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DESIGNING RESPONSIVE MATERNAL MENTAL HEALTH SERVICES: IMPLEMENTATION LESSONS FROM NIGERIA FOR GLOBAL HEALTH EQUITY

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Abstract

Maternal mental health remains a neglected component of maternal healthcare in many low- and middle-income countries (LMICs), despite the substantial burden of postpartum depression (PPD). In Nigeria, the integration of maternal mental health services into routine primary healthcare remains limited, resulting in delayed identification and inadequate support for affected women. This study explored postpartum mothers' experiences of maternal mental healthcare to identify service gaps and inform evidence-based strategies for improving maternal mental health services. A qualitative descriptive design was employed. Thirty-six postpartum mothers were purposively recruited from selected primary healthcare centres in Southeast Nigeria and participated in four focus group discussions. Data were audio-recorded, transcribed verbatim, and analysed using Braun and Clarke's thematic analysis framework. Three overarching themes emerged: **healthcare neglect**, characterised by limited recognition of mothers' emotional wellbeing during routine postnatal care; **service gaps**, including the absence of routine mental health screening, counselling services, and structured referral pathways; and **desired support**, reflecting participants' recommendations for empathetic provider communication, family-inclusive counselling, peer support groups, and improved community awareness. Participants consistently described stigma, inadequate psychosocial support, and limited access to appropriate mental health services as major barriers to care. The findings highlight significant gaps in maternal mental healthcare delivery within primary healthcare settings in Nigeria and underscore the need to integrate mental health into routine maternal services. Strengthening provider capacity, implementing routine screening, promoting family-centred care, and expanding community-based mental health support may improve access to timely and culturally responsive care. These findings provide context-specific evidence to inform maternal mental health policy and service delivery in Nigeria and other LMICs.

Keywords: Maternal mental health; postpartum depression; qualitative research; primary healthcare; health service delivery; Nigeria; low- and middle-income countries.

Introduction

Global Burden of Maternal Mental Health

Maternal mental health has emerged as a major global public health priority because of its profound implications for the health and wellbeing of women, infants, families, and communities. Among maternal mental disorders, postpartum depression (PPD) is one of the most common complications of childbirth, affecting approximately 10–20% of women worldwide, with substantially higher prevalence reported in low- and middle-income countries (LMICs) where poverty, gender inequality, inadequate social protection, and limited access to quality healthcare increase women's vulnerability (Woody et al., 2017). Beyond its high prevalence, postpartum depression contributes significantly to the global burden of disease by impairing maternal functioning, reducing quality of life, and increasing healthcare utilisation, thereby placing additional pressure on already overstretched health systems (Ferrari et al., 2013).

The consequences of untreated postpartum depression extend well beyond maternal psychological wellbeing. Evidence consistently demonstrates that maternal depression adversely affects mother–infant bonding, breastfeeding practices, infant growth and development, emotional attachment, and children's long-term cognitive, behavioural, and psychosocial outcomes (Stein et al., 2014). Goodman et al. (2011) further reported strong associations between maternal depression and childhood anxiety, behavioural disorders, and emotional dysregulation, highlighting the intergenerational consequences of untreated maternal mental illness. Collectively, these findings underscore that maternal mental health is not solely an individual clinical concern but a critical determinant of maternal, child, and family health.

Despite increasing recognition of these adverse outcomes, maternal mental health continues to receive inadequate attention within global maternal and child health programmes. Fisher et al. (2012) observed that mental health services remain poorly integrated into maternal healthcare across many LMICs despite the availability of effective screening and intervention strategies. Similarly, Rahman et al. (2013) identified maternal mental health as one of the "grand challenges" for global health, arguing that psychological wellbeing should be regarded as an integral component of routine maternal healthcare rather than an optional service. Nevertheless, implementation has been slow, largely because maternal health programmes continue to prioritise physical obstetric outcomes while emotional and psychological wellbeing receive comparatively limited policy attention.

This persistent neglect reflects broader inequities within health systems. Women experiencing postpartum psychological distress frequently encounter delayed diagnosis, inadequate treatment, fragmented referral pathways, and persistent stigma, particularly in resource-constrained settings. These systemic deficiencies contribute to widening disparities in maternal health outcomes and undermine efforts to achieve Universal Health Coverage and Sustainable Development Goal 3, which emphasises ensuring healthy lives and promoting wellbeing for all.

Importantly, maternal mental health inequities are not unique to LMICs. Although the burden is disproportionately higher in resource-limited settings, evidence from high-income countries also demonstrates persistent gaps in routine screening, access to specialised services, continuity of care, and psychosocial support. Consequently, strengthening maternal mental healthcare represents a global health systems challenge requiring coordinated policy reforms, improved service integration, and culturally responsive models of care. Understanding how these challenges manifest within different contexts is therefore essential for designing equitable and sustainable maternal mental health services.

