Sattva Knowledge Institute SKI perspective

INTEGRATING MENTAL HEALTH CARE INTO MATERNAL AND NEWBORN HEALTH SYSTEMS IN INDIA

Insights from service providers on integrating care provision for perinatal and postpartum depression.

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Acknowledgements

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- Four ANMs and two ASHAs from the districts of Bangalore, Gadag, Mysore and Ramanagara, Karnataka

Disclaimer

About Sattva Knowledge Institute

Sattva Knowledge Institute (SKI), established in 2022, is our official knowledge platform at **Sattva**. The **SKI** platform aims to guide investment decisions for impact, shedding light on urgent problems and high potential solutions, so that stakeholders can build greater awareness and a bias towards concerted action. Our focus is on offering solutions over symptoms, carefully curating strong evidence-based research, and engaging decision-makers actively with our insights. Overall, **SKI** aims to shift intent and action toward greater impact by influencing leaders with knowledge. All of our content proactively leverages the capabilities, experience and proprietary data from across **Sattva**.

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Executive Summary

The World Health Organization (WHO) estimates that between 20-33% of women in India suffer from mental health disorders during pregnancy and after childbirth (UNFPA India 2021). Perinatal and postpartum depression occurs as a result of an interplay of individual, sociocultural and economic factors and manifests itself in the form of low mood, lack of interest, anxiety, sleeping and eating difficulties, and difficulty coping with day-to-day tasks, to name a few (National Institute of Mental Health n.d. a). Despite its high prevalence, this type of depression remains largely underdiagnosed and untreated in India due to limited awareness, lack of standardised tools and guidelines, and sociocultural taboos surrounding maternal mental health.

Maternal and newborn health programmes in India have shown success, especially at the primary health care level, and the health system has been effective in expanding the coverage of antenatal and postnatal care for mothers throughout the country. Since the maternal and newborn health systems are well-established and have multiple points of interaction with expectant, pregnant and new mothers, there lies an opportunity to integrate maternal mental health within the existing maternal and newborn health systems.

Primary research into the various cadres of health providers in public and private sectors, highlights the great need and high willingness to integrate maternal mental health care. 99% of respondents agree that it is important to integrate mental health care into existing maternal and newborn health services. Nearly 90% of providers routinely screen mothers for depressive symptoms, and almost all providers stated the use of informal practices to screen and counsel mothers in the absence of standardised tools and guidelines. Only 21% of providers encountered a large number of families with awareness about maternal depression and a majority of families are rarely aware. Training and upskilling of existing cadres in the provision of mental health care emerged as the most prominent recommendation, with 92% of respondents expressing a willingness to receive training.

Early interventions in India addressing maternal mental health by non-governmental organisations (NGOs) and select state governments show promise. At a broader systemic level, policy prioritisation is critical to creating enabling systems and driving action. This can be done by policy recognition and integration of maternal mental health in new and existing policies and initiatives, standardisation of processes and tools, strengthening of systems for mental health and referrals, and capacity-building of the health workforce. Stakeholders can play a role in the integration of perinatal and postpartum depression into existing maternal and newborn health systems in two ways: **i) They can generate evidence to inform action, and; ii) enable policy reform, capacity-building across the continuum of care, and prioritisation of maternal mental health within existing and new interventions, especially at a primary healthcare level.** In this regard, philanthropy has a catalytic role in driving ecosystem priorities towards maternal mental health, across the spectrum of practitioners, researchers and solution providers.

High Prevalence of Maternal Mental Health Issues and the Need for Standardised Tools

What are perinatal and postpartum depression?

Perinatal depression is a mood disorder that can affect women during pregnancy and after childbirth. The word "perinatal" refers to the time before and after the birth of a child. Perinatal depression includes depression that begins during pregnancy (called prenatal depression) and depression that begins after the delivery of the child (called postpartum depression) (National Institute of Mental Health n.d. a). Postpartum depression is depression that occurs after childbirth. Feelings of postpartum depression are more intense and last longer than those of "baby blues," a term used to describe the worry, sadness, and tiredness many women experience after having a baby (Centre for Disease Control and Prevention 2022).

Mothers with such depression may find it difficult to carry out daily tasks, including caring for themselves or others (National Institute of Mental Health n.d. a). It is a major but treatable medical condition that causes profound unhappiness, apathy, or anxiety, as well as changes in mood, activity levels, sleep patterns, and appetite (American Psychiatric Association n.d.). While perinatal and postpartum depression are serious health issues for many women, they often remain undiagnosed and hence untreated (Upadhyay et al. 2017).

What is its prevalence?

It is estimated that postpartum depression affects 17.2% of the world population with prevalence rates being significantly higher in developing nations (Wang et al. 2021). The National Mental Health Survey (NMHS) 2015 estimates that the proportion of new mothers affected by postpartum depression in India ranges between 15% and 23% (Mathew 2018).

> **The WHO estimates that between 20% to 33% of women in India suffer from mental health disorders during pregnancy and after childbirth.**
>
> (UNFPA India 2021)

Perinatal and postpartum depression are real medical illnesses and can affect any mother, regardless of age, race, income, culture, or education. Women are not to blame or at fault for having perinatal or postpartum depression: these disorders are not brought on by anything a mother has or has not done and do not have just a single cause. Research suggests that these types of depression are caused by a combination of genetic and environmental factors. Stress (e.g. demands at work or experiences of past trauma), the physical and emotional demands of childbearing and caring for a new baby, and changes in hormones that occur during and after pregnancy can contribute to the development of perinatal and postpartum depression (National Institute of Mental Health n.d. a).

In the Indian context, practitioners have also noticed that cultural preferences to have a male

child, strained relationships with partners, inadequate family and social support, poverty and social adversity, changes in one's personal and professional life, the stress associated with childcare, poor physical health of the mother or the child, and coincidental negative life occurrences are also other variables that contribute to maternal depression (Primary interview; Shriraam et al. 2019).

Screening tools.

Screening mothers for depression during pregnancy and post-delivery should be considered a cost-effective supplementary strategy to improve the detection of depression in routine maternal and newborn health care settings and to enable effective and timely care delivery.

The Edinburgh Postnatal Depression Scale (EPDS), the Patient Health Questionnaires (PHQ) 2 and 9 and the Whooley Questions are recognised tools for screening for depression, including maternal depression. These tools are validated questionnaires which review key symptoms of depression and allow service providers to identify mild, moderate and severe depression based on a scoring system. Different studies have tested the tools in varying contexts and have shown varied results in accuracy and sensitivity. In India, there is no nationally recognised or mandated tool for screening for maternal depression.

Perinatal and postpartum depression are difficult to diagnose. This holds true in the Indian scenario as health care institutions usually lack dedicated maternal mental health services and medical staff with mental health expertise (Upadhyay et al. 2017). The lack of approved screening methods that can be adopted for clinical use further exacerbates this challenge (Primary Interview).

Globally, advancements have been made in digitising screening and diagnosis. Studies have used computerised adaptive assessments (Computerised Adaptive Diagnosis–Depression Inventory (CAT-DI) (in the form of automated tools for screening based on symptom-related questions to provide a diagnosis for depression severity) and diagnostic modules for depression (Computerised Adaptive Diagnosis - Major Depressive Disorder (CAD-MDD)). In comparison to conventional testing, CAD-MDD detected 5%

> "Various studies have taken varied cut-offs for Edinburgh Postnatal Depression Scale (EPDS); a few have taken the cut-off as 10 or 12 and cut-offs in studies in the United Kingdom or low and middle-income countries are different. There is no uniformity. We require a scale which is tested in the general population in India. That said, PHQ 2 and 9 were translated and field tested as part of the study and are now available in the public domain in most of the Indian languages and are useful screening tools"
>
> **– Dr Sundarnag Ganjekar**, Additional Professor of Psychiatry, Perinatal Psychiatry Services, Dept of Psychiatry, NIMHANS, Bengaluru, Karnataka

more perinatal depression cases in women of colour (Wenzel et al. 2022). This presents a case for leveraging technology while highlighting the need for more robust evidence.

Sustaining the momentum of declining trends in maternal mortality (WHO 2015), there is an opportunity to further address maternal mortality and morbidity as related to maternal mental health (Meh et al. 2022; Upadhyay et al. 2017). The limited resources for mental health and their unequal distribution and ineffective use create a significant divide that all stakeholders should prioritise and address (Upadhyay et al. 2017).

The development of efficient screening tools and national guidelines will aid standardised integration of mental health into maternal and newborn health care, increase diagnostic efficiency, and lower integration costs for systems that adhere to the established guidelines.

