Title: Understanding the barriers to integrating maternal and mental health at primary health care in Vietnam

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Key messages:

- The integration of mental health into maternal services at the primary care-level has been recommended to address the maternal mental health treatment gap.
- However, in LMICs, perinatal care is predominantly siloed and biomedical in focus.
- We found that, in Vietnam, there is currently no screening, treatment, or referral of pregnant women with mental health needs.
- Several barriers to integrating perinatal mental health at the primary care-level span across sociocultural, structural, organizational, and individual levels.

Reflexivity statement: The authors include ten females and two males, spanning multiple levels of seniority. Seven authors are Vietnamese scholars specialising in health systems and policy research in Vietnam. The other scholars have experience in conducting health systems research in low- and middle-income country contexts, particularly using theory-informed approaches.

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Abstract

The prevalence of common perinatal mental disorders in Vietnam ranges from 16.9% to 39.9%, and substantial treatment gaps have been identified at all levels. This paper explores constraints to the

integration of maternal and mental health services at the primary healthcare level and the implications for the health system's responsiveness to the needs and expectations of pregnant women with mental health conditions in Vietnam. As part of the RESPONSE project, a three-phased realist evaluation study, we present Phase One findings which employed systematic and scoping literature reviews, and qualitative data collection (focus groups and interviews) with key health system actors, in Bac Giang province, Vietnam, to understand the barriers to maternal mental healthcare provision, utilisation, and integration strategies. A four-level framing of the barriers to integrating perinatal mental health services in Vietnam was used in reporting findings, which comprised individual, socio-cultural, organisational, and structural levels. At the socio-cultural and structural levels, these barriers included: cultural beliefs about the holistic notion of physical and mental health, stigma towards mental health, biomedical approach to healthcare services, absence of comprehensive mental health policy, and a lack of mental health workforce. At the organisational level, there was absence of clinical guidelines on the integration of mental health in routine antenatal visits, a shortage of staff, and poor health facilities. Finally, at the provider level, a lack of knowledge and training on mental health was identified. The integration of mental health into routine antenatal visits at the primary care level has the potential help to reduce stigma towards mental health and improve health system responsiveness by providing services closer to the local level, offering prompt attention, better choice of services, and better communication while ensuring privacy and confidentiality of services. This can improve the demand for mental health services and help reduce the delay of care-seeking.

Introduction

Approximately 15% of women in low- and middle-income countries (LMICs) experience common perinatal mental disorders (CPMDs) antenatally, and 20% postnatally (Fisher et al. 2012). CPMDs refer to depression, anxiety, and postpartum psychosis that occur during pregnancy or in the first year

postpartum. Risk factors include a history of illness, significant life stressors, poor marital relationships, and poor social support (O'Hara & Wisner 2014). CPMDs can have long-lasting consequences not only for the mother but also for the child, including disrupting infant brain development, lowering weight, impairing growth, and promoting infectious diseases (Nguyen et al. 2014, Ngo & Hill 2011, Fisher et al. 2011, Thi Hue et al. 2020, Hoang et al. 2016). However, most diagnosed mental health conditions go untreated (WHO 2022).

To address this treatment gap, the integration of mental health into maternal services at primary health care has been recommended (Atif et al. 2015). In LMICs, perinatal care is predominantly siloed and biomedical. The integration of maternal mental health can promote a holistic approach to treatment and consider socio-cultural perspectives, all implemented within contexts of allopathic or traditional systems of care and support (Sarkar et al. 2022). Integration of maternal mental health is particularly limited in many LMICs due to a lack of mental health workforce, inadequate training and supervision of health workers, and stigmatising attitudes of health workers and the public towards mental health (WHO 2022, Atif et al. 2015).

Integration of maternal mental healthcare can be improved through "holistic life courses" and "stepped care", and task sharing with non-mental healthcare workers (WHO 2022, Atif et al. 2015, Gureje et al. 2021). Task-sharing is another promising strategy for integrating maternal and mental healthcare (Le et al. 2022). It involves the redistribution of care typically provided by those with more specialised training (e.g., psychiatrists, psychologists) to individuals, often in the community, with little or no formal training (e.g., community/lay health workers, peer support workers).

Vietnam is an LMIC with a population of 96 million (General Statistics Office 2020). The health system is organised into four levels including national, provincial, district, and commune. Primary health care is provided at both district- and commune-level services (Mirzoev & Kane, 2017). Mental health in Vietnam is guided by the National Plan for Prevention and Control of Non-communicable Diseases and Mental

Disorders for the Period of 2022-2025 (MoH 2022). Maternal healthcare is guided by several policies, including the National Strategy on Population and Reproductive Health (2011-2020) (MoH, 2013), with the National Master Plan for Safe Motherhood and Newborn Care particularly emphasising regions with difficult socio-economic conditions and vulnerable groups (Ha et al. 2015). While these policies do indirectly and independently, touch upon the need for a comprehensive approach to maternal mental health, a cohesive response to CPMDs is missing, even though the prevalence of CPMDs in Vietnam ranges from 16.9% to 39.9% (Van Ngo et al. 2018, Fisher et al. 2007). As a result, pregnant women, who experience mental health conditions, and seek care for CPMDs from local community health centers, particularly in rural areas, are often overlooked (Abrams et al. 2016). Thus, there is a need for effective screening, management, and referral of pregnant women with mental health conditions, which arguably can inform improvements in the responsiveness of Vietnam's health system to the needs and expectations of women with maternal mental health conditions (Abrams et al. 2016). A model for task sharing was piloted in Vietnam, where non-specialised healthcare personnel was trained to deliver low-cost depression care, including psychological education and providing antidepressant medications with the support of mental health specialists (Do & Tran 2022).