Nigeria as a Case Study

Nigeria provides an important context for understanding the complex interaction between maternal mental health, sociocultural practices, and health system performance. As the most populous country in Africa, Nigeria experiences a substantial burden of postpartum depression, with reported prevalence estimates ranging from approximately 19% to over 30% depending on study population and setting (Adewuya et al., 2005; Chibuzor et al., 2021). These figures exceed many global estimates and reinforce evidence that women in LMICs experience a disproportionate burden of maternal mental disorders.

Despite this considerable burden, maternal mental healthcare remains inadequately integrated into routine maternal health services. Screening for postpartum depression is rarely incorporated into antenatal or postnatal care, and structured counselling services are often unavailable within primary healthcare facilities. Abiodun (2006) observed that healthcare providers frequently rely on observable emotional distress rather than validated screening instruments, resulting in under-recognition of postpartum depression and missed opportunities for early intervention. Furthermore, Gureje et al. (2019) reported that referral pathways for specialised mental healthcare remain poorly developed, leaving many women without appropriate assessment or treatment even after symptoms are identified.

The Nigerian experience also illustrates the important influence of sociocultural factors on maternal mental health. Traditional postpartum care practices, particularly *Omugwo* among the Igbo, provide emotional, nutritional, and practical support to new mothers during the postnatal period (Okeke, 2013). When implemented within supportive family environments, these practices may enhance maternal recovery and psychological wellbeing. However, Nwoye (2015) noted that unrealistic expectations, criticism, and family conflict may transform these same practices into sources of psychological distress, thereby reinforcing stigma and discouraging women from disclosing emotional difficulties. These contrasting experiences highlight the need for culturally responsive maternal mental health interventions that preserve beneficial traditional support while addressing practices that may inadvertently contribute to emotional distress.

Nigeria also exemplifies broader health system inequities affecting many LMICs. Mental health services remain chronically underfunded, specialist personnel are limited, and primary healthcare workers often receive little formal training in recognising or managing maternal mental health conditions. Nevertheless, evidence suggests that strengthening primary healthcare capacity can substantially improve maternal mental health outcomes. Oladeji et al. (2019) demonstrated that

training primary healthcare workers to identify and manage common mental disorders improved service delivery, supporting recommendations for integrating maternal mental healthcare into routine primary care. These findings illustrate that the principal challenge lies not in the absence of evidence but in translating existing knowledge into sustainable health system interventions.

Accordingly, Nigeria provides valuable lessons for other LMICs facing similar constraints. The coexistence of high disease burden, cultural influences, limited mental health resources, and fragmented service delivery offers an important opportunity to examine how health systems can be redesigned to improve maternal mental healthcare while remaining responsive to local contexts.

Rationale for a Health Service Design and Implementation Perspective

Although extensive research has documented the prevalence, determinants, and consequences of postpartum depression, comparatively less attention has been devoted to understanding how maternal mental health services should be organised and implemented within routine healthcare systems. Much of the existing literature has concentrated on identifying epidemiological patterns and associated risk factors (Adewuya et al., 2005; Abiodun, 2006; Chibuzor et al., 2021), providing valuable evidence regarding the magnitude of the problem but offering relatively limited guidance for strengthening health service delivery.

A health service design perspective shifts attention from describing the burden of postpartum depression to examining how health systems can respond more effectively to women's needs. This perspective recognises that effective maternal mental healthcare requires coordinated service delivery involving routine screening, timely referral pathways, culturally appropriate counselling, community engagement, and continuity of psychosocial support. Rather than functioning as isolated interventions, these components should be integrated into existing maternal and child healthcare programmes to maximise accessibility and sustainability.

Evidence from LMICs increasingly supports such integrated approaches. Rahman et al. (2013) demonstrated that incorporating maternal mental health into routine maternal and child healthcare can improve both maternal psychological wellbeing and child health outcomes. Similarly, Patel et al. (2018) highlighted the effectiveness of task-sharing approaches, whereby appropriately trained non-specialist healthcare workers deliver evidence-based mental healthcare within primary care settings. These strategies are particularly relevant in resource-constrained environments where specialist mental health professionals remain scarce.

Equally important is the incorporation of women's lived experiences into service design. Qualitative evidence consistently demonstrates that postpartum women value respectful communication, emotional validation, family involvement, continuity of care, and accessible peer support. These experiences provide essential insights for developing culturally appropriate services that respond to women's expressed needs rather than relying solely on clinician-centred models of care.

Against this background, this review synthesises current evidence on maternal mental health service delivery, using Nigeria as a case study to examine systemic barriers, sociocultural influences, and opportunities for health system strengthening. By integrating international

evidence with context-specific literature, the review identifies practical strategies for improving maternal mental healthcare and highlights lessons that may inform policy, programme implementation, and future research across Nigeria and other low- and middle-income countries.

Contribution to Global Readership

The significance of this review extends beyond Nigeria by positioning local experiences within the broader context of global maternal mental health and health system strengthening. Although grounded in evidence from Nigeria, the challenges identified are characteristic of many low- and middle-income countries (LMICs), where maternal mental health remains inadequately integrated into routine maternal healthcare. Consequently, the review offers context-specific evidence while generating lessons that are broadly applicable to health systems seeking to improve maternal mental healthcare. This aligns closely with the mission of EMSAJ Publishing Global, which promotes evidence-informed scholarship capable of advancing healthcare policy, practice, and implementation across diverse settings.