Integrating Maternal Mental Health within Existing Health Systems

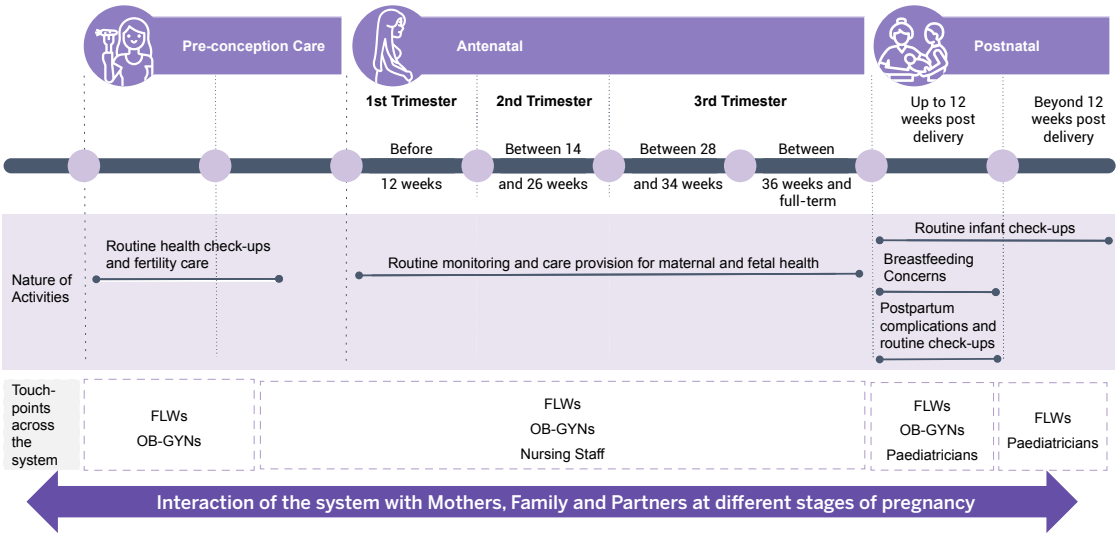
Note: This perspective uses the term service providers to refer to all health care cadres engaging with women at any point for care provision, including Front Line Workers (FLWs), OB-GYNs, general health practitioners etc.

Expecting and pregnant women interact with both public and private healthcare systems during various stages of their journey. The maternal and newborn health system in India mandates complete antenatal care (ANC) check-ups with a minimum of four visits to a service provider and promotes institutional childbirth (Ministry of Health and Family Welfare n.d.).

As part of the public health system's maternal and newborn care provisions, FLWs including ANMs, ASHAs and Anganwadi Workers (AWW) regularly interact with pregnant women and new mothers over a period of roughly three to five years. Nursing staff and OB-GYNs, in both the public and the private sectors, have multiple points of interaction with expectant, pregnant and new mothers. These interactions present an opportunity to upskill existing service providers and integrate mental health care into the maternal health care system.

Post childbirth, women are in regular contact with OB-GYNs and paediatricians for routine care and immediate postpartum concerns, to maintain their own as well as their children's physical health. Be it for maternal or newborn health, the existing system has established touchpoints for mothers with FLWs at regular intervals through routine home visits, community platforms and facility-based care. This presents yet another opportunity to promote the mother's mental well-being, identify symptoms of postpartum depression and provide appropriate care.

Figure 1: Interaction of the system with mothers and their families at different stages of pregnancy



(Ministry of Health and Family Welfare 2010, pp. 10)

Thus, there lies a significant opportunity to:

- Build the capacities of service providers to seamlessly integrate maternal mental health into existing interactions with women, their families, and their partners before and after childbirth.
- Use existing interactions as a window to engage in preventive and promotive mental health conversations in a manner that is locally acceptable and suitable.
- Equip women with self-care techniques to build resilience in case of symptoms.
- Screen women for symptoms of depression.
- Provide basic counselling and psychoeducation.
- And where needed, refer them to specialists.

The integration of the prevention, promotion, screening and treatment for perinatal and postpartum depression into the existing health care system presents a unique opportunity by:

- Eliminating the need for a new cadre of professionals through upskilling and task-sharing among existing professionals and a stepped care model based on the severity of mental illness.
- Leveraging the trust that service providers have established with women and their families to include conversations about mental health and well-being.
- Augmenting existing services such as regular health screening and counselling to include mental health, and expanding maternal health data systems to include mental health indicators.

In India, the mental health system is still developing and lacks robust outreach services. Additionally, health-seeking behaviour among the population is also limited due to low awareness and high stigma. Recognising the opportunity for expanding existing maternal and newborn health systems to include mental health and to further explore it, Sattva undertook primary research to identify service providers' opinions on maternal mental health care services.

Understanding the Perspectives of Service Providers and Key Findings

Objective of the research.

The primary research aimed to understand the awareness, attitudes, and practices prevalent amongst service providers with regard to maternal mental health. The research further sought to gather their opinions and recommendations on the integration of perinatal depression within the maternal health system:

- **Awareness and experiences** about a) guidelines and tools for screening, b) identification of depressive symptoms, c) referral pathways and training, d) experiences in engaging with women on the topic of maternal mental health, e) learnings and barriers, f) awareness among families, and g) challenges faced by women in seeking maternal mental health care
- **Attitudes** around a) perceived importance of incorporating screening for maternal depression in routine engagement with women during antenatal and perinatal care (ANC and PNC respectively), and b) willingness to undergo training to effectively incorporate screening in their routine practice with women
- **Practices** around a) routine screening for depression amongst women, b) barriers in integrating screening and care for perinatal depression within routine ANC and PNC care, and c) recommendations to address challenges

Methodology for primary research.

Primary research was undertaken using closed-ended surveys, focus-group discussions and key informant interviews (KIIs) between July and August 2022.

Geography.

The primary research was undertaken with service providers in the three states of Karnataka, Odisha and Madhya Pradesh. These states were selected to provide diversity in the research findings, bringing in views from different health systems and cultures. The two organisations which supported Sattva's primary research were also present in these states.

Targeting and sampling.

The primary research was undertaken with health care providers in the public and private sectors, targeting ASHAs, ANMs, OB-GYNs, General Health Practitioners, nursing staff and counsellors. This was supplemented with KIIs with two psychiatrists.

The research used convenience sampling, wherein Sattva partnered with two organisations to identify respondents and support the implementation of the survey.

Karuna Trust, a non-profit organisation working on maternal and mental health, supported primary research in Karnataka and Odisha via access to public sector providers. ARTIST, a premier institute for training, teaching and research for OB-GYNs and health care providers in India, supported primary research in Karnataka and Madhya Pradesh via access to private sector providers.

Key Findings from Primary Research.

Figure 2: Occupational mix of respondents

What is your current occupation? (n = 228)

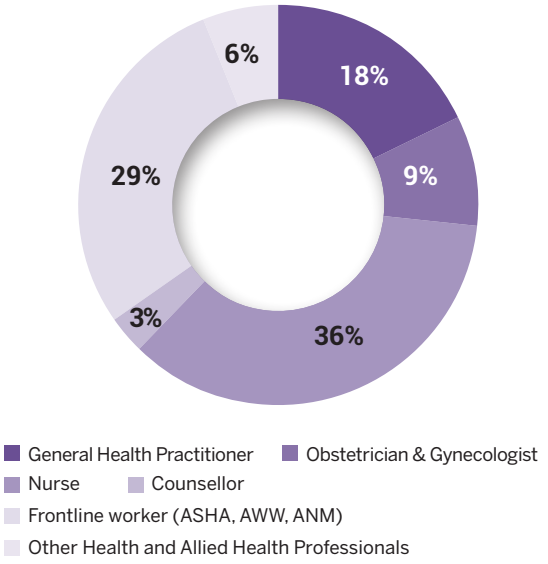


Figure 3: Awareness of guidelines to identify depressive symptoms among mothers

Are you aware of any guidelines to identify symptoms of depression among mothers, during pregnancy and after delivery? (n = 228)

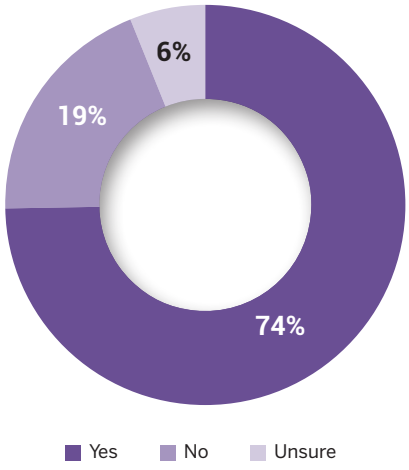


Figure 4: Service providers' awareness of screening for depressive symptoms

If yes, do you know how to check for these signs? (n = 169)

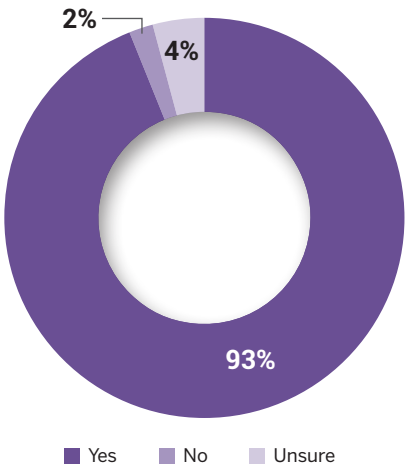


Figure 5: Practice of routine screening of mothers for depressive symptoms

Do you routinely check mothers for symptoms of depression during pregnancy and after delivery? (n = 228)

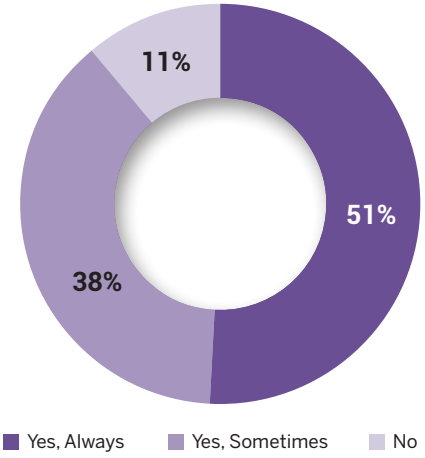


Figure 6: Awareness of referral systems for mothers with depressive symptoms

If the mother is showing symptoms of depression, are you aware of who she should be referred to? (n =101)