The concept of health systems responsiveness was originally developed by the World Health Organization (WHO) to measure how well a health system responds to people's non-medical expectations and consists of eight domains: autonomy, confidentiality, communication, dignity, social support, attention, basic amenities and choice of provider (WHO 2000). Recent frameworks highlighted the importance of multiple interactions between people and their health systems, amongst people and their communities, and within health systems (Mirzoev & Kane 2017). Health systems responsiveness has also been applied to specific health topics including mental health (Bramesfeld et al. 2007, Bramesfeld et al. 2007, Forouzan et al. 2011) and maternal health (van der Kooy et al. 2014, Abdo et al. 2021) and tied closely to the integration of maternal and mental health services.

The literature on the integration of health services is relatively limited from LMICs and maternal mental health has been receiving particularly insufficient attention. Similarly, health systems responsiveness is one of the least researched health systems goals, particularly in LMICs. Finally, we could not find any literature that bridges the boundaries of integrated maternal mental health care and health systems responsiveness. In this paper, we aim to bridge these knowledge gaps. More specifically, this paper aims to contribute to advancing the literature on health integration and health systems responsiveness through reporting results of a realist evaluation of the integration of maternal and mental health care at the primary healthcare level in Vietnam. The objectives of this paper are: first, to analyse barriers to the provision and utilisation of maternal mental healthcare at the primary care level in Vietnam and, second, to identify key barriers to integration across individual, organisational, structural, and social-cultural dimensions. We hope this paper will be of interest and relevance to policymakers, practitioners, and academics interested in advancing knowledge about and addressing health integration related to perinatal mental health at primary healthcare facilities, and consequently improving health systems responsiveness to maternal mental health needs in Vietnam and other similar LMICs.

Methods

This paper reports Vietnam-specific findings from Phase I of a collaborative three-phase realist evaluation of health system responsiveness to the maternal mental health needs in Vietnam and Ghana (Mirzoev, et al. 2021). Phase 1 focused on understanding the local context of maternal mental healthcare provision and 6tilization, identifying the barriers to maternal mental healthcare provision, as well as 6tilization and integration strategies in Vietnam. In Phases 2 and 3 an intervention to improve system responsiveness was co-produced with local stakeholders, and subsequently implemented and evaluated in Vietnam and Ghana.

The study employed a realist evaluation approach, which focuses on unpacking ‘what works, how, under what conditions, and for whom’, using context, mechanism, and outcome (C-M-O) configurations as a

heuristic of chains of causality (Pawson and Tilley, 1997). Context refers to the conditions in which programs are introduced including political and economic conditions, cultural norms, and beliefs. The mechanisms include reasoning of how individuals interpret and respond to interventions, at a given time, in a given context, and how they interact with the available resources. Outcomes are the patterns of intended and unintended consequences that result from mechanisms triggered in different contexts (Pawson et al. 1997, Manzano 2016, Dalkin et al. 2015).

Realist evaluations, a form of theory-driven evaluations, work with program theories at their center and typically involve phases of theory gleaning, development, testing, consolidation, and refining. The notion of a 'programme' within realist evaluations is flexible and can encompass ongoing government health or programme such as reproductive health (Oladimeji, 2022), a specific intervention such as capacity strengthening or human resource management (McCauley, 2019), or just a chain of causality within routine service delivery such as demand management strategies (Pawson, 2016), sense of security and degree of trust as key influences on utilization of healthcare (Evans, 2022). In this paper, when we refer to a programme theory in the absence of an explicit government programme on the integration of maternal mental healthcare in Vietnam, we mean a realist chain of causality or hypothesis framed as a CMO configuration.

Programme theories in realist evaluations are typically informed by iterative engagements with three sources of information: (a) stakeholder views gleaned from the data for example from documents and interviews; (b) existing literature, both covering substantive social science theories and results of empirical studies which articulate evidence in support of different causal propositions and (c) researcher views, from team deliberations and discussions. As a result, reporting of realist findings often contains literature and researcher views; these are presented as 'results' and, as such, are different to the point of discussion and reflection on the findings. In this paper, we follow this logic, though acknowledge the differences in the presentation from traditional research where, for example, literature is typically included outside the results.

Between June 2020 to November 2022, the literature on health systems responsiveness and policies on maternal and mental health in Vietnam were reviewed to arrive at the initial program theory (Box 1). The qualitative data collection took place from April to October 2022, and it aimed to further develop and refine the initial program theory derived from the reviews. The researchers held regular discussions throughout the process, and a workshop was organised in November 2022 with relevant stakeholders to review and refine emerging CMO configurations including the one reported in this paper.

Study setting

Bac Giang province was purposively selected as it represents the kind of large-scale industrial zone, around which much of development and thereby population concentration is occurring in Vietnam. The province is located in Northeast Vietnam in the Red River Delta region. This region is geographically small but has the highest population and population density of all regions of Vietnam. Bac Giang province is experiencing rapid development and attracting migrants from neighboring provinces and across the country – a melting pot of people from the whole country. Crucially, the local authority shows a high commitment to improving the health of the population.

Sampling and study participants

We approached and purposively recruited a heterogenous sample of respondents comprising: (1) health staff with maternal- and mental health-related experience, working at health facilities at different levels, (2) pregnant women visiting antenatal care services (ANC) at health facilities at different levels, (3) policymakers and managers at central and provincial health facilities, and (4) representatives of women's unions in local communities. This allowed us to capture in-depth knowledge from diverse perspectives, providing a representative mix of demographics and experiences of maternal and mental health services.