First, the review reinforces universal principles underpinning effective maternal mental healthcare. Across the Nigerian studies reviewed, women consistently identified respectful communication, psychosocial support, family involvement, and opportunities for peer interaction as essential components of quality care. These priorities are consistent with evidence from South Asia, Latin America, and high-income countries, where woman-centred interventions have been associated with improved psychological wellbeing and greater utilisation of maternal health services (Rahman et al., 2013; Dennis, 2013). The convergence of these findings suggests that effective maternal mental health services should be designed around women's lived experiences while remaining responsive to local cultural contexts.

Second, the review contributes to ongoing discussions on health equity by demonstrating how systemic neglect of maternal mental health perpetuates disparities in healthcare access and outcomes. Across many LMICs, maternal health programmes have historically prioritised obstetric outcomes and infant survival, while psychological wellbeing has received comparatively limited policy attention (Fisher et al., 2012). The Nigerian evidence illustrates how this imbalance contributes to delayed diagnosis, inadequate treatment, fragmented referral pathways, and persistent stigma. Addressing these inequities requires integrating mental health into routine maternal healthcare rather than treating it as a separate or specialist service.

Third, the review identifies practical strategies for strengthening maternal mental health services. Evidence consistently supports integrating routine mental health screening into primary healthcare, improving healthcare providers' competencies in empathetic communication, strengthening referral systems, involving families in maternal care, and establishing community-based peer support programmes. These recommendations are consistent with global evidence supporting task-sharing approaches in which appropriately trained non-specialist healthcare workers deliver basic mental healthcare within primary care settings (Patel et al., 2018). Such approaches are particularly relevant for resource-constrained health systems where specialist mental health services remain limited.

The review also highlights the importance of culturally responsive service design. Traditional postpartum support systems, including *Omugwo* in southeastern Nigeria, demonstrate that cultural practices may either promote maternal wellbeing or contribute to psychological distress depending on family dynamics and social expectations. Comparable postpartum traditions exist across South Asia and Latin America, emphasising that culturally appropriate maternal mental health interventions should strengthen supportive practices while addressing those that may reinforce stigma or emotional distress.

Finally, this review demonstrates the value of qualitative evidence in informing maternal mental health policy and practice. While epidemiological studies quantify the burden of postpartum depression, qualitative research provides deeper understanding of women's experiences, perceptions, and priorities, thereby informing more responsive and equitable health service design. By synthesising these perspectives, the review contributes evidence that may guide policymakers, programme managers, clinicians, and researchers seeking to strengthen maternal mental healthcare in Nigeria and other LMICs.

Review of Service Gaps

Maternal mental health services in Nigeria, consistent with many LMICs, remain constrained by substantial deficiencies across the continuum of care. Existing evidence identifies persistent weaknesses in routine screening, counselling services, referral mechanisms, workforce capacity, and policy implementation. These shortcomings contribute to delayed identification of postpartum depression, inadequate access to treatment, and continued neglect of maternal psychological wellbeing. Examining these service gaps is essential for informing health system reforms that promote equitable, integrated, and culturally responsive maternal mental healthcare.

Screening Gaps

Routine screening for postpartum depression remains largely absent within primary healthcare services in Nigeria despite the availability of validated instruments such as the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987). Current practice relies predominantly on clinicians recognising overt emotional distress rather than using structured assessment tools, increasing the likelihood that women experiencing mild or moderate symptoms remain unidentified (Abiodun, 2006). Consequently, opportunities for early diagnosis and timely intervention are frequently missed.

The limited use of routine screening reflects broader structural challenges within the health system. Maternal mental health assessment has not been systematically incorporated into standard maternal healthcare protocols, and many frontline healthcare providers receive limited training in recognising common perinatal mental disorders. Women therefore report that emotional concerns are frequently overlooked or dismissed during routine postnatal consultations, reinforcing stigma and reducing help-seeking behaviour (Adewuya et al., 2005).

International evidence demonstrates that systematic screening substantially improves case identification and facilitates timely referral for appropriate care. O'Connor et al. (2016) reported

improved detection rates following integration of validated screening tools into routine maternal healthcare, while Rahman et al. (2013) demonstrated that screening can be effectively implemented in resource-constrained settings through task-sharing approaches involving trained non-specialist healthcare workers. These findings suggest that integrating validated screening instruments into routine postnatal care, supported by workforce training, supervision, and clear referral pathways, represents an achievable strategy for strengthening maternal mental healthcare in Nigeria.

Counselling Gaps

The availability of structured counselling services for women experiencing postpartum psychological distress remains extremely limited within Nigerian maternal healthcare facilities. Evidence consistently indicates that emotional concerns raised by postpartum women are frequently minimised or overlooked, and opportunities for psychosocial support are often absent (Adewuya et al., 2005). As a result, many women leave healthcare facilities without receiving appropriate guidance, emotional support, or referral for specialised care. The absence of counselling services reinforces the social stigma surrounding maternal mental illness. Without confidential opportunities to discuss emotional difficulties, many women internalise feelings of guilt, shame, and inadequacy while attempting to conform to prevailing cultural expectations of motherhood. These experiences may delay help-seeking and contribute to worsening psychological distress.