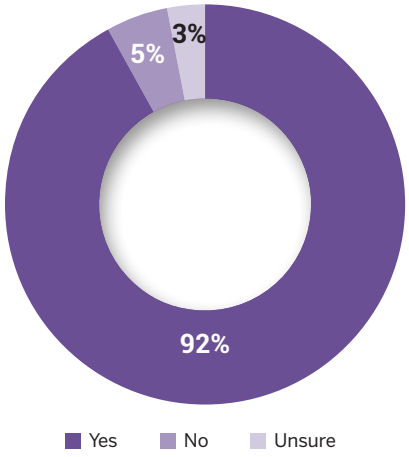


Figure 7: Training received by service providers for maternal mental health

Have you received training for screening mothers for symptoms of depression? (n = 228)

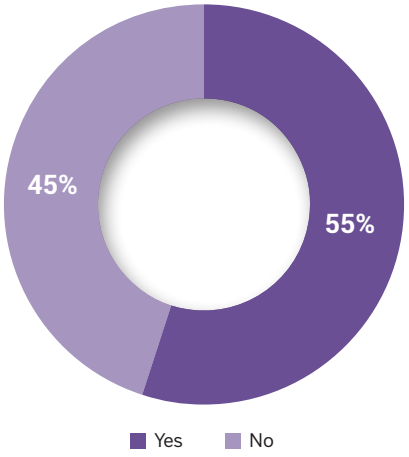


Figure 8: Service providers' willingness to undergo training

If no, would you be willing to take training for it? (n = 101)

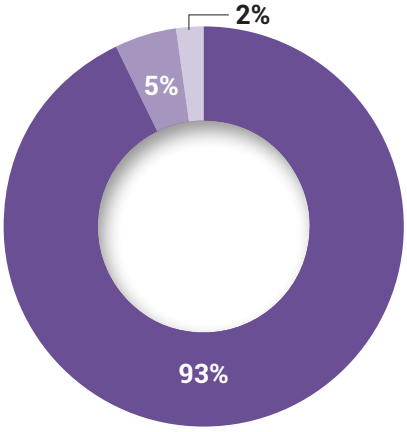


Figure 9: Perceived importance of integrating routine screening for maternal depression

Do you think it is important to include screening for depression symptoms among mothers, as a part of existing maternal health check ups? (n = 228)

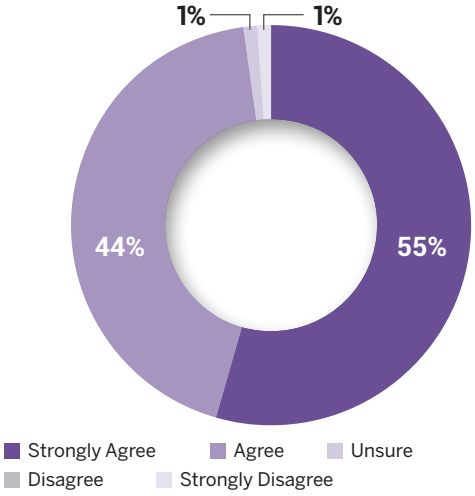


Figure 10: Awareness of maternal depression among families

In your experience, do families usually have awareness about likelihood of depression among mothers during pregnancy and after delivery? (n = 228)

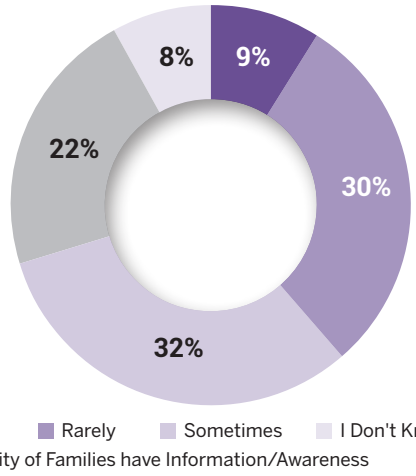


Figure 11: Challenges faced by women in accessing care for maternal mental health

In your experience, what are the difficulties that mothers face in accessing mental health services, including care for depression, during pregnancy and after delivery? (n = 228)

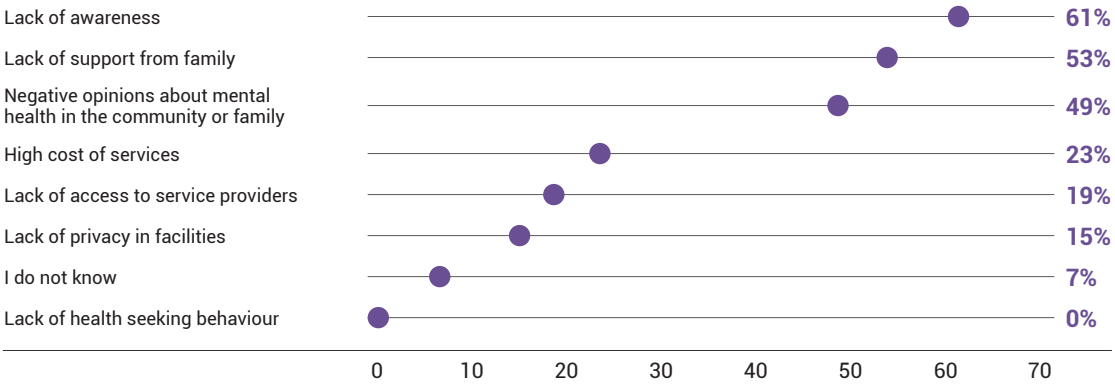


Figure 12: Challenges faced by service providers in integrating mental health screening in existing systems

What are the main problems in adding routine mental health screenings during ante-natal and post-natal checkups for all mothers? (n = 228)

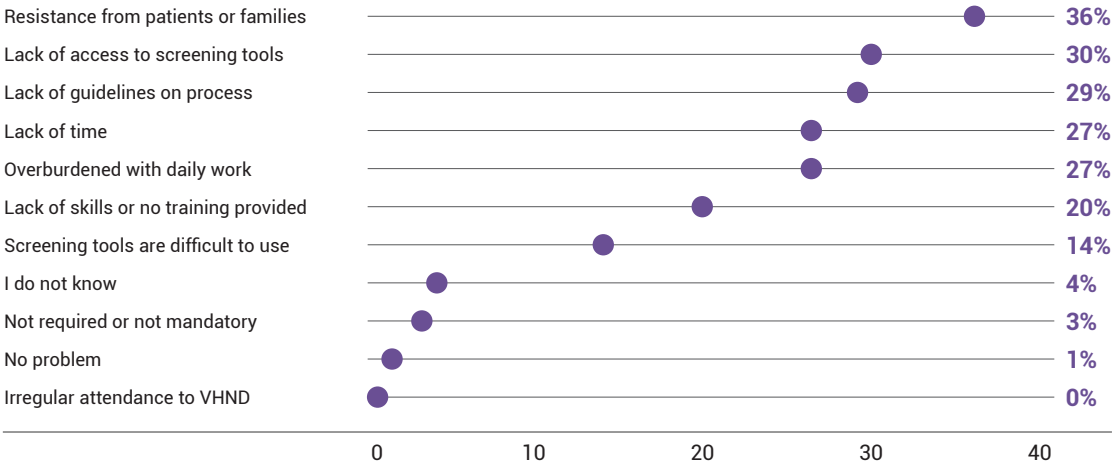
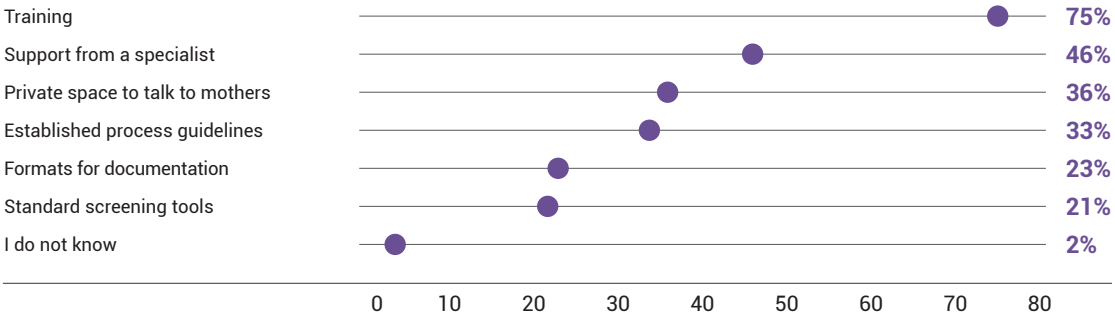


Figure 13: Suggested solutions for integrating maternal mental health

What do you think can help you in routine mental health screening for all mothers? (n = 228)



Note: These three questions enabled the respondents to select multiple options (as many as applicable to them). The total responses obtained were 519, 435 and 536 respectively and the percentage values shows the percentage selection of a particular option.

For more details on the methodology, targeting and sampling, please refer to *Annexure 1*.

An overall analysis of the survey results showed largely similar findings across the public and the private sectors. The responses on levels of awareness and determinants of maternal depression as part of their experience and screening practices were broadly similar. Attitudes toward integration of screening, barriers to practice, and recommendations for integration were also largely similar across both sets of respondents.

Insights from the survey present an opportunity for further probing and in-depth exploration.

Awareness.

Nearly three-fourths of the service providers stated that they are aware of some guidelines to identify symptoms of maternal depression.

> **Note:** The survey did not probe further to understand which guidelines the respondents were referring to. Conversations with partner organisations indicated that respondents may be referring to general awareness about perinatal and postpartum depression or guidelines for non-communicable diseases and mental health care provision in general.

Providers claimed to have a basic understanding of maternal mental health. However, focus group discussions with ASHAs and ANMs in Karnataka and Odisha revealed respondents' lack of awareness of available standardised guidelines or tools for the identification and diagnosis of maternal depression.

Of the respondents aware of any guidelines, nearly all claimed to be familiar with screening women for maternal depression.