Table 1: Characteristics of Study Participants, and Data Collection

Data collection

Data collection involved different rounds of literature reviews, team discussions, and qualitative fieldwork. The literature reviews were conducted from June 2020 to November 2022 to include empirical studies on health systems responsiveness and the policies on maternal and mental health in Vietnam, followed by a workshop with stakeholders in November 2022.

Qualitative data collection included face-to-face in-depth interviews (IDIs) and focus group discussions (FGDs), with purposefully identified key health systems actors (policymakers, managers, providers, pregnant women at ANC services and community representatives) utilising a realist approach (Manzano 2016, Greenhalgh 2011). A total of 22 IDIs and 4 FGDs were conducted with a total of 20 participants (see Table 1).

Data collection took place from April to May 2022. All data collection activities were conducted in Vietnamese. Interviews and focus groups were audio-recorded and lasted approximately 60 to 90 minutes. Data were collected using semi-structured topic guides designed to explore the initial theories identified in the realist synthesis (Mirzoev et al. 2021) and tailored to specific respondents. Health managers and healthcare providers were asked about the structural, and organisational levels of maternal mental health at health facilities and socio-cultural aspects (health literacy, stigma, and awareness of the risks). Pregnant women and the community were asked about the meaning of mental health, to share their experiences of any mental health symptoms or conditions, and how they seek care to manage their condition.

Data analysis

Qualitative data were analysed using the realist logic of analysis, which is an iterative process aiming to refine the theories that had been identified. A retroductive approach to data analysis was used for

identifying, analysing, and reporting tentative patterns within data against the initial programme theory (Box 1).

The data were compiled and findings were organised into CMO configurations, highlighting the relationships between contexts, mechanisms, and outcomes. The IDIs and FGDs were transcribed, and transcripts were coded, with the support of MindManager software, for themes related to the program theory and four levels of barriers to the integration of health services (Braun and Clarke 2006).

Box 1. Initial Programme Theory

Ethical consideration

The study was approved by the Institutional Review Boards of the Hanoi University of Public Health. Written informed consent was obtained from all study participants before fieldwork, and their anonymity and confidentiality were preserved as much as feasible during data analysis and in reporting findings.

Results

We report results structured by four levels of barriers to the integration of health services, shown in Figure 1, namely individual, organisational, structural, and socio-cultural levels (Sambrook Smith et al. 2019).

Sociocultural level

Cultural beliefs and traditions affected mental health care-seeking behavior

Beliefs in mind-body dualism, which view the mind as existing independently from the body, are evident in many cultures and have had a great impact on the practice of modern Western medicine. In contrast, in the Vietnamese culture under the influence of traditional Chinese medicine, the holistic notion of physical and mental health is very common. Body and mind are not seen as separate entities (Gendle 2016,

Forstmann et al. 2012). Pregnancy and mental health are natural phenomena. This was reflected in the qualitative data; pregnant women perceived their mental health conditions as a normal experience during pregnancy which constrained their health-seeking behaviours.

"When it comes to mental health issues, they do know, they do read about or have some attention. But usually, they won't listen to those things. They consider their mental state normal. They don't care much about mental health and don't pay close attention to it either. For example, if they have a sign of mental health issues, they won't care about it, they will just leave it there". (District_3_Pregnant_Woman)

When women felt their mental health conditions needed attention, they often sought support from traditional healers, family members, and spiritual ceremonies in addition to medical treatments. This was reflected in the qualitative data.

"They invited a shaman or a fortune teller, to provide information or treatment related to any problems with ancestors. So, spirituality is related to different matters" (District_1_Commune_1_Collaborators)

Fear of mental health stigma prevents disclosure of information and delays care-seeking

Mental illness, or "*benh tam than"*, is referred to in Vietnamese as madness, or severe psychiatric disorder. It carries the stereotyped connotation of wild, unpredictable, and dangerous people. Mental illness is highly stigmatised in Vietnamese society as related to prior sins, suffering, and karma, all rooted in Buddhism. This can sometimes imply a condemnation of the individual and an indictment of the honor of the whole family (Minas et al. 2017).

Interviews revealed that fear of stigma informs the non-disclosure of information about mental illness and delays in care-seeking, and *"going to psychiatric hospitals is something no one wants to do".* (Central_Manager_4).

Consequently, mentally ill members of the family are commonly hidden or confined within the household for as long as they can be tolerated to prevent familial disgrace.

"Women do not want to go for mental health examination, because they are afraid that their unborn babies might get those issues from them during pregnancy. So, I think pregnant women are afraid of whether those issues will affect their fetuses. Even telling them to go to psychiatric facilities for checkups will make them nervous, and then their family members will be nervous, too". (District_2_Health_Provider)

As this health provider explained, when it comes to perinatal mental health, the added issue of perceived protection of the safety of the fetus acts as a deterrent to uptake of further healthcare. Individuals, for their part, avoid openness with personal difficulties and will forgo the cost of personal mental health in their desire to preserve their relationships.

Stigma towards mental health professionals constrains care

Psychiatrists in Vietnam are referred to as "*bac si tam than"*, which when translated means "*doctors who treat madness"* implying the ridiculousness of this profession (Nguyen 2003). The psychiatrists we interviewed felt that they were looked down upon and were compelled to often hide that they worked at psychiatric hospitals.