Evidence from both high-income countries and LMICs demonstrates the effectiveness of counselling and psychosocial interventions in improving maternal mental health outcomes. Dennis (2013) reported significant reductions in postpartum depression through peer support and counselling interventions, whereas Rahman et al. (2008) demonstrated the effectiveness of cognitive behavioural interventions delivered by trained community health workers within resource-constrained settings. These findings indicate that integrating culturally appropriate counselling into routine maternal healthcare is both feasible and effective.

Strengthening counselling services requires investment in workforce training, supportive supervision, and the development of standardised psychosocial care pathways that are integrated within existing maternal and child health programmes. Such reforms would promote earlier intervention, improve continuity of care, and contribute to more comprehensive maternal mental healthcare delivery.

Referral Pathway Gaps

Effective referral systems are fundamental to ensuring continuity of care for women experiencing postpartum depression (PPD). However, referral pathways for maternal mental healthcare remain poorly developed in many low- and middle-income countries (LMICs), including Nigeria. Although primary healthcare providers may identify women experiencing psychological distress, referrals to specialist mental health services are often hindered by shortages of mental health professionals, poorly coordinated services, and the absence of standardized referral protocols.

These challenges contribute to substantial treatment gaps and leave many women without appropriate assessment or follow-up care (Patel et al., 2018; Saxena et al., 2007).

The inadequacy of referral pathways reflects broader fragmentation within health systems, where maternal health and mental health services frequently operate independently with limited coordination. Women requiring specialist mental healthcare often encounter inaccessible services, long waiting times, financial barriers, and stigma associated with psychiatric care. Such structural barriers discourage both healthcare providers and postpartum women from pursuing referrals, resulting in delayed diagnosis, interrupted continuity of care, and poorer maternal mental health outcomes (Semrau et al., 2015; Thornicroft et al., 2016).

Evidence from both high-income countries and LMICs demonstrates that routine depression screening is effective only when integrated with accessible referral and treatment services. O'Connor et al. (2016) concluded that screening programmes improve outcomes only when linked to systems capable of providing accurate diagnosis, appropriate treatment, and follow-up care. Likewise, task-sharing interventions in LMICs have shown that clearly defined referral pathways enable non-specialist healthcare workers to identify women requiring specialist assessment while maintaining continuity of care (Patel et al., 2018; van Ginneken et al., 2013).

Strengthening referral pathways should therefore constitute a central component of maternal mental health service reform. Standardized referral protocols, stronger collaboration between primary healthcare providers and specialist mental health services, improved communication across levels of care, and community initiatives to reduce mental health stigma are essential for improving continuity of care and reducing the maternal mental health treatment gap (Thornicroft et al., 2016; Patel et al., 2018; Saxena et al., 2007).

Provider Training Gaps

The successful integration of maternal mental health into routine maternal healthcare depends largely on the competence, confidence, and preparedness of frontline healthcare providers. Nevertheless, evidence from many LMICs indicates that healthcare professionals receive limited formal education and clinical training in recognising, assessing, and managing perinatal mental disorders. Insufficient workforce capacity remains one of the principal barriers to integrating mental healthcare into primary healthcare systems (Kakuma et al., 2011; Fisher et al., 2012).

Limited provider training contributes directly to the under-recognition of postpartum depression. Healthcare workers who are unfamiliar with common perinatal mental disorders may regard depressive symptoms as normal postpartum experiences, fail to utilise validated screening instruments, or overlook opportunities to provide psychosocial support and appropriate referrals. These deficiencies have been consistently identified across resource-constrained health systems where mental health services remain inadequately integrated into routine maternal healthcare (Fisher et al., 2012; van Ginneken et al., 2013).

Workforce challenges are further compounded by limited opportunities for continuing professional development and supportive supervision. In many LMICs, maternal mental health receives little emphasis within undergraduate medical, nursing, and midwifery curricula, while in-service

training programmes rarely include competencies related to perinatal mental health assessment, counselling, and referral. Consequently, many healthcare providers report limited confidence in managing maternal psychological distress (Semrau et al., 2015; Kakuma et al., 2011).

Evidence from implementation research demonstrates that provider training is among the most effective strategies for strengthening maternal mental healthcare. Rahman et al. (2008) demonstrated that community health workers trained in cognitive behavioural approaches successfully delivered psychosocial interventions that significantly improved maternal mental health outcomes. Similarly, the Lancet Commission on Global Mental Health and Sustainable Development emphasised that task-sharing interventions require structured training, ongoing supervision, and clear clinical protocols to achieve sustainable improvements in service delivery (Patel et al., 2018).