> **Note:** On awareness among providers on how to check for depressive symptoms, the survey did not probe further on details on how providers checked for symptoms. Interviews and group discussions with interviews threw light on the practices in more detail.

The interviewees stated that they monitored patients for behavioural changes, both self-reported as well as those reported by family, to identify symptoms of depression. They observed possible symptoms to be dullness, withdrawal from people, sullenness, lethargy, unusual irritability or silences, excessive crying, and lack of sleep and appetite.

Sociocultural factors including the presence or absence of family support, undue pressures, conflicts with partners and other risk factors (detailed in the section on determinants) were shared as important determinants in identifying acceptable ways of engaging with the patients.

Nearly all service providers are aware of whom to refer the patients to, in case of an exhibition of depressive symptoms.

FLWs in the public health system refer women to the Medical Officer-In-Charge (MOIC), Registered Medical Practitioner (RMP) or OB-GYN in the nearest Primary Health Centre (PHC); a First Referral Unit (FRU); or the district hospital. They also refer women to doctors overseeing care provision on the noncommunicable diseases (NCD) day observed every week or to the visiting psychiatrists coming to the area once every week or every month. Service providers in the private sector provided counselling via in-house counsellors or OB-GYNs and, in severe cases, referred the patients to external counsellors or psychiatrists.

Experience with patients' families.

Two-thirds of service providers shared that families are either unaware or rarely or sometimes aware of the likelihood of perinatal and postpartum depression.

Only one-fifth of service providers shared that the majority of families they interact with exhibit an awareness of perinatal and postpartum depression, particularly so in urban settings. Service providers added that even in cases where families might be aware of the concept of maternal depression, their approach to supporting at-risk women in their own families is closely linked to their attitudes and sociocultural contexts.

> "We have also seen women with the right support system, good financial status and with whom everything seems fine, going into depression without any seemingly obvious reason. It may be something internal that we cannot make out when they are in the hospital and it becomes difficult to identify. It is important for us to be careful and not overlook such women who do not show any obvious risk factors."
>
> – **Dr Rita Singh**, Associate Consultant, OB-GYN, Divakars Speciality Hospital, Bengaluru, Karnataka

Determinants of perinatal and postpartum depression.

Socioeconomic, cultural, and biological drivers have a strong influence on maternal mental well-being. In the Indian context, social and cultural factors play a critical role in women's susceptibility to perinatal and postpartum depression.

Insights from primary research point to **a complex interplay of the nature of social and familial support, relationship with one's partner, gender inequities in society, individual factors and stressors associated with the experience of motherhood**, among other factors, as important drivers of maternal mental health outcomes in India.

Service providers must recognise this complex interaction of drivers determining a woman's risk of perinatal and postpartum depression and contextualise care provision both to the individual's and population's needs in a given region, beyond visible symptoms.

Motherhood related factors.

- Age (Pregnancy among elderly women or adolescents).
- Pregnancy after infertility treatments or artificial reproductive techniques.
- Pregnancy complications or high risk pregnancies.
- Past history of obstetric complication, failed pregnancies or death of babies.
- Complications in delivery or caesarean section delivery.
- Obstetric violence.
- Fears and apprehensions about pregnancy and parenting.
- Lack of knowledge or issues with breastfeeding.
- Poor health or complications in the health of foetus or newborn.
- Poor lifestyle including inadequate sleep and nutrition.
- Feelings of alienation from family and friends after childbirth due to increased responsibilities.

Economic.

- Poor financial condition as a barrier to seek care and adopt a healthy lifestyle.
- Stressful economic stressors such as loss of livelihood, unstable income or loss of shelter.

Cultural factors.

- Undue pressure or expectation to have a male child.
- Subsequent pregnancy after previously having female children and apprehensions on sex of the foetus.
- Fear of ostracisation, blame or lack of social support in the event of a female child birth.

Partner and marital relationship factors.

- Economic migration of spouse leaving the mother alone.
- Substance abuse challenges in husband.
- Mental illness or depression in partner.
- Marital conflict.
- Intimate partner violence.
- Lack of support, care or attention from partner during pregnancy or after delivery.
- Overindulgent or restrictive behaviour of partner.
- Neglect of parental responsibilities.
- Abandonment by spouse during pregnancy or after delivery.

Individual related factors.

- External environmental stressors including migration and natural disasters, including pandemics.
- Recent stressful life events.
- Past history or family history of psychiatric illness.
- Low self-esteem or lack of empowerment to seek health services.
- Apprehensions and fear among working women of career setbacks due to childbirth.
- Past history of mental health issues including adverse adolescent experiences.
- Existing health conditions including HIV infection.
- Unwanted or unplanned pregnancy.
- Pregnancy via surrogacy.
- Lack of preparedness for lifestyle changes as a new mother.
- Lack of a confidante/close friend through pregnancy and post delivery.

Family and social factors.

- Family's stigma, lack of awareness or lack of acceptance of mother's mental health issues.
- Lack of familial support to share mother's parenting responsibilities.
- Neglect of the new mother over care for the newborn.
- Overburdening mothers with restrictions or suggestions for newborn's care.
- Conflict with or between parents-in-law.
- Lack of consensus between the two families over who should look after the infant and how they should do it.
- Skewed or unrealistic expectations from the new mother to sacrifice self-care.

(Primary Interview; WHO 2009; Upadhyay et al. 2017)

Lack of awareness, lack of support from family and negative opinions about mental health in the community and family are the top three difficulties faced by women in accessing maternal mental health services, as shared by service providers.

In addition, service providers stated that in their experience, barriers to patients' access to maternal mental health care include limited accessibility of facilities, high cost of services, lack of privacy in facilities, and lack of health-seeking behaviour.

Current practices.

89% of service providers routinely check women for symptoms of depression during pregnancy and after delivery.

All service providers mentioned that screening for symptoms is done in the form of informal conversations which strongly leverage the trust-based relationship developed with the women.

Service providers initiated conversations about mental wellness by promoting a healthy lifestyle (e.g. sleeping and eating habits), addressing stressors (e.g. concerns about breastfeeding), and providing psychoeducation to women (e.g. preparing women for changes in lifestyle post delivery and addressing self-doubt among new mothers).

Barriers to practice.

Resistance from patients and families and lack of access to screening tools are the top barriers that service providers face while including routine mental health screenings in antenatal and postnatal checkups.

> **Note:** This question enabled the respondents to select multiple options (as many as applicable to them). The total responses obtained were 519 and the percentage values show the percentage selection of a particular option.

Providers shared that it was particularly challenging to bring up the subject of maternal mental health with women and their families because of the stigma associated with it. Families reacted defensively, deemed the conversation unnecessary and avoided it entirely, or chose to ignore the symptoms. Given that childbirth is a joyous occasion in families, conversations about the possibility of mental illness among expectant and new mothers are often not welcome. In the absence of tools, providers were unsure of the right questions to ask to screen the women.

Over one-fourth of responses indicated both the lack of time as well as the burden of daily work as barriers service providers face while including routine mental health screenings in antenatal and postnatal checkups.

> **Note:** This question enabled the respondents to select multiple options (as many as applicable to them). The total responses obtained were 435 and the percentage values show the percentage selection of a particular option.

Providers also highlighted that time constraints were a barrier specific to the public sector. In private clinics, providers can dedicate sufficient time to their patients, however, in government settings, high patient loads deprive doctors of enough time or privacy to talk to the patient. In the limited time available to them, doctors tend to prioritise other aspects of physical health or essential emergencies over screening for mental health.

Service providers also mentioned that the absence of standard process guidelines was a barrier to practice. A few shared that a lack of training made screening tools difficult to use.

Attitudes.

Almost all providers agreed that it is important to screen mothers for perinatal and postpartum depression during existing maternal health checkups.

The focus group respondents and interviewees reiterated the importance of screening women for perinatal and postpartum depression during regular maternal health checkups and the opportunity available to upskill the existing cadre of providers.

Almost all service providers expressed a willingness to undergo training for screening women for perinatal and postpartum depression.

Service providers stated a willingness to implement learnings from the training by promoting maternal mental health, screening for symptoms, and counselling women appropriately.

Suggestions to enable integration.

Training emerged as the top suggestion in enabling providers' integration of mental health screening into ANC and PNC.

The respondents of the survey shared that they had received some form of training for screening for depression among women and mothers. Upon exploration in the interviews and group discussions, the providers shared that Karuna Trust had provided training and has been working closely with the government to strengthen public health systems.

In Odisha, FLWs revealed that the last mental health training session that the government had provided in their district was four years ago and no capacity-building interventions on mental health have taken place since.

> "If frontline workers are applying these questionnaires (PHQ 2 and 9), they need some training on mental health. Without training, they may not be able to accurately identify signs or score women. Sometimes they might need to ask a few more probing questions before arriving at the right score and training is required to build these skills for the nuanced understanding of symptoms"
>
> **– Dr Sundarnag Ganjekar**, Additional Professor of Psychiatry, Perinatal Psychiatry Services, Dept of Psychiatry, NIMHANS, Bengaluru, Karnataka

In Karnataka, the government conducted a similar mental health training session two years ago. FLWs shared that the training saw limited participation as it was done in the district centre which was far away and difficult to access.

In the private sector, an OB-GYN shared that no structured training on maternal mental health has been provided in their network of practitioners and efforts for voluntary training have not seen much uptake, likely due to multiple other priorities and time limitations. This highlights the critical need for capacity-building of service providers in both sectors as an enabler for the integration of mental health into maternal care.

Almost half of the responses suggested support from specialists for routine care provision to help integrate mental health screening as part of ANC and PNC.

Almost one-third of responses indicated the importance of a private space to interact with women.
Respondents also shared established process guidelines, standardised tools and formats for documentation as recommendations.