"Yes, [mental health] is very stigmatised. The community does not only stigmatise mental patients but also health staff at provincial psychiatric hospitals. We confirmed that we are doctors, nurses working, but we will not confess that working at psychiatric hospitals" (Provincial_Mental_Hospital_Manager_12)

Stigma towards mental health professionals also prevented other healthcare providers from learning and being associated with mental health care, with "*..most healthcare providers [being]… reluctant to work with mental health because of stigma*" (Central_Hospital_Manager_Provider)

Limited trust in mental healthcare staff in managing health symptoms during pregnancy by OBGYN providers was also cited as a barrier to referrals to provincial psychiatric hospitals.

"If we see that pregnant women cannot rest their minds, we will have to refer them to higher-level hospitals. We will not dare to manage them at these district-level facilities. We often refer them to the obstetric department of the provincial hospital. […] Because they are pregnant and we don't know much about the matter, we don't dare to introduce them [to psychiatric hospitals] and only refer them to the provincial hospital so that they can be treated without harm". (District_3_Health_Provider).

With this perception, pregnant women will not receive prompt specialist care, and this could end with severe consequences for both mental and physical health, even at the provincial level. Providers can be seen protecting women against social stigma while, paradoxically, reinforcing stigmatisation by preventing referrals.

Structural level

Biomedical approach with a focus on hospital treatment of severe mental illness

Mental healthcare provision in Vietnam remains disproportionately influenced by the French colonial system where the dominant approach involved hospital-based treatment and a focus on severe mental disorders such as schizophrenia, schizotypal and delusional disorders, mood (affective) disorders, neurotic, stress-related, and somatoform disorders. Hospital admissions for these conditions have been increasing in the last years (Vuong, et al. 2011, Minas et al. 2017).

The outpatient service was introduced in 2004, including community-based mental health care, and covers 67% of all communes in the country under the National Health Target Program (NHTP). While some attention is given to people with depression and anxiety, the program does not yet pay attention to maternal mental health and related care. The needs of women with CPMDs go largely unrecognised with

virtually no services provided (Fisher et al. 2012). This is further complicated by the lack of a stable supply of medicines and insufficient attention to managing side effects during pregnancy. (Minas et al. 2017, MoH 2015). Further, pharmaceutical therapy is the predominant form of treatment, with few other modalities such as psychotherapy and psychosocial rehabilitation, being used (Minas, et al. 2017; Ministry of Health and Health Partnership Group 2015). In 2020, the National Health Target Program on mental health was stopped due to a change of government policy, and no funding mechanisms were given for mental health programs at local levels. No alternative program was available till 2023, which indicated the need for advocacy for community-based mental health programs.

Limited data and the absence of a comprehensive mental health policy constrain integrated mental healthcare

In Vietnam, routinely collected data on mental health is limited. The latest data was collected in 2002 with a nationally representative epidemiological survey estimating 14.9% of the population having common mental health illnesses. The most prevalent of these are alcohol abuse (5.3%), depression (2.8%), and anxiety (2.6%) (Vuong et al. 2011). Although schizophrenia and epilepsy are under different specialties, traditionally, the Vietnam Health Statistics Yearbook reported information for these two conditions without information on common mental illnesses, such as depression and anxiety (Vuong et al. 2011). Fieldwork also revealed that the local provincial health department only knew the prevalence of schizophrenia and epilepsy. However, policymakers highlighted the need for updated data on the burden of mental health at national and local-level health facilities.

The Government of Vietnam approved the National Strategy on People's Care and Protection towards 2030 (2001, revised 2011) with a commitment to ensuring access to essential health services to promote good physical and mental health. Vietnam also endorsed the WHO Mental Health Action Plan 2013–2020 and, in 2015, ratified the UN Convention on the Rights of Persons with Disabilities, including those with mental conditions. However, the lack of a dedicated mental health law has been a continued problem,

resulting in insufficient protection of people with mental illnesses (Minas et al. 2017). This lack of attention to establishing a national mental health policy was identified by participants as a significant barrier to implementing long-term health policies on mental health.

"I must say that I am not satisfied with the mental health program, especially the leadership... They are not fully devoted to mental health programs and have no advocacy for mental health on health policy agenda" (Central_Manager_1)

The recent National Plan for Prevention and Control of Non-communicable Diseases and Mental Disorders for the Period of 2022-2025 is short-term for 3 years. In the plan, 100% of medical staff that implement the prevention and control of mental disorders at all levels should receive training in the prevention, supervision, detection, management, diagnosis, and treatment of common mental disorders. All pregnant women should receive screening, counseling, and prevention for mental health disorders. However, the plan was promulgated without the government's financial commitments and did not provide sufficient guidance for provincial health departments to develop mental health plans. This may echo the low priority accorded to mental health at the policy level in Vietnam (MoH 2015).

Fragmented and siloed management and delivery of perinatal mental health services

The networks of maternal and mental health services are separately organised and managed. The Maternal and Child Health Department of the Ministry of Health is responsible for maternal health services across all levels, whereas mental health services are provided via a limited number of psychiatric hospitals and clinics.

"*The two systems of psychiatric and maternal health care services are still two vertical sectors and do not have much integration. Maybe there is a connection at only a few hospitals [within the projects], but technically, the two are independent*" (Central_Manager _4)

The siloed approach constrains and hinders smooth referrals between the two networks. Most pregnant women experiencing mental health conditions are referred to the provincial general hospital where there is no specialised mental health care instead of the provincial psychiatric hospital, except in cases with prior history of schizophrenia or severe depression. This results in a very low number of pregnant women receiving mental healthcare.