Accordingly, maternal mental health should be systematically incorporated into undergraduate health professional education, continuing professional development programmes, and routine supportive supervision. Building competencies in screening, counselling, psychosocial support, referral, and culturally responsive communication will strengthen service delivery while promoting the sustainable integration of maternal mental healthcare into primary healthcare systems (Patel et al., 2018; Rahman et al., 2008; van Ginneken et al., 2013).

Systemic Implications

The evidence reviewed demonstrates that deficiencies in maternal mental healthcare are interconnected rather than isolated. Weak screening systems contribute to under-diagnosis, limited counselling services reduce access to psychosocial support, poorly developed referral pathways impede specialist care, and inadequate workforce capacity compromises the quality of service delivery. Together, these deficiencies create fragmented models of care that perpetuate inequities in access to diagnosis, treatment, and recovery for women experiencing postpartum depression (Fisher et al., 2012; Patel et al., 2018; Thornicroft et al., 2016).

Addressing these challenges requires comprehensive health system strengthening rather than isolated interventions. Evidence consistently demonstrates that integrating routine screening, workforce development, structured referral systems, psychosocial support, and collaborative models of care produces more sustainable improvements than implementing individual interventions in isolation. Such integrated approaches are particularly important in resource-constrained settings, where strengthening existing primary healthcare platforms provides the greatest opportunity to reduce treatment gaps and improve maternal mental health outcomes (Patel et al., 2018; Semrau et al., 2015; van Ginneken et al., 2013).

Counselling Gaps

Access to structured counselling services for maternal mental health remains limited across many healthcare facilities in Nigeria and other low- and middle-income countries (LMICs). Women experiencing postpartum depression frequently report that their emotional concerns receive little attention during routine maternal healthcare encounters, with greater emphasis placed on physical

recovery and infant wellbeing than on maternal psychological health (Adewuya et al., 2005; Fisher et al., 2012). Consequently, opportunities for early psychosocial intervention are often missed, leaving many women without the emotional support needed during the postpartum period.

The limited availability of counselling services contributes to persistent stigma surrounding maternal mental illness. In the absence of safe and supportive environments where women can openly discuss psychological distress, many internalise feelings of guilt, shame, and inadequacy while attempting to conform to prevailing cultural expectations of motherhood. This reluctance to disclose symptoms delays help-seeking, reduces opportunities for early intervention, and may worsen maternal and infant outcomes (Stein et al., 2014; Fisher et al., 2012). These findings underscore the importance of integrating psychosocial support into routine maternal healthcare rather than treating mental health as a separate component of service delivery.

Substantial evidence supports the effectiveness of counselling and psychosocial interventions for preventing and managing postpartum depression. Dennis and Dowswell (2013), in a Cochrane systematic review, reported that psychosocial and psychological interventions—including professional counselling, peer support, and cognitive behavioural approaches—significantly reduced depressive symptoms among postpartum women. Similarly, Rahman et al. (2008) demonstrated that cognitive behavioural interventions delivered by trained community health workers in rural Pakistan produced significant improvements in maternal mental health, illustrating the feasibility of integrating counselling into primary healthcare within resource-constrained settings.

Integrating counselling into routine maternal health services therefore represents a critical component of health system strengthening. This requires healthcare providers to be trained in empathetic communication, basic psychosocial counselling, and culturally responsive approaches to maternal mental healthcare. Counselling services should be supported by standardised clinical protocols, effective supervision, and clear referral mechanisms to ensure continuity of care. Such integrated approaches have consistently been identified as effective strategies for improving maternal mental health outcomes while reducing treatment gaps in LMICs (Patel et al., 2018; van Ginneken et al., 2013).

Referral Pathway Gaps

Effective referral systems are fundamental to ensuring continuity of care for women experiencing postpartum depression (PPD). However, referral pathways for maternal mental healthcare remain poorly developed in many low- and middle-income countries (LMICs), including Nigeria. Although primary healthcare providers may identify women experiencing psychological distress, referrals to specialist mental health services are often hindered by shortages of mental health professionals, poorly coordinated services, and the absence of standardized referral protocols. These challenges contribute to substantial treatment gaps and leave many women without appropriate assessment or follow-up care (Patel et al., 2018; Saxena et al., 2007).

The inadequacy of referral pathways reflects broader fragmentation within health systems, where maternal health and mental health services frequently operate independently with limited coordination. Women requiring specialist mental healthcare often encounter inaccessible services,

long waiting times, financial barriers, and stigma associated with psychiatric care. Such structural barriers discourage both healthcare providers and postpartum women from pursuing referrals, resulting in delayed diagnosis, interrupted continuity of care, and poorer maternal mental health outcomes (Semrau et al., 2015; Thornicroft et al., 2016).

Evidence from both high-income countries and LMICs demonstrates that routine depression screening is effective only when integrated with accessible referral and treatment services. O'Connor et al. (2016) concluded that screening programmes improve outcomes only when linked to systems capable of providing accurate diagnosis, appropriate treatment, and follow-up care. Likewise, task-sharing interventions in LMICs have shown that clearly defined referral pathways enable non-specialist healthcare workers to identify women requiring specialist assessment while maintaining continuity of care (Patel et al., 2018; van Ginneken et al., 2013).

