment of Context

Understanding the context of the community and the facilities where any intervention would be introduced is a crucial first step highlighted in many studies and intervention approaches.[33,105] This process should include conducting a well-designed and contextually tailored **assessment.** This assessment should include:

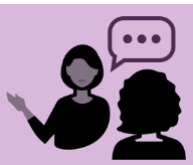
- an exploration of the opportunities and community assets that can be leveraged,
- an understanding of **what platforms could "absorb" CPMD programming**,
- key decisions **regarding the most pressing social determinants of health,**
- considering the unique needs of vulnerable populations, such as **adolescents**,
- ensure cultural adaptation of tools and intervention approaches are done in collaboration with women, and
- applying key principles for **providing quality care for crisis-affected and displaced populations**.[106]



Well Supervised and Supported Task-Sharing Model

Community Health Worker: Several interventions found that training existing community health workers in talk therapy and implementing a cascade model of training and supervision improved both mother and baby outcomes.[107]

Peer to Peer: Peers may be best for women with less chronic or severe depression and thus a good first step in stepped care.[108]



Talk Therapy

Using a training that is appropriate for the women who will be facilitating the sessions is crucial for successful implementation. Talk therapy has been introduced successfully and implemented through minimal training.

Contextualized Language for CPMDs

Using language that women and providers know and understand is crucial to any intervention.

Core Elements of Successful Interventions:

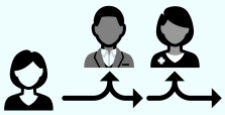
Health Facility Components

Pre-service Training on Mental Health

The inclusion of CPMD during pre-service training of health care providers is an essential, but largely missing, piece of a responsive health system. A specific focus on CPMDs was mentioned in the KIIs as a necessary component for providers (mostly midwives) to have the skills and awareness to address CPMDs.

Trained and Supervised Health Care Providers

The training and continuing supervision of health facility staff to provide respectful mental health services is crucial. Having mechanisms for providers to get advice/assistance/guidance when a woman has mental health issues beyond their training is important to include in all systems.



Clear Referral Process

The need for a clear referral pathway—one that neither relies on the use of women's or providers' funds, nor sends a woman in circles to different departments—needs to be established, and high-quality mental health services should be available when referred.

Assessment Process

The landscape analysis found that most interventions relied on some method of assessing a woman's mental health status upon arrival at the health facility. The various approaches are discussed below in the Adaptable Components—but it was largely agreed that there must be a more systematic, standardized method to include assessments of mental health into a health facility visit. Experts warn against only screening, stressing the importance of confirmation by clinical assessment before offering a diagnosis or initiating treatment. In addition, many experts promote universal approaches that could benefit the mental health and well-being of all women—not only those who meet diagnostic criteria.

Mental Health Support for Health Care Providers

COVID-19 has exposed the glaring needs and the consequences of not having support for health care workers (burnout, absenteeism, attrition, depression, and suicide). This is a glaring need in all health systems.

Respectful Maternity Care (RMC)

CPMD interventions should incorporate elements of RMC and Person-Centered Maternity Care (PCMC) to have true impact.

Link with and Strengthen Gender-Based Violence (GBV) Services

Every intervention should include a gender analysis to understand how best to identify and support women experiencing GBV, and then include an intentional approach to prevent and respond to GBV.

Adaptable Elements of Successful Interventions

Compensation

The compensation of the cadre implementing a mental health intervention ranged according to the program and the setting. As there is a global push to professionalize CHWs and compensate them fairly, adding in PMH services and training will have to be discussed in each health system.

Screening, Assessment, or Measurement Tools: How to Accurately Assess?

The need for the tool or process to identify women who have CPMD and their relative need for services was mentioned in almost every study. However, how to do this is highly debated: Is it an intake assessment by a midwife, is it a short, contextually adapted tool conducted by a midwife or health facility staff, or is it a longer more nuanced tool that takes more time, but gets more detail? The purpose of the data collection should be grounded in what is feasible and acceptable at the facility level to manage or refer.

Who Is a Trusted Delivery Agent?

Who will be best suited to deliver CPMD interventions is context specific. In many studies women trusted CHWs from their communities who shared their language, culture, and social norms.[109,110] Whereas when the intervention targets the male partner, a male health worker may be more effective.

WHERE TO BEGIN INTEGRATING MATERNAL MENTAL HEALTH INTO THE HEALTH SYSTEM?