The provincial psychiatric hospital had no follow-up with other hospitals or clinics.

"At this moment, we only maintained contact with patient's families. We do not know who treated the patients at the lower level and did not contact with them" (Provincial_Mental_Hospital_Manager_12).

The lack of follow-up between mental health and maternal services can result in delayed care or untreated maternal mental health problems and, in turn, can adversely impact a mother and child's physical and mental health (Higgins et al., 2017). Prescription of psychotropic drugs is often discontinued during pregnancy or breastfeeding as women place a greater emphasis on the safety of their child.

Organisational level

The lack of guidelines on integration constrains provision of mental healthcare

Several policies in Vietnam have been developed to reduce maternal and neonatal mortality. However, there are no specific strategies relating to the screening, diagnosis, and treatment of mental health conditions amongst pregnant women or recent mothers (MoH 2013, Ha et al. 2015). The National Guideline on Reproductive Health Services (2009, 2016) guides the provision of reproductive health services. However, there is no guidance on the inclusion of screening, treatment, and referral for CPMDs within antenatal visits, as interviews also revealed:

"I must say that the health system is following the technical protocol [national guideline on reproductive health services], but we do not have a technical guideline on mental health in maternal care, so we ignore this" (Provincial_OBGYN_Hospital_Manager).

Inadequate resources and hospital autonomy policy limit maternal mental healthcare.

Shortage of staff and lack of communication time were identified as constraints in the delivery of antenatal visits. Each hospital obstetrician should daily receive about 50-80 patients for routine antenatal visits. An average of five minutes were spent per patient, with no time left to identify mental health issues.

"*We have no time to answer and our answers are also not adequate. It cannot meet the needs of pregnant women if they have concerns about mental health issues. Even if we found out about mental health problems, we can do nothing*" (District_2_Hospital_Provider).

The shortage of staff was partly due to the implementation of the hospital autonomy policy in Vietnam which prompted the decentralisation and autonomisation of public hospitals to improve the efficiency of service delivery. To sustain their work, hospitals reduced staffing costs. Heavy workloads, staff shortages, and long working hours are reported as factors that hinder service quality (Tran et al. 2022, Ha et al. 2023).

In addition, although antenatal visit rooms varied in different sites, most private clinics tended to be in good condition and can ensure privacy during the checkup, in contrast with public clinics.

"Confidentiality and privacy are not ensured because they do not have private consultation rooms. In the ultrasound room, doctors have curtains, one person is inside and the other outside [curtain], and this does not ensure confidentiality and privacy" (District_2_Hospital_Women_2).

While the loss of privacy and confidentiality is not unusual in public hospitals, often designed with semi-private rooms and curtains rather than solid walls, physical layouts of antenatal checkups can have direct impact on patients' and staff's reluctance to engage in a mental health discussion.

Individual level

Normalisation of perinatal mental health constrains identification of mental health issues

Mental health conditions are often perceived as a normal phenomenon during pregnancy and no mental health distress was detected at the primary care level in Vietnam (Fisher et al. 2010). This was also reflected in the qualitative data, where both providers and pregnant women perceived decreased mental health as being normal due to hormonal changes during pregnancy, often leading to mental health being overlooked during pregnancy.

"When we were pregnant, then will be tired, some stress. So, it is often said that pregnant women are often easy to get angry" (District_2_Commune_1_Collaborators)

"In reality, if any abnormal related to clinical symptoms or laboratory results, then we will focus more. It [mental health], we skip this condition as it was normal during pregnancy" (Provincial_OBGYN_Hospital_Manager)

Most antenatal visits dealt with signposting information and antenatal counseling mostly focused on physical health, not mental health, which resulted in few cases detected with mental health conditions.

Lack of knowledge and training on mental health limits trust in providers

Lack of capacity for mental health was highlighted as the reason for providers not being confident with their diagnosis – their diagnosis mostly came from experience.

"When the patient asked a lot of questions about abnormalities of the unborn baby, or they were too worried about something, I feel that they may have mental health issues. That is on experience" (Provincial_Private_Hospital_Provider_1)

The health providers did not receive training on mental health during medical education. The need for training on mental health in medical education was acknowledged by primary care providers. The lack of skills to identify and manage mental health issues in pregnant women, and the limited communication time, were identified as the main reasons for the lack of trust and low demand for mental health in maternal healthcare networks. As a result, most women perceived maternal health care providers as solely for their physical well-being.

"The doctors mentioned only the physical health, mostly about this. About mental health, we also did not ask". (Provincial_OBGYN_Hospital_Woman _2)

Managers were aware of the need for screening and management of mental health and training needs for maternal healthcare providers on screening, management, referral, and follow-up of CPMDs.

"Mental health should be integrated into the maternal healthcare network, only severe cases which obstetricians cannot manage should be referred to a psychiatrist, with medication and other methods. The early detection and management should be integrated as soon as possible" (Central_Manager_1)

Lines of communication across different services and health professionals can help with a holistic diagnosis for mothers since clues can be identified during different visits by different staff (e.g. receptionists, nursing assistants) and a team approach can help develop a more detailed and accurate diagnosis (Sriranjan et al. 2020).