Strengthening referral pathways should therefore constitute a central component of maternal mental health service reform. Standardized referral protocols, stronger collaboration between primary healthcare providers and specialist mental health services, improved communication across levels of care, and community initiatives to reduce mental health stigma are essential for improving continuity of care and reducing the maternal mental health treatment gap (Thornicroft et al., 2016; Patel et al., 2018; Saxena et al., 2007).

Provider Training Gaps

The successful integration of maternal mental health into routine maternal healthcare depends largely on the competence, confidence, and preparedness of frontline healthcare providers. Nevertheless, evidence from many LMICs indicates that healthcare professionals receive limited formal education and clinical training in recognising, assessing, and managing perinatal mental disorders. Insufficient workforce capacity remains one of the principal barriers to integrating mental healthcare into primary healthcare systems (Kakuma et al., 2011; Fisher et al., 2012).

Limited provider training contributes directly to the under-recognition of postpartum depression. Healthcare workers who are unfamiliar with common perinatal mental disorders may regard depressive symptoms as normal postpartum experiences, fail to utilise validated screening instruments, or overlook opportunities to provide psychosocial support and appropriate referrals. These deficiencies have been consistently identified across resource-constrained health systems where mental health services remain inadequately integrated into routine maternal healthcare (Fisher et al., 2012; van Ginneken et al., 2013).

Workforce challenges are further compounded by limited opportunities for continuing professional development and supportive supervision. In many LMICs, maternal mental health receives little emphasis within undergraduate medical, nursing, and midwifery curricula, while in-service training programmes rarely include competencies related to perinatal mental health assessment, counselling, and referral. Consequently, many healthcare providers report limited confidence in managing maternal psychological distress (Semrau et al., 2015; Kakuma et al., 2011).

Implementation research consistently demonstrates that provider training is one of the most effective strategies for strengthening maternal mental healthcare. Rahman et al. (2008) demonstrated that community health workers trained in cognitive behavioural techniques successfully delivered psychosocial interventions that significantly improved maternal mental health outcomes. Likewise, the Lancet Commission on Global Mental Health and Sustainable Development emphasised that task-sharing interventions require structured training, supportive supervision, and clearly defined clinical protocols to achieve sustainable improvements in service delivery (Patel et al., 2018).

Accordingly, maternal mental health should be systematically incorporated into undergraduate health professional education, continuing professional development programmes, and routine supportive supervision. Building competencies in screening, counselling, psychosocial support, referral, and culturally responsive communication will strengthen service delivery while promoting the sustainable integration of maternal mental healthcare into primary healthcare systems (Patel et al., 2018; van Ginneken et al., 2013; Kakuma et al., 2011).

Systemic Implications

The evidence reviewed demonstrates that deficiencies in maternal mental healthcare are interconnected rather than isolated. Weak screening systems contribute to under-diagnosis, inadequate counselling limits psychosocial support, poorly coordinated referral pathways impede timely access to specialist care, and insufficient workforce capacity compromises the quality and continuity of maternal mental healthcare. Collectively, these deficiencies create fragmented care pathways that perpetuate inequities in access to diagnosis, treatment, and recovery among women experiencing postpartum depression (Fisher et al., 2012; Patel et al., 2018; Thornicroft et al., 2016).

Addressing these challenges requires comprehensive health system strengthening rather than isolated interventions. Evidence consistently indicates that integrating routine screening, counselling services, workforce development, structured referral systems, and collaborative models of care within primary healthcare produces more sustainable improvements in maternal mental health than implementing individual interventions in isolation. Such integrated approaches are particularly relevant in resource-constrained settings, where strengthening existing maternal and child health services offers the greatest opportunity to reduce treatment gaps and improve maternal wellbeing (Patel et al., 2018; Semrau et al., 2015; van Ginneken et al., 2013).

Recommendations for Service Design

The evidence reviewed highlights significant deficiencies in maternal mental healthcare that require comprehensive health system reforms rather than isolated interventions. Addressing these gaps demands strategies that strengthen primary healthcare, expand access to psychosocial support, improve workforce capacity, and enhance continuity of care. Building upon evidence from implementation research and global maternal mental health literature, five interrelated strategies are proposed: integration of maternal mental health into primary healthcare, family-inclusive counselling, peer support interventions, provider capacity building, and task-sharing approaches.

Integration into Primary Healthcare

Integrating maternal mental health into routine primary healthcare represents one of the most effective approaches for reducing the treatment gap for postpartum depression. Since primary healthcare facilities provide the first point of contact for most pregnant and postpartum women, embedding routine mental health assessment within antenatal and postnatal services offers an opportunity for early identification, timely intervention, and continuity of care. Integrating psychological assessment into routine maternal healthcare also contributes to reducing stigma by positioning maternal emotional wellbeing as an essential component of comprehensive maternal care rather than a specialised mental health concern (Patel et al., 2018; Fisher et al., 2012).