Where to intervene, and through whom, has many implications for meeting women's mental health needs during the perinatal period. Though the dominant sentiment in the literature and in the expert interviews was to promote a stepped-care model, often organizations, interventions, or research initiatives were able only to intervene in one level of the health system, given time, expertise, and funding. The various entry points that were discussed include:

- **Community level:** Community health workers, peers, grandmothers, or new mental health cadres are able to meet women where they are, as people women trust. This also helps to engage women who are not seeking care at the health facilities.[111]
- **Children and family approaches:** Key informants described how many approaches use children as "trojan horses" for entry. This approach can remove the pressure, guilt, and stigma from mothers.
- **Facility level ANC and PNC:** Having health care workers who are trained in CPMDs was a core component of most interventions that engaged in health system strengthening.[36]
- **Provider pre-service education:** A comprehensive response to CPMDs will require training incoming generations of health workers to diagnose and treat CPMDs.[95]
- **Traditional healers and faith-based organizations:** Several key informants noted the powerful link between mental health and spirituality/faith and working with local traditional healers and faith leaders if there is to be any true change in women's perinatal mental health.

THE CALL FOR INTEGRATION

The landscape analysis highlighted three "calls" for better integration of perinatal mental health:

1. Across multiple health sectors (maternal, newborn/child, nutrition, HIV, chronic diseases, etc.) and sectors outside of health (education, WASH, etc.). Gender-based violence prevention is a key area for seamless integration, particularly through community-based interventions like women's participatory groups and safe spaces, which have been shown to improve maternal health outcomes and reduce CPMD symptoms.[112,113]
2. A movement of services away from centralized institutions to the primary care and community level. In 2008, the WHO outlined this strategy: *"… Integrating mental health services into primary care is the most viable way of ensuring that people have access to the mental health care they need. People can access mental health services closer to their homes, thus keeping their families together and maintaining their daily activities. In addition, they avoid indirect costs associated with seeking specialist care in distant locations. Mental health services delivered in primary care minimize stigma and discrimination and remove the risk of human rights violations that occur in psychiatric hospitals."*[114]
3. Integration of mental health into health care provider education and practice. Key informants who provide trainings on the basics of CPMDs and how to support perinatal women to medical students and practitioners reported a gap in exposure and training in mental health, which can result in many health practitioners thinking mental health ranks low in the priorities of medical institutions.

GAPS

The landscape analysis identified a range of gaps with several clear themes: a need to expand the evidence to include findings from different contexts and avoid inappropriate generalization; a need for more evidence for certain vulnerable populations; a need to expand the evidence base beyond postnatal depression; a need to center research and practice on the expressed desires of women, and a need for integrated approaches that improve both women's and children's health. There were widespread calls for more evidence related to the needs of and which interventions work for certain populations that are particularly vulnerable to CPMDs (women in humanitarian settings, adolescents, women experiencing IPV, and women experiencing perinatal loss). Both the literature review and key informant interviews highlighted a substantial gap in the evidence on what women want during the perinatal period, both in terms of outcomes and preferences for kinds and modalities of services, to set direction for research and program priorities within the field of perinatal mental health. This analysis found very few examples of co-creation or longer-term input and inclusion beyond the initial qualitative research. And last, growing interest in paternal mental health, the role of fathers, and their impact on the wellbeing of the mother-baby dyad, is a gap that has direct relevance to both risk factors and potential interventions.[115,116] *"No, the agenda is always set up by the Global North, and I think there are some really good reasons for that,"* one key informant said. *"Obviously […] that's the context where much more has been achieved, in terms of development progress. And also there is a sense of moral responsibility. All of that is great. But we do not give valence to understanding perspective of these emerging country context, what researchers, what program leaders might say, just as we don't pay enough attention to women themselves, or to adolescents, what they're asking, because we decide the agenda for them. And these processes have not being responsive to their needs."* — (Researcher)

CONCLUSION

The findings from this landscape analysis illuminate an undeniable and urgent need to provide CPMD prevention, care, and treatment programs to women in LMICs. The time is long overdue to take the issue of perinatal mental health seriously. Mental health suffering is often not obvious or physically visible, and the deeply entrenched stigma and biases of mental health have aided in keeping women and their families largely silent. But something must be done. The undeniable impact of mental health disorders during the perinatal period deeply affects women, their children, and their families. To move forward requires balancing between generating better evidence and concurrently implementing programs and approaches to help the millions of women "suffering in silence" every day. Cost-effective and feasible interventions for mental health conditions, with demonstrated effectiveness for CPMDs, exist and can be implemented today.[44,117] The merging of MNCAH communities with mental health communities provides a seminal opportunity to accelerate research, learning, and action.

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