Discussion

This study has shown that the integration of maternal and mental health at the primary care level in Vietnam is challenging. Several barriers were identified affecting the utilisation of mental healthcare services and consequently the health system's responsiveness to maternal mental health needs, as well as the women's help-seeking behaviours. The programme theory examined in this paper focused on increasing understanding of how barriers operated at the socio-cultural, structural, organisational, and individual level and their relationships within the context of Vietnam. Using the four-level framework to guide data analysis led to the development of a revised theory (see Box 2) that increased our nuanced understanding of the context in which barriers to integration of maternal mental health at primary care level, and the mechanisms operating in health systems interactions. This revised programme theory will support Phases 2-3 of the co-produced intervention to increase overall health systems responsiveness for maternal mental health.

Box 2. Revised programme theory

This study identified the mental health treatment gap at the primary care level in Vietnam, with no screening, treatment, or referral of pregnant women experiencing mental health conditions. This finding is consistent with other studies where mental health services are mainly provided at national and provincial psychiatric hospitals (Murphy et al. 2018, Niemi et al. 2010, Abrams et al. 2016). The findings highlighted the importance of and need for integrated screening, management, and referral of CPMDs into routine antenatal visits at the primary care level to increase access and reduce stigma (Johnson et al. 2018, Viveiros et al. 2019). Similar to studies in other LMICs, our findings suggest that several barriers to integrating perinatal mental health at the primary care level span across sociocultural, structural, organisational, and individual levels (Sambrook Smith et al. 2019, Murphy et al. 2018, Bayrampour et al. 2018, Murphy et al. 2018, Abrams et al. 2016).

The sociocultural beliefs related to physical and mental health can impact mental health care-seeking through the perception of perinatal mental health conditions as being normal, seeking traditional care, and delays in seeking medical care. Despite frequent contact between pregnant women and healthcare providers, the majority of women do not seek help for symptoms of perinatal distress (Phan & Silove 1999, Minas et al. 2017, Ogbo et al. 2019). Only 5% of those with mental distress sought health care at facilities where mental health care services were available in Vietnam (Thornicroft et al. 2022).

Another prominent contextual barrier to seeking mental healthcare is the stigma towards mental health in society. This finding aligns with the evidence from the UK and Australia, as well as LMICs such as Nigeria (Sambrook Smith et al. 2019, Murphy et al. 2018, Bayrampour et al. 2018, Oh et al. 2020, Augsberger et al. 2015). People often choose to suffer from mental distress without relief, rather than risk the discrimination that comes with accessing mental health services (WHO 2022). Stigma, however, aggregates in complex ways and also extends to women's families and health care providers who were also found to be reluctant to refer to mental health specialists. So, this study highlights how stigma acts as a double-edged sword (Gausset et al. 2012); on one hand, it constrains the health-seeking behaviours of pregnant women and their families and, on the other, it affects clinical decisions by health workers, such as those related to referrals for specialist mental health treatment. This is why the need to improve mental health literacy for pregnant women and staff on the importance of early detection and care-seeking of CPMDs while reducing stigma, must be emphasised.

In Vietnam, despite the high prevalence of mental illnesses (14.9%), mental health care is only offered for severe illnesses such as schizophrenia and epilepsy and is offered only at tertiary hospitals (Vuong et al. 2011). Other prevalent conditions such as postpartum depression (PPD) are not recorded as mental health illnesses in the statistic health yearbook despite their high prevalence (ranging from 8,2 to 37.1%) (Nguyen, et al. 2021). One possible explanation could be the sociocultural belief around it being a normal condition due to hormonal changes after delivery (Huyen Thi Hoa, et al. 2023). Women who experienced PPD often opted for traditional healers due to the holistic notion of physical and mental health (Niemi, et

al. 2010). Lack of mental healthcare for such women often resulted in a higher risk of severe mental illness or suicidal thoughts (Huyen Thi Hoa, et al. 2023). The silos of maternal and mental health networks could be worsening women's PPD condition, which highlights the need for linkage between maternal and mental healthcare networks. The model of task sharing for depression management at the primary care level is ongoing in Vietnam (Victoria Khanh, et al. 2023). However, findings from this study highlighted that, in the context of Vietnam, intervention should take into account several factors to mitigate the impact of barriers to integration, such as sociocultural beliefs about the normalization of mental health conditions, stigma toward mental health and mental health professionals, siloes of maternal and mental health network services, and the lack of comprehensive policy on the integration of maternal mental health. The trust between related stakeholders (pregnant women, maternal and mental health providers, and the community) should be established to promote treatment initiation and maintain engagement by countering prevailing stigmatising attitudes.

Somatisation is quite common among mental health patients in Asian countries, including Vietnam (Lin, et al. 1985) (Huyen Thi Hoa, et al. 2023). In this study, however, we did not find this trend because our population comprised pregnant women coming for antenatal checkups without specific psychological complaints. While exploring the degree of somatisation was outside the scope of this paper, we acknowledge, however, that somatisation can be an important explanation for a combination of many psychological, emotional, and physical symptoms.

Our findings align with the results of studies in other countries, where comprehensive mental health-related plans or legislation is absent, mostly due to the complexity of mental health issues, and where a fragmented approach to treatment and management of mental conditions exists (Vung et al. 2009). Since mental health is an integral part of our overall health and well-being and a basic human right, a comprehensive long-term policy on mental health in Vietnam should be prioritised, with clear funding mechanisms, either from the government or external funders (WHO 2022). In the longer term, this includes a shift in the focus of care for severe mental health conditions, away from psychiatric hospitals

and towards community-based mental health (Tornicroft et al. 2022). The government should have a plan to remedy the funding cut from NHTP for community-based mental health. Our findings also highlight the urgent need for updating the National Guidelines on Reproductive Health Care Services, perhaps building on examples of routine screening for psychosocial distress during pregnancy, implemented in Australia and the United States (Ogbo et al. 2019, Puspitasari et al. 2021).