Evidence consistently demonstrates that routine depression screening improves maternal outcomes only when accompanied by appropriate assessment, treatment, and follow-up services. A systematic evidence review by O'Connor et al. (2016) concluded that depression screening should be implemented within health systems capable of providing diagnosis, counselling, referral, and ongoing management. Similarly, global implementation research has shown that integrating maternal mental healthcare into existing maternal and child health programmes substantially improves access to care in resource-constrained settings (Patel et al., 2018; van Ginneken et al., 2013).

Successful integration also requires supportive national policies and clinical guidelines. Maternal mental health should be incorporated into routine maternal healthcare protocols, with standardised procedures for screening, counselling, referral, documentation, and follow-up. Policy support provides the institutional framework necessary for sustainable implementation while ensuring consistency across healthcare facilities (World Health Organization, 2022; Patel et al., 2018).

Family-Inclusive Counselling

Family support is widely recognised as a major determinant of maternal psychological wellbeing during the postpartum period. In many African societies, including Nigeria, family members play central roles in providing emotional, practical, and social support following childbirth. However, inadequate understanding of postpartum depression may result in criticism, misunderstanding, or unrealistic expectations that exacerbate maternal distress rather than promote recovery (Fisher et al., 2012; Stein et al., 2014).

Family-inclusive counselling provides an opportunity to improve maternal mental health by involving spouses and significant family members in education, psychosocial support, and shared decision-making. Such interventions improve understanding of postpartum depression, encourage supportive family relationships, and reduce stigma associated with maternal psychological distress. Evidence indicates that family-centred psychosocial interventions strengthen treatment adherence, improve maternal coping, and promote healthier mother–infant relationships (Stein et al., 2014; Shorey et al., 2018).

Implementing family-inclusive counselling within routine maternal healthcare is particularly relevant for LMICs, where family members frequently constitute the primary source of postpartum

support. Integrating family education into counselling services therefore represents a culturally appropriate strategy for strengthening maternal mental healthcare while enhancing community acceptance of psychological interventions (Patel et al., 2018; Fisher et al., 2012).

Peer Support Interventions

Peer support interventions provide an important complement to formal healthcare services by creating opportunities for women to share experiences, reduce social isolation, and develop adaptive coping strategies. Women with postpartum depression frequently report feelings of loneliness, self-blame, and perceived social isolation, all of which may discourage disclosure and delay help-seeking. Structured peer support groups offer psychologically safe environments where mothers can exchange experiences, receive emotional encouragement, and normalise common postpartum challenges (Dennis & Dowswell, 2013; Shorey et al., 2018).

Evidence from systematic reviews demonstrates that peer support interventions significantly reduce depressive symptoms among postpartum women and improve emotional wellbeing. Dennis and Dowswell (2013) found that psychosocial interventions, including peer support programmes, effectively reduced the incidence and severity of postpartum depression. Likewise, Rahman et al. (2008) demonstrated that community-based psychosocial support delivered by trained lay workers significantly improved maternal mental health outcomes within resource-constrained settings. Within Nigeria, peer support groups could be integrated into primary healthcare centres, maternal support clinics, or existing community health programmes. Such approaches provide cost-effective opportunities to extend psychosocial care while strengthening community participation and reducing stigma surrounding maternal mental health (Patel et al., 2018; van Ginneken et al., 2013).

Provider Capacity Building

Healthcare providers represent the cornerstone of effective maternal mental healthcare. However, inadequate knowledge and limited confidence in recognising and managing perinatal mental disorders continue to impede service delivery across many LMICs. Strengthening provider capacity is therefore fundamental to improving detection, counselling, referral, and long-term management of postpartum depression (Kakuma et al., 2011; Fisher et al., 2012).

Capacity building should extend beyond short-term workshops to include undergraduate education, continuing professional development, supportive supervision, and competency-based clinical training. Healthcare providers require practical skills in administering validated screening instruments, delivering basic psychosocial counselling, recognising severe mental illness, and coordinating referrals within multidisciplinary care pathways (Patel et al., 2018; van Ginneken et al., 2013).

Evidence consistently demonstrates that provider training improves service quality and patient outcomes. Rahman et al. (2008) showed that trained community health workers successfully delivered cognitive behavioural interventions that significantly reduced maternal depressive symptoms. Similarly, the Lancet Commission on Global Mental Health and Sustainable Development identified workforce development as a prerequisite for expanding equitable access to mental healthcare worldwide (Patel et al., 2018).

Task-Sharing Approaches

Task-sharing has emerged as one of the most effective and scalable strategies for addressing shortages of specialist mental health professionals in LMICs. Under this model, appropriately trained non-specialist health workers including nurses, midwives, community health workers, and primary care physicians deliver evidence-based mental health interventions under specialist supervision (Patel et al., 2018; van Ginneken et al., 2013).

Given the limited mental health workforce in Nigeria, task-sharing provides a realistic approach for expanding maternal mental health services without relying exclusively on psychiatrists or clinical psychologists. Non-specialist providers can administer validated screening tools, deliver basic psychosocial counselling, facilitate peer support programmes, monitor treatment progress, and coordinate referrals when specialist intervention becomes necessary (Rahman et al., 2008; Patel et al., 2018).