Note: This questions enabled the respondents to select multiple options (as many as applicable to them). The total responses obtained were 536 and the percentage values show the percentage selection of a particular option.

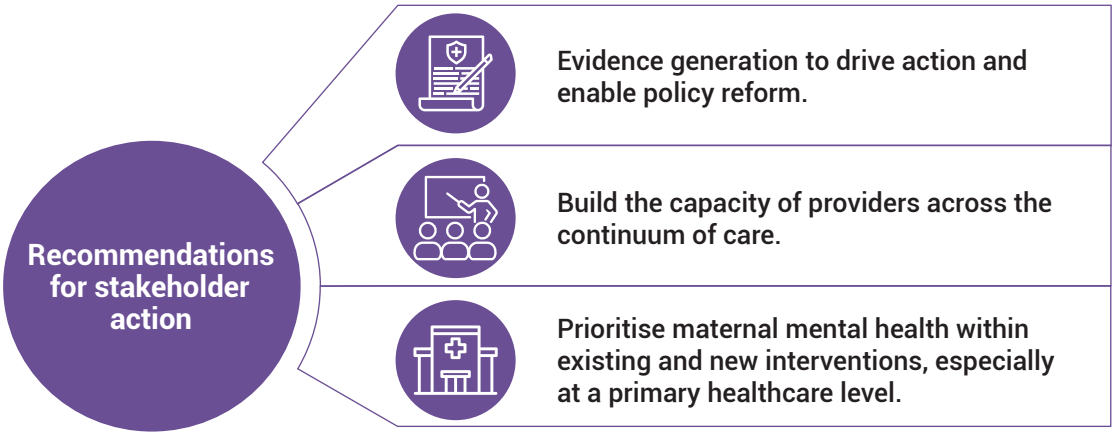
Recommendations for Stakeholder Action

In India, although maternal mental health care is still in its early stages, select state governments and non-profit organisations have made critical efforts to drive action.

Programmes by NGOs such as Swabhimaan 2.0, Samya Baani, The Thinking Healthy Programme-Peer Delivery (THPP) programmes and others, have designed comprehensive interventions to engage with mothers and communities. These programmes have provided a continuum of care, while also building awareness and demand. Evidence and learnings from these programmes can help propel new action.

These programmes leveraged technology and found ways to provide care, even during the pandemic, and present immense potential for learning. In the public health sector, the Government of Karnataka introduced the Mathruchaitanya Programme and the Government of Kerala started the Amma Manasu initiative which focuses on maternal mental health, leveraging existing maternal and mental health systems in the state. Although both initiatives are in the early stages of implementation, they present an opportunity for learning and replication (please refer to *Annexure 2* for details about these interventions).

Figure 14: Recommendations for stakeholder action



Policy recognition and action to augment maternal and newborn health systems with mental health is critical

(Primary Interview; WHO 2009; Upadhyay et al. 2017)

Based on secondary research as well as the experiences, suggestions and best practices that the service providers shared as part of the primary research, this perspective has identified four broad areas for action.

While stakeholders drive action across these areas, it is important to recognise women's complex experiences while dealing with perinatal and postpartum depression and the difficulties they face with sharing these extremely personal experiences with a service provider. While interventions focus on the integration of care provision at the supply side, interventions at all stages including promotion, prevention, screening and treatment, should **prioritise the creation of safe and private spaces** through targeted efforts. Creating safe and private spaces to engage with women about their mental health issues at various levels such as households, community forums and health care facilities, is imperative. This can ensure that women feel assured about their privacy and feel comfortable and safe enough to share their struggles, emotions and experiences without fear of judgement.

> "I have built a private chamber inside my chamber where I examine my patient. When I examine my patient, nobody else is there and that is the place where I talk to my patient. In front of their mother-in-law or their husbands, they fail to talk to you. And at times they give you surprising answers when you're talking to them alone."
>
> **– Dr Sunitha Wadwani**, Medical Director & Consultant OB-GYN, Ratlam Hospital & Research Centre, Ratlam, Madhya Pradesh

At a facility level, this also includes private spaces for providers to talk to women directly without their families or partners, thereby creating spaces for them to share concerns, such as lack of support from the family or partner, or other such stressors. A key advantage of this model is that it leverages the existing trust-based relationship of frontline workers, nurses and doctors with the patients and their families, helping to reduce resistance and increase acceptance of mental health care.

Recommendations for action have been detailed below.

Evidence generation to drive action and enable policy reform.

Despite the high prevalence of perinatal and postpartum depression across the country, evidence and research on the issue is still at a nascent stage. There is a need to undertake research on all aspects of the issue, including clinical and other areas, backed by technical experts in the field. Evidence is also needed on whitespaces to enable policy prioritisation and implementation by organisations, to improve both maternal and newborn outcomes. Below are recommendations for action:

- **Generate data on the prevalence** of perinatal and postpartum depression and use it to guide evidence-based advocacy and policy reform.
- **Strengthen research on the efficacy and applicability of globally recognised tools and guidelines** in the Indian context to enable informed adoption in the health system.
- **Generate evidence on learnings from maternal mental health models and best practices from implementation.** It will be critical to draw learnings from other successful models in the Indian context (state government initiatives such as those in Karnataka and Kerala) as well as global interventions which have proven impactful.
- **Prioritise under-researched areas for building evidence** around perinatal and postpartum depression. A few of these whitespaces include:

    - **Understand the impact of mental illness on women's pregnancy journeys as well as on their infants' health.** There is limited evidence on the impact of psychosocial risk factors such as depression, anxiety, stress and violence in mothers on infants' cognitive and socio-emotional outcomes (Ganjekar et al. 2020).
    - **Understand the influence and interaction of sociocultural and economic factors on maternal mental health and identify ways for programmes to successfully adopt a comprehensive approach for care and design holistic interventions.** It is important to develop evidence on factors that make interventions socially, culturally and locally acceptable for women to access mental health interventions and to explore these factors to help overcome barriers (Ganjekar et al. 2020).
    - **Explore the relationship between paternal and maternal mental health during pregnancy and post-delivery and the interplay of factors in the Indian context.** There is minimal research on the mental health of men who become fathers and its possible links with maternal mental health.

Building the capacity of providers across the continuum of care.

Capacity-building of the health workforce is critical and one of the most important levers for the integration of mental health within maternal and newborn health systems. Given that the care provision of maternal health largely rests on service providers, the quality of prevention, promotion, screening and treatment of maternal mental health will be determined by the service providers' knowledge and skill set.

Training of the non-specialist workforce, supported by specialist cadres, will aid the adoption of a stepped care approach. Task-sharing can help ease the burden on specialists; non-specialist cadres can be equipped to manage cases up to the provision of basic psychoeducation and counselling services and moderate and severe cases can be referred to specialists. Staff, nutrition consultants and breastfeeding experts who engage with women during pregnancy and after delivery, can be trained on maternal mental health.

> "Maternal mental health has to come as an inherent mechanism in the whole system of care. However, everything cannot be done by all cadres and we should recognise that. Networking with the available counsellors, psychologists and psychiatrists have to happen within the system where we providers identify those in need and refer them further. In my experience, counsellors have been able to help women tremendously and it is something only they can do because often it's not a quick fix kind of support and the right background experience and skills are needed."
>
> **– Dr Hema Divakar**, Consultant OB-GYN and Medical Director, Divakars Speciality Hospital, Bengaluru, CEO – ARTIST, President FOGSI 2013

Below are recommendations for action:

- **Upskill existing maternal and newborn health cadres at regular intervals** to provide maternal mental health care and identify when to refer moderate and severe cases to specialists. Beyond a one-time training, ensure refresher training at regular intervals at least once a year to increase efficiency, refresh skills and share new research.
- **Simplify training modules and curriculums** to ease learning, improve the practical applicability of skills, and increase uptake of the modules. Use engaging training techniques such as role play to develop practical skills like patient interaction and counselling in real settings.
- **Adopt hybrid learning models** using digital and in-person modes to provide flexibility in accessing training courses as well as a hands-on learning experience. Ensure access to offline training content in the form of audio-visual content, guidelines, toolkits etc. beyond the training, for ongoing reference and self-learning. This can also help in ensuring that the training is easily accessible and inclusive.
- **Build capacities of service providers in conversational skills about sensitive topics such as mental health.** Inculcate interpersonal skills such as empathising with the patients and respecting their practices.

Focus areas for the training content.

In addition to clinical knowledge of maternal mental health, provide training on:

- **Determinants of mental illness and the complex nature of factors that impact mental health.** It is important to recognise symptoms among women based on the stressors at an individual, familial and sociocultural level by holistically viewing patient history, available family support, motherhood-related stressors etc. Talking to their partners and families can help service providers identify factors that contribute to risk and resilience.
- **Creating a trust-based relationship with patients** and providing safe and private spaces. This will encourage the patients and their families to develop confidence in the service provider and confide in them. The service provider must also be trained to reassure the women about the privacy and confidentiality of the information they share.

This can help them in:

- **Recognising symptoms based on the women's behaviour, in addition to verbal responses.** Service providers must be mindful of the fact that women in distress or from unsupportive families are often unable to share their feelings or concerns honestly.
- **Customising approaches and tools to suit local contexts** and moving away from a one-size-fits-all approach. Engaging with communities using socially acceptable language can help increase acceptance of the intervention.
- **Sensitively probing concerns that trigger reluctance or discomfort in patients.** During continuous interactions, service providers are often able to identify areas in the woman's situation that she might be ashamed, scared or hesitant to share and actively probing these can help break the ice, e.g. actively enquiring about where the woman wants to deliver her child may likely induce her to open up about the restrictions she faces with visiting her maiden family and stressors associated with lack of support.