The lack of psychiatrists can result in limited tertiary mental healthcare, with only two central and 31 provincial psychiatric hospitals, and 23 psychiatric departments in the general provincial hospitals (Vuong et al. 2011). In conjunction, poor knowledge and training on mental health can contribute to the lack of trust in mental healthcare providers who may mostly focus on physical conditions with insufficient attention to and a lack of skills in mental health management. These were also identified as barriers to integrating mental health services at primary health care in other studies in Vietnam and Ghana (Sarkar et al. 2022, Murphy et al. 2018). Despite several constraints, most maternal health care providers expressed willingness for additional training in screening, assessment, management, and referral of CPMD cases.

Training and supervision to build the capacity for health staff at the primary care level was identified as an important intervention strategy of task sharing on the integration of mental health at the primary care level (Le, et al. 2022). Continuing medical education with supervision on mental health could cover the identification of symptoms of CPMDs. Information needs should also include red flags and information for concerned family members (Sambrook Smith et al. 2019). Each case identified as ‘at risk’ based on screening on mental health, must then be discussed with, and where appropriate, referred to the relevant mental health professionals with formulation of specific referral pathways. In this way, a horizontal collaboration between maternal and mental health networks should be emphasised. This may present many logistic challenges but it is an opportunity for further integration of mental health services in primary care (WHO 2022). Such action could have great impact on public health outcomes and contribute

to improving the quality of life of women and their children (Birdthistle et al 2018, Bayrampour et al. 2018).

In this study, several barriers to health-seeking behaviours and integration of maternal mental health across individual, socio-cultural, organisational, and structural levels were identified. We recognise, however, that these levels do not operate in isolation and can be mutually reinforcing each other. For example, cultural beliefs and, specifically, stigma are likely to be contributors to shortages of specialised staff for mental healthcare, and lack of clinical guidelines on integration of maternal and mental healthcare can contribute to limited knowledge and training on mental health amongst maternal healthcare providers. A systems approach can therefore help us to better understand complex phenomena, such as integration, and identify feasible and sustainable solutions. Moreover, mental and physical health are interconnected and, as such, the integration should require a move beyond a health system (Javadi, 2017). It needs an understanding of large-scale public sector involvement, interactions across key actors, and mobilisation of these actors, so the health system can shift and respond to local needs, taking into account the specificity of culture and context (Montenegro, 2020), to reduce stigma and encourage students or health workers to work in mental health profession.

Our results also advance understanding of different aspects of the health system's responsiveness to maternal mental health needs (WHO 2000). Women's antenatal visits should allow for enough time for communication, ascertaining patients' concerns, and discussion on mental health issues. The trust in and continuity of mental services across primary to tertiary care, with horizontal referrals within each level, can be usefully linked to the choice of service. Similar findings are reported in Germany (Bramesfeld et al. 2007) and Iran (Forouzan et al. 2011). The finding reinforces the argument that responsiveness is a socially constructed set of interactions between people and their health systems and strategies to improve responsiveness should address both the 'people' and the 'systems' sides (Mirzoev et al. 2021).

We acknowledge two limitations. First, this study took place in Hanoi and Bac Giang province, so the findings might not be generalisable to the rest of the country. The results, however, offer enough depth to be representative of the experience of many maternal health providers working in primary care in Bac Giang province and may be of relevance to other parts of Vietnam and other LMICs. Second, purposive sampling may be another limitation. Due to the context of Vietnam, where we were required to use formal channels to access health providers, this approach was necessary. We are confident, however, that this approach did not limit the validity of our findings. As previously indicated, study participants were pregnant women visiting ANC clinics without any specific mental health symptoms. This choice ensured that we could get a general, societal understanding of mental health issues and care-seeking for mental health issues. Since mental health is a sensitive and stigmatised topic, identifying women with mental health issues would have been very difficult, and getting such women to share their personal situation would have been even more so. We recognise that, while this sampling choice allowed us to get broad, societal insights, these insights do not represent the experiences of those pregnant women who need to or seek care for mental health issues.

Conclusion

Despite the mental health needs, integration of maternal mental health at the primary care level in Vietnam is challenging. The identified barriers operated at four levels, namely socio-cultural, structural, organisation, and individual levels. Our findings increase the understanding of the context, mechanism, and outcome configurations that are of importance and provide explanations for our program theory on integrating perinatal mental health at primary health care in Vietnam. The integration of mental health into routine antenatal visits at the primary care level will help to reduce stigma towards mental illnesses and improve the health system's responsiveness by providing services closer to the local level, offering prompt attention, and better communication, while ensuring privacy and confidentiality of services. This, in turn, has the potential to improve the demand for mental health services and help to reduce delays in

care-seeking, and the transformation of services should be ready to respond to this increased demand and interest in maternal mental health.

List of abbreviations

ANC: antenatal care

C-M-O: context, mechanism, and outcome

CPMDs: common perinatal mental disorders

FGDs: cocus group discussions

IDIs: in-depth interviews

LMICs: low- and middle-income countries

NHTP: National Health Target Programme

PPD: postpartum depression

WHO: World Health Organization

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IF there was a national health policy on **integration** of maternal health and mental health at primary care level in Vietnam, clinical guidelines and care pathway for inclusion of **screening** of common mental disorders in pregnancy (Context), then this will greater sense of **importanc**e and commitment to the inclusion of maternal mental health services at primary care level from the key stakeholders, and better **collaboration** between departments within health services; encourage **resource allocation, clearer roles and responsibilities which** will incentivize integrated solutions (**capacity**) and it can also require health staff to **referral** and **follow up** in MMH women at primary care (PHC) (Mechanism), WILL ultimately contributing to holistic provision of linking MMH care at PHC level and thereby making health systems more responsive to the complex needs of pregnant women experiencing common mental health disorders across different stages of pregnancy (screening for MMH symptoms, detection, option for treatment: counseling, referral, continuing treatment, and follow up or referral to specialized care) (Outcomes: prompt attention, communication, confidentiality, autonomy and choice of service provider

Box 1. Initial Programme Theory

IF there is dominant biomedical approach and silos of maternal and mental health network service in Vietnam, then there may be no health program and resources for MMH, including funding, workforce, training, facilities at PHC level.

IF there is lack of health policy on integration of MMH at PHC level, lack of clinical guideline on screening, management, referral at primary care level, then may be lack of resources and collaborative approach in treatment and follow up for MMH cases

IF the capacity of health providers at PHC level is insufficient, focused on physical condition, then will be lack of attention to mental health symptoms, delays in giving care and sending for referral.

IF community believes the holistic notion of physical and mental health, fear towards mental health and profession, then will be delay in seeking care and adherence to treatment (no report symptoms and care sought).

Box 2. Revised programme theory

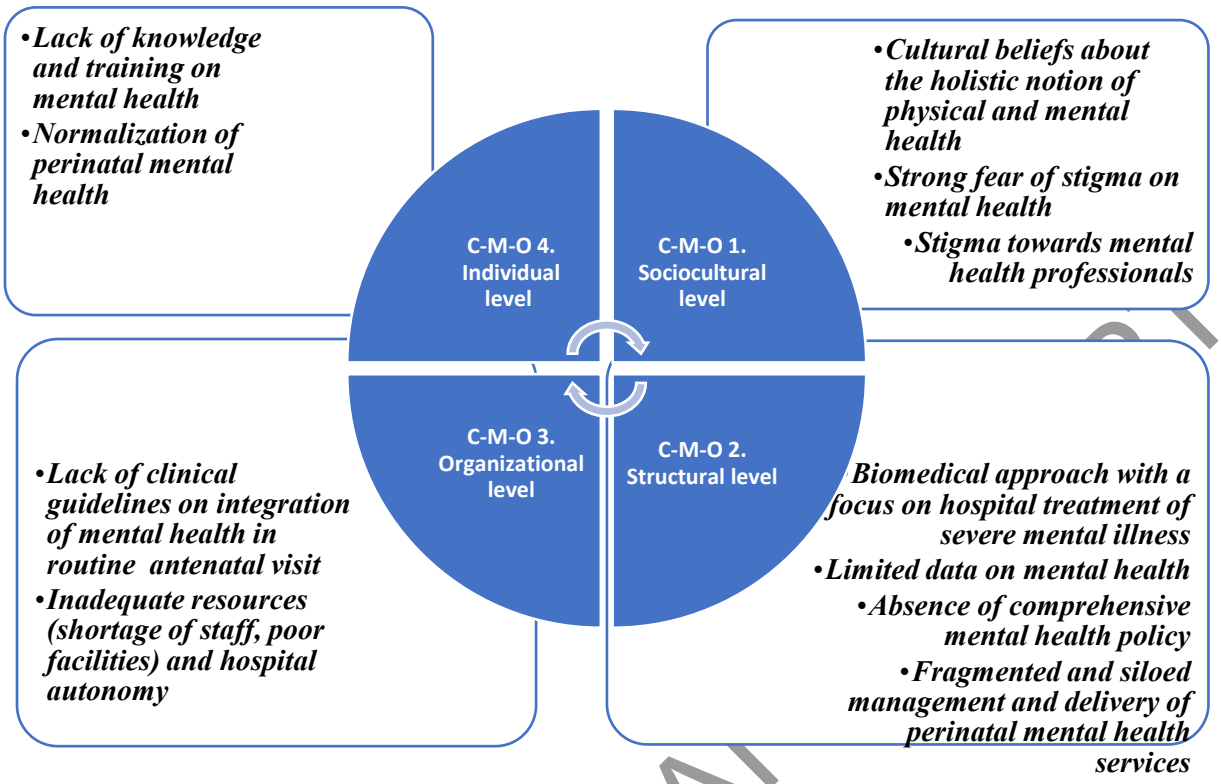

Figure 1. Integration of maternal and mental health at PHC level in Vietnam

Participants	Method	
	IDIs	**FGDs**
National level	4	
Policymakers on mental health services and maternal and child health care services at the Ministry of Health	3	
Mental health care provider	1	
Provincial level	8	
Health managers at the Centers for Disease Control and Prevention	2	
Health managers in the provincial obstetric gynecology (OBGYN) public hospital, a private hospital, and a psychiatric hospital	3	
Health and providers in the provincial public general hospital, a private general hospital, and a psychiatric hospital	3	
Health managers in charge of OBGYN in district hospitals	2	
Health providers (OBGYN) in district hospitals	2	
Health providers in charge of maternal and child health (MCH) in commune health centers		2 (12)
Representative of Women Union, Youth Union, village health workers (Collaborators)		2 (10)
Pregnant women at ANC checkup services of district and commune health centers	6	
Total of participants	**22**	**22**

Table 1: Characteristics of study participants, and data collection