Focus areas for promoting self-care and engaging with families.

Training should also equip service providers with building resilience in patients and enabling a supportive family environment. They can be trained to:

- **Equip women with information about pregnancy to prepare them for their journeys** and provide targeted information on stressors associated with pregnancy and motherhood. Women are often stressed and concerned about the mental and physical pressures of motherhood. In cases of digital literate populations, women can be introduced to mobile-based applications that offer information on motherhood and guided practices for self-care and mental wellness.
- **Counsel women on risks associated with labour and delivery**, as relevant, to build preparedness and resilience to deal with unforeseen circumstances.
- **Equip new mothers with information on breastfeeding and newborn care** to help

minimise the risk of depression or anxiety stemming from the demands of being new mothers. Often, women are overwhelmed by the experience of motherhood and are emotionally unable to cope.

- **Build a positive mindset and address the self-doubt that new mothers face.** Service providers must be able to help mothers cope with the expectations of providing the best care for their newborns, encourage them to actively seek help, and introduce them to relevant tools. It is important to reassure them that they are not alone in their feelings.
- **Include conversations about mental health early on in the antenatal period** to reduce resistance to screening and treatment in the postpartum period.
- **Counsel families to avoid comparing the new mother with others or with their own experiences** to avoid triggering self-doubt, guilt or other negative emotions.
- **Encourage families to support the mother**, urge her to take care of herself while also taking care of the child, and help her actively identify symptoms when they emerge and seek appropriate care for them.

Prioritise maternal mental health within existing and new interventions, especially at a primary health care level.

In addition to creating new maternal mental health programmes, it is also vital to incorporate them into existing interventions. New programmes can explore and pilot innovative ways to address maternal mental health through community engagement, care provision, and strengthening systems. At the same time, the impact of existing interventions can be improved by finding efficient ways to use existing resources and platforms and leveraging relationships built across stakeholders and communities. This should ensure collaboration with both public and private sectors to establish holistic and appropriate care pathways.

Maternal mental health can be prioritised across interventions in four ways:

- **Create new programmes that are specifically designed to address maternal mental health.** There is a need for targeted interventions which holistically address maternal mental health in both public and private sectors, are culturally and locally acceptable, and are useful for the generation of evidence.
- **Integrate maternal mental health care within existing maternal and newborn health programmes.** Existing maternal and newborn health interventions have touchpoints with women and their families, throughout pregnancy and early stages of motherhood, into which mental health can be introduced. It is important to leverage existing engagement with women and their families to initiate dialogues on mental health and well-being, promote positive mental health among patients and generate awareness about maternal mental health issues.
- **Prioritise maternal mental health within mental health interventions.** Ensuring a targeted focus on maternal mental health within the ambit of existing mental health interventions is critical. An adequate focus needs to be given to aspects such as mental health literacy, screening and treatment.

- **Leverage existing community-based interventions for the promotion of maternal mental health.** Interventions that actively engage with communities and across sectors provide an opportunity to promote women's mental health during pregnancy and after delivery. Often, community-based programmes find it easier to engage with citizens regarding less stigmatised physical health concerns (e.g. maternal and newborn health). Dialogue around holistic maternal health, including mental well-being, can be initiated across community-based interventions as part of existing engagement platforms.

Focus on prevention and promotion of maternal mental health as part of community-level interventions to create a conducive environment.

Primary research has brought out the need to **promote positive mental health and highlight its significance.** The initiation of dialogues on mental health and well-being and of enabling environments is especially relevant for interventions which engage with community platforms and systemic structures due to their regular interaction with patients and their families throughout pregnancy and during the early stages of motherhood. At a primary health care level, the following are critical areas of action:

- **Normalise conversations around mental health** to highlight its importance and increase receptiveness to conversations, screening and treatment.
- **Initiate dialogue on maternal mental health early on during the antenatal period** to reduce resistance to screening and treatment in the postpartum period. This allows women and families, especially those with limited awareness to process the information over time, and not feel singled out or stigmatised.
- **Involve men and families in conversations about maternal mental health**. Recognising the important role they play, interventions should actively sensitise and empower them to ensure a conducive and supportive environment for women during pregnancy and after delivery.

The role of policy recognition and action.

Policy recognition of perinatal and postpartum depression as a critical health area is essential to create systemic structures and enable stakeholder action. National-level policies will provide states with the impetus and structure to initiate action and strategically explore augmenting existing maternal and newborn health systems through a mental health care lens. Policy recognition and action in the following areas are critical:

- **Policy recognition of maternal mental health by:**
  - **Creating new policies on maternal mental health** with a recognition of the prevalence of perinatal and postpartum depression and other mental health issues as well as pathways to action through various stakeholders at primary, secondary and tertiary care levels.

  - **Including maternal mental health as part of existing health initiatives.** This includes maternal health schemes such as Janani Shishu Suraksha Karyakaram (JSSK), Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) and platforms such as Village Health Nutrition Day (VHND), Mahila Arogya Samiti (MAS) etc. Additionally, this includes integration with child health schemes with regular touchpoints with mothers in the postpartum period such as Navjaat Shishu Suraksha Karyakram (NSSK), Rashtriya Bal Swasthya Karyakram (RBSK) and overall health system initiatives such as Pradhan Mantri Jan Arogya Yojana (PM-JAY), Health and Wellness Centres (HWCs), Comprehensive Primary Healthcare (CPHC) etc.

- **Establishing standardised guidelines and tools to guide implementation.** This includes standard process guidelines within the systems for service providers at various levels and other health systems; tools for screening; Information, education and communication (IEC) material for preventive and promotive activities; and any other relevant formats for documentation. Tools must also possess scope for adaptability and tailored application based on regional needs and contexts.

- **Standardising quality care protocols across the continuum of care.** Recognising the complex nature of maternal mental health, quality protocols should enable adherence to set standards for training and delivery of care and protocols, and aid timely and relevant care to all. This would also require the identification or set up of a regulatory body to govern implementation.

- **Strengthening existing systems to support and enable effective implementation:**
  - **Strengthen mental health systems.** This includes strengthening and ensuring the implementation of various provisions of the Mental Health Policy and Act such as setting up of District Mental Health Programmes (DMHPs) and State Mental Health Associations (SMHAs). This is critical to ensure a reliable support system for maternal mental health care.

  - **Establishing systemic referral linkages across various care facilities and levels.** This includes establishing processes to connect primary care systems with mental health professionals. At secondary levels, this would mean establishing relationships with psychiatrists and psychologists, and at tertiary levels with medical colleges, mental health facilities, and long-term care facilities. This is critical for the adoption of a stepped care model.

  - **Identify the roles and responsibilities of authorities for governance, monitoring and evaluation of policies.** This would ensure state accountability to implement policies, ensure documentation, establish grievance redressal mechanisms for people not receiving care and enforce responsibility across all levels of providers.

- **Building the capacity of public health cadres and standardising training modules and modalities.** This includes upskilling existing cadres of providers engaged in the

provision of maternal and newborn health including FLWs, OB-GYNCs, and general health practitioners. Further, mental health specialists and counsellors can also be trained to expand the provider base. Training curriculums should be simple to implement and account for the varying needs of the providers, and modalities should leverage the potential of digital technology.

Fundamental systemic challenges to consider.

While stakeholders initiate action in maternal mental health, it is important to be cognisant of fundamental challenges in the existing health system, including those unique to the public and private sectors.

Reform and action in public health care systems are dependent on policy; in the absence of policy-level directives, it is very challenging to drive adoption even within existing systems. Policy action can be slow and states often face challenges in translating policy to action. The nation's health system is already facing the challenges of an overburdened workforce and in light of this, upskilling of existing cadres can be difficult. Moreover, given that states will drive the recognition and implementation of maternal mental health, there can be variations in state-level action. However, this also provides an opportunity to document learnings from states initiating early action to generate evidence for adoption in other states.

The private sector for maternal health, which includes small maternity homes, small to medium clinics, and larger facilities and hospital chains, is highly fragmented. Driving action across private sector providers requires the action of national and regional provider associations, networks and industry bodies, and can often be difficult to galvanise in the absence of incentives.

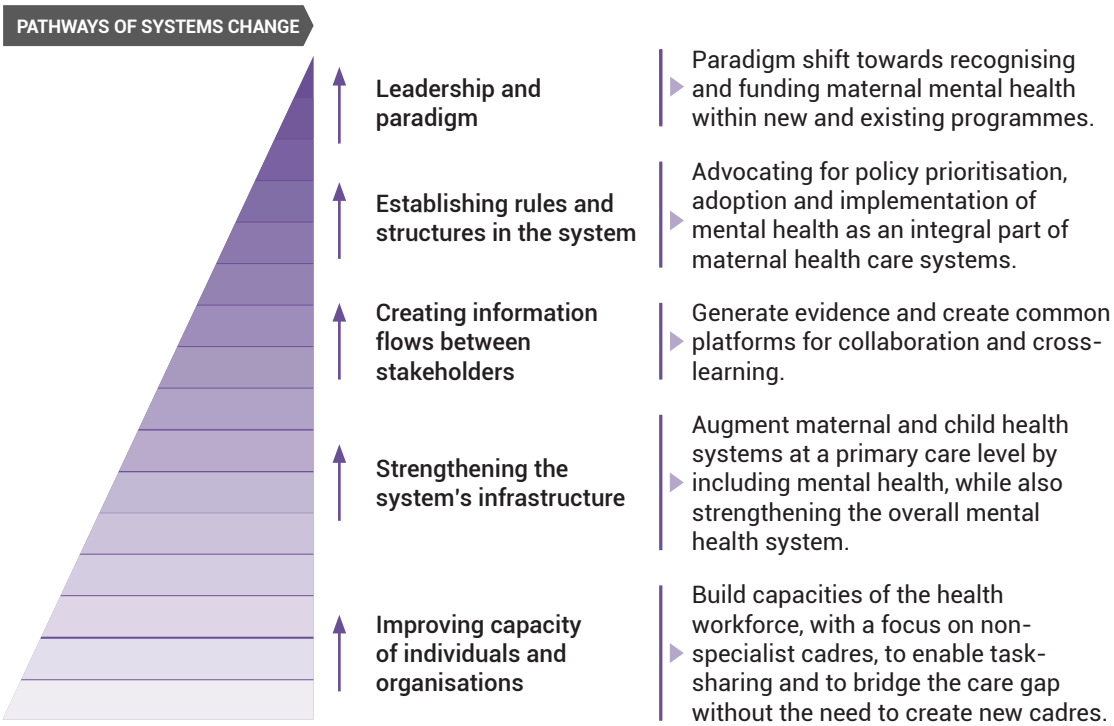
Lastly, given the nascent nature of the Indian mental health system, there are challenges on both the supply and demand sides, as well as systemic challenges such as inadequate infrastructure and a shortage of a trained and specialist workforce. Inadequate mental health systems can be a barrier to ensuring a robust system for maternal mental health at all levels.

Philanthropy can play a catalytic role in mainstreaming maternal mental health.

For maternal mental health to be integrated with the existing systems, philanthropic entities (including foundations, multilateral organisations, high net-worth individuals and corporate funding as part of corporate social responsibility) have a critical role to play. Philanthropies can support programmatic interventions and play a vital role by focusing on system strengthening and advocating for the prioritisation of the issue.

Philanthropic prioritisation and funding of maternal mental health will have a catalytic impact in driving both prioritisation and action among non-profit organisations, solution providers, research institutions and other practitioners.

Figure 15: Philanthropy interventions mapped to pathways of systems change



(Adapted from the Donella Meadows framework)

Shift paradigm towards recognition and funding of maternal mental health within new and existing programmes.

Philanthropies are well-positioned to prioritise critical issues like maternal mental health and further drive focus and action among implementers. The opportunity for action is at two levels. Firstly, mental health can be integrated within existing maternal and newborn health interventions and generate efficiencies through an augmented approach. Secondly, new interventions in the continuum of care for perinatal depression can be designed and implemented with room to enable innovation and research. A leadership recognition and portfolio prioritisation of maternal mental health can steer action at all levels (Wright 2009).

Advocate for policy prioritisation, adoption and implementation of mental health within health care systems.

Philanthropy can play an integral role in driving systemic change and the adoption of maternal mental health, especially through the augmentation of existing robust maternal and newborn health care systems. Philanthropy can advocate for policy adoption, reform and recognition, and support government efforts to strengthen systems for maternal mental health with an evidence-based and collaborative approach. It is also necessary to ensure the mental health literacy of populations to drive demand and enable health-seeking behaviour for maternal mental health.

Generate evidence and create common platforms for collaboration and cross-learning.

Maternal mental health is in its early stages of prioritisation and action in India and the ecosystem will benefit from the performance and dissemination of research through a collaborative approach. There are numerous whitespaces in research in the perinatal and postpartum depression space in India in terms of models, tools, processes, capacity-building and multiple other areas, which philanthropy can fill by enabling innovation and evidence-generation. The evidence can inform action, generate programmatic efficiencies and guide advocacy efforts toward ecosystem-level outcomes. Furthermore, philanthropy is best-positioned to build ecosystem-level assets in the form of common platforms that enable cross-learning through the flow of data, evidence, best practices and learnings.

Augment health systems at a primary care level by including mental health and strengthening overall mental health systems.

Philanthropic prioritisation of system strengthening is imperative and is required at two levels. There is a need to augment existing maternal and newborn health systems with mental health, ensuring a strong focus on strengthening all health system levers including infrastructure, human workforce, care delivery and technology. Given the existing infrastructure for maternal and newborn health care, there is immense potential to integrate mental health with minimal resources to drive substantial outcomes.

In addition, there is a need to strengthen mental health systems and build adequate infrastructure, to complement efforts of integration with the maternal and newborn health system. Establishing systemic structures and processes (e.g. DMHP) and enhancing access and governance by leveraging technology will help build strong mental health systems that support the integration of efforts within the maternal and newborn health systems.

Build capacities of the health workforce, with a focus on non-specialist cadres, to enable task-sharing and bridge the care gap.

Adoption of a stepped care model via task-sharing has proved to be an effective and efficient solution in mental health models globally and in India and the same can be applied to maternal mental health. By utilising, upskilling, and supporting the structured and robust cadres of service providers already present in the maternal and newborn health system, including FLWs, general health practitioners, OB-GYNs, and counsellors, philanthropy can eliminate the need for creating new cadres. Philanthropy must also support the creation and standardisation of training curriculums, pilot and drive innovation in modes of delivery of training, and explore the role of technology in capacity-building.

Catalysing Stakeholder Action and Leveraging Provider Interest

Perinatal and postpartum depression affects nearly one in every three, to one in every five women in India (UNFPA India 2021), making for a very large population that needs care and support. This illness has received attention globally, but in India, there is a need to recognise the issue and prioritise action.

India has a well-structured system for maternal and newborn health with established touchpoints for women and mothers within the health system at regular intervals. With multiple policies, initiatives and schemes involving varied health cadres in the public and private sector, the engagement with women during pregnancy and after delivery is robust.

> **"What do we need to focus on? Firstly, simplify the mental health training modules for all cadres to make them easier to consume. Secondly, give health care workers small and specific targets to achieve within the complex mental health ecosystem. Thirdly, increase the number of human resources who are engaged in mental health and incentivise their work."**
>
> **– Dr Naveen Kumar C**, Professor of Psychiatry, NIMHANS, Bengaluru, Karnataka

This presents an untapped and immediate opportunity to leverage and augment existing systems and provide care for perinatal and postpartum depression. Furthermore, there is a high willingness and interest among service providers, in both public and private sectors, which is indicative of a strong likelihood for quick adoption of systemic actions and recommendations. Primary research also reveals that there is a recognition of the urgent need to address the issue, a high willingness to acquire training, and the immense potential of integrating mental health with maternal health care. Moreover, given the volume of women in the primary health care system for maternal and newborn health, integrated maternal mental health care can reach a very large section of the population even at the last mile.

While the Government has an indispensable role in driving policy reform and action, the philanthropic ecosystem is uniquely positioned to drive priorities and action across practitioners. This includes solution providers and innovators, NGOs and research institutions. Capitalising on the high willingness among providers to engage in maternal mental health care within the existing system, there is a need and opportunity to act now, to help women and mothers stay mentally healthy.

Annexure 1

Details of the primary research.

Methodology for primary research

Primary research was undertaken using:

- A closed-ended survey administered via an online form (in English, Hindi and Kannada) which received 228 responses.
- Focus group discussions administered in a hybrid mode with one in-person facilitator and other team members telephonically (in Hindi and Kannada).
- Key informant interviews were administered telephonically and online (in English).

The research was undertaken over a period of two months from July to August 2022.

Geography

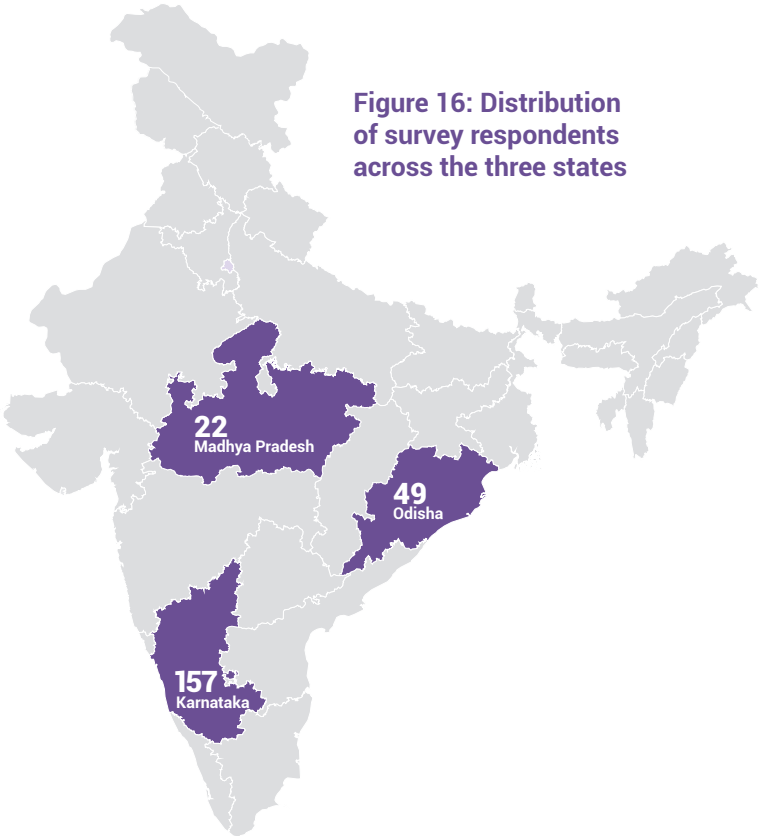
The primary research was undertaken with service providers in the three states of Karnataka, Odisha and Madhya Pradesh. In addition, the KIIs with two psychiatrists provided national-level insights into the perspective.

Targeting and sampling

The primary research was undertaken with health care providers in the public and private sectors. In the public sector, the research targeted ASHAs, ANMs and counsellors. In the private sector, the research targeted OB-GYNs, General Health Practitioners, nursing staff and counsellors from 30-50 bedded hospitals barring four respondents from larger medical colleges and hospitals.

- **Closed-ended survey:** 228 responses received across three states (*break-up in Figure 16*).
- **Focus group discussions:** Two group discussions with six ASHAs, five ANMs and a staff nurse.
- **Key informant interviews:** Four ANMs and six OB-GYNs, two psychiatrists and community mental health experts.

Figure 16: Distribution of survey respondents across the three states



Annexure 2

Interventions to address maternal mental health in India.

The maternal mental health landscape in India is in its nascency. NGOs, multilateral organisations and select state governments have made efforts to implement targeted interventions to address maternal mental health and have made significant contributions to evidence and learnings from piloting models. A few noteworthy initiatives addressing maternal mental health in India are detailed below.

Government of Kerala.

Amma Manansu (Wadhwa 2021)

Amma Manasu (Mother's mind), a state-wide maternal mental health programme, was introduced in 2017 by the Department of Health and Family Welfare, Kerala. The initiative was established in collaboration with the National Mental Health Programme. Kerala is the first state in India to take the lead in including maternal mental health care treatments within the regular prenatal and postnatal care services.

The junior public health nurses who have received the necessary training will evaluate mothers' prenatal and postpartum needs for any mental health care. Mothers in need of additional care would be directed to primary care physicians and the DMHP.

The initiative aims to use the Mother and Child Tracking System (MCTS), an online data-entry system, for monitoring pregnant women and children under the age of five, to identify moms who are at high risk of developing mental problems. To provide care and support decision-making, the platform will also promote information sharing with important stakeholders.

Complementing these efforts, the state government has also established Ashwas (which translates to "assurance") clinics to provide mental health care. These depression screening clinics were created in nearly 170 Family Health Centres (FHCs) from 2016 onward, thereby improving access to mental health care for the general population (Joseph et al. 2021).

Government of Karnataka.

Mathruchaitanya Programme (Mukherjee et al. 2020)

The Mathruchaitanya Programme is an integrated reproductive, maternal, neonatal and child health (RMNCH) and mental health programme. The programme conducted interviews with a variety of local stakeholders (such as obstetricians, psychologists, and psychiatrists) to obtain their opinions on the issue as they play a critical role within the maternal mental health space. Insights from the interviews were used to guide the development of a stepped care and task-sharing strategy for the universal screening, identification, referral, and treatment of pregnant women with perinatal and postpartum mental conditions.

The government of Karnataka initiated this specialised prenatal mental health programme in 2020 to educate and assist frontline workers with basic screening and counselling procedures, as well as establish clear accountability and referral mechanisms for severe and

complex illnesses. The programme seeks to accomplish two goals: increasing capacity for mental health care at all levels of the health system and freeing up specialist time to focus solely on difficult cases.

Complementing these efforts, the state government also initiated the Manochaitanya Programme in 2014 to integrate mental health services into all public health care organisations such as state primary health centres, community health centres, and hospitals located within taluks, and to improve the public patient referral system for mental health (Manjunatha et al. 2017).

Initiatives by non-governmental organisations.

Swabhimaan 2.0 by ROSHINI, in partnership with Lady Irwin College and *other partners (Roshini n.d.)

Swabhimaan 2.0 is an initiative that has added to an earlier multi-sectoral nutrition programme administered by women's self-help organisations. The initiative improves resilience to COVID-19 by integrating nutritional, obstetric and mental health counselling, and providing gender-transformative interventions delivered via telemedicine. The programme is currently operative in the states of Bihar, Chhattisgarh, Odisha, Telangana, Assam and Madhya Pradesh.

Tele-based interventions for mental health included linkages of mothers to mental health professionals, telephonically, at least once a month. In-person mental health support involves:

- Group meetings utilising counselling cards and other interactive techniques
- Screening and evaluation of at-risk women every month (extreme thinness, obesity, anaemia, anxiety, depression)
- Monthly home visits for at-risk individuals and their families.
- Linkage to referral programmes including the DMHP and One Stop Centre Counsellors (OSC).

*Other Partners

- JEEViKA Bihar, National Rural Livelihood Mission (NRLM), State Rural Livelihood Mission (SRLM) and Mission For Elimination Of Poverty In Municipal Areas (MEPMA) for Direction, Mobilisation and Facilitation;
- Ministry of Health & Family Welfare to enable access to VHSND and other governmental nutritional programmes;
- NGO partners: ROSHINI – Centre for Women led Collective Social Action (CWCSA), ARMMAN to ensure access, anchorage and leverage technical support;
- Institutional partners: NIMHANS, Institute of Economic Growth (IEG), International Institute for Population Survey (IIPS) for Implementation and Impact Evaluation;
- UNICEF for technical support and funding

The initiative trained FLWs, community resource persons and women-led self-help groups to deliver existing health and nutritional programmes, therefore expanding their reach. Technological solutions such as the 'Shakti Aunty' chatbot, were developed for FLWs to share information, support maternal mental health referrals to the DMHP and ensure follow-up. Women's helplines, supported by the Ministry of Women and Child Development,

were also used to produce recommendations for psycho-social support throughout the perinatal period. Data from government systems, telemonitoring in sentinel locations, monthly review sessions, and biennial scorecards were used to track these interventions.

Samiya Baani by Innovators in Health (Munsi 2021)
Innovators in Health (IIH), an Indian non-profit organisation in collaboration with Schizophrenic Research Foundation (SCARF India) established a free hotline (via an Interactive Voice Response System (IVRS)) in 2018 to assist maternal mental health in Bihar's Samastipur region.

Callers to the hotline were allowed to speak with a counsellor or listen to pre-recorded messages, skits, or songs regarding maternal mental wellness. Some callers were also given the option of having talk therapy sessions at home.

In addition to the IVRS, the programme also engaged frontline workers to provide counselling to mothers. The locals employed by IIH received training on community mental health, counselling, and the fundamentals of cognitive behavioural therapy. Additionally, they received training on approaching rural women, educating them about the hotline, and encouraging them to share their concerns. Some members of the team would oversee the calls, while the remainder would go door-to-door giving counselling services.

A target group of 186 women employed the IVRS 3,349 times over the course of seven months (Innovators in Health n.d.). The programme enabled several positive outcomes as clients could understand therapy techniques and be shown actively employing mental health terminology such as feeling burdened, powerless, nervous, etc.

BIND-P model by the Indian Council of Medical Research
(Kukreti et al. 2022; Ransing 2021; Raghuveer 2020)
This ANM-based stepped Care Model (BIND-P model) emerged from a study conducted by the Indian Council of Medical Research (ICMR) in 2017 for a period of three years in the rural region of Maharashtra, India. As part of its research emphasis on the National Mental Health Programme (NMHP) of India, ICMR also financed the study in Delhi and Karnataka (Mangalore and Dharwad).

Based on the WHO implementation toolkit, a panel of experts and stakeholders assessed the research to create this psychological intervention (BIND-P) which consisted of low-intensity interventions (e.g. exercise, sleep, hygiene) and counselling at the antenatal clinic during their ANC visits for women diagnosed with mild to moderate perinatal depression.

The BIND-P model recruits Junior Research Fellows (JRFs) and nurses or ANMs at each location where the primary investigator provides the orientation training for participant enrollment, screening of pregnant women with the PHQ-2 questionnaire and data collection. The training featured didactic lectures and case-based learning and included postpartum

depression screening, BIND-P intervention, referral, and follow-up evaluation. The study team wrote the training handbook in English and translated it into Hindi, Marathi, and Kannada to guarantee consistency of the content of the training programme across the four sites.

The model calls for collaboration between psychiatric services and ANMs, with the latter providing perinatal women with screening, short psychological care for mild to moderate depression, and referral services.

The Thinking Healthy Programme-Peer Delivery (THPP)
(Mental Health Innovators 2014; Fuhr et al. 2019)
The THPP Model was an evidence-based intervention for perinatal depression which aimed to reduce perinatal depression in low-resource settings by incorporating cognitive and behavioural techniques delivered through peers. It was implemented in the form of a two-year individual randomised control trial in India, launched in 2014 by the South Asian Hub for Advocacy, Research and Education in mental health (SHARE) - a five-year initiative financed by the National Institute of Mental Health (NIMH) to foster research to in mental health (National Institute of Mental Health n.d. b).

The programme included:

- Provision of culturally-sensitive psychological care, based on cognitive behavioural therapy (CBT) principles, that incorporates strategies like active listening, collaboration with the family, non-threatening inquiry into the family's health beliefs, and addressing non-scientific beliefs.
- Delivering services at a community level via lay volunteers.
- Working with the existing cadres of health professionals to supervise and ensure quality.

Using an innovative, workable, efficient, and sustainable community-based strategy, THPP administered a well-established psychological treatment that lessens the burden of depression in women in South Asia from the time of conception until six months after delivery. In Goa, local mothers (peers) were trained for 5-7 days and guided by non-specialists with some prior THP work experience to deliver interventions. The training was in the form of role-playing and interactive talks on the intervention's content, confidentiality, navigation of challenging circumstances, and the identification and reporting of severe adverse events (SAEs). A cascade model of training and supervision was established in which a specialist remotely supervised several non-specialist trainers, who then cascaded this training to their peers.

Over the 6-month postpartum period, the treatment had a moderate impact on the remission of perinatal depression. It was also observed that THPP saves money by reducing expenditures on health care, time, and productivity while also being relatively inexpensive to deliver (Fuhr 2016).

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