Systematic reviews consistently demonstrate that task-sharing interventions improve access to care, reduce treatment gaps, and achieve clinical outcomes comparable to specialist-led services for common mental disorders. Consequently, task-sharing should be regarded as a central component of maternal mental health service reform within resource-constrained healthcare systems (van Ginneken et al., 2013; Patel et al., 2018).

Systemic Implications

The recommendations presented are complementary and mutually reinforcing rather than independent interventions. Integrating maternal mental healthcare into primary healthcare establishes the service platform, family-inclusive counselling strengthens social support, peer support interventions reduce stigma and isolation, provider capacity building improves service quality, and task-sharing expands access to care. Collectively, these evidence-based strategies provide a comprehensive framework for strengthening maternal mental healthcare while addressing longstanding inequities in access, quality, and continuity of care. Implementing these recommendations within existing primary healthcare systems offers a practical pathway toward achieving equitable, culturally responsive, and sustainable maternal mental health services in Nigeria and other low- and middle-income countries (Patel et al., 2018; Fisher et al., 2012; van Ginneken et al., 2013).

Global Lessons

Maternal Mental Health as a Global Health Equity Issue

Maternal mental health is increasingly recognised as a fundamental component of global health equity rather than a secondary aspect of maternal healthcare. Despite substantial evidence demonstrating the adverse consequences of postpartum depression for maternal wellbeing, infant development, and family functioning, maternal mental health remains inadequately integrated into routine maternal and child health services, particularly in low- and middle-income countries (LMICs) (Fisher et al., 2012; Patel et al., 2018). This disparity reflects broader inequities in health

systems, where interventions have historically prioritised maternal survival and infant health while overlooking women's psychological wellbeing.

The Nigerian experience reflects challenges that extend well beyond national boundaries. Similar deficiencies in screening, diagnosis, treatment, referral, and follow-up have been reported across many LMICs, where limited financial resources, shortages of trained personnel, fragmented health systems, and pervasive stigma continue to constrain access to maternal mental healthcare (Patel et al., 2018; Kakuma et al., 2011). Addressing these inequities requires maternal mental health to be embedded within universal health coverage agendas and recognised as an essential component of quality maternal healthcare rather than an optional service.

Transferability of Lessons Across Health Systems

Although this review focuses on Nigeria, the lessons identified are broadly applicable across diverse healthcare settings. Strategies including integration of maternal mental health into primary healthcare, family-centred care, peer support interventions, provider capacity building, and task-sharing have demonstrated effectiveness across both high-income countries and resource-constrained settings (Patel et al., 2018; van Ginneken et al., 2013).

Evidence from Pakistan demonstrates that community health workers trained to deliver psychosocial interventions can significantly improve maternal mental health outcomes, illustrating the feasibility of integrating mental healthcare within existing primary healthcare systems (Rahman et al., 2008). Similarly, systematic reviews have shown that psychosocial interventions and peer support programmes reduce depressive symptoms and improve maternal wellbeing across diverse cultural and healthcare contexts (Dennis & Dowswell, 2013). These findings suggest that while implementation strategies should be adapted to local sociocultural contexts, the underlying principles of early identification, accessible psychosocial support, workforce strengthening, and community engagement are universally relevant.

Cultural Sensitivity in Maternal Mental Health Service Design

Effective maternal mental healthcare must be culturally responsive. Cultural beliefs, family structures, and traditional postpartum practices influence how women perceive psychological distress, seek care, and engage with healthcare services. Consequently, interventions that fail to acknowledge these contextual factors may experience limited acceptability and reduced effectiveness (Fisher et al., 2012).

Within Nigeria, traditional postpartum support practices such as *Omugwo* demonstrate the complex relationship between culture and maternal wellbeing. Supportive family involvement can promote emotional recovery and strengthen maternal confidence, whereas unsupportive or critical family interactions may intensify psychological distress. Similar family-centred postpartum traditions exist across many regions, including South Asia and Latin America, highlighting the universal importance of culturally appropriate maternal mental healthcare. Rather than replacing existing cultural practices, health services should work alongside families and communities to strengthen supportive traditions while addressing practices that contribute to stigma or emotional distress (Stein et al., 2014; Patel et al., 2018).

Policy and Practice Implications

The evidence reviewed has important implications for health policy and service delivery. Integrating maternal mental health into routine primary healthcare should be prioritised within national maternal and child health programmes through standardised screening, structured counselling services, strengthened referral pathways, and continuous workforce development. These reforms should be supported by national clinical guidelines, sustainable financing, and routine monitoring and evaluation systems to ensure quality implementation (World Health Organization, 2022; Patel et al., 2018).

Expanding task-sharing approaches offers a practical strategy for addressing severe workforce shortages while increasing equitable access to maternal mental healthcare. Evidence consistently demonstrates that appropriately trained non-specialist healthcare workers can safely and effectively deliver evidence-based psychosocial interventions under appropriate supervision (Rahman et al., 2008; van Ginneken et al., 2013). Strengthening community participation through peer support programmes and family engagement initiatives further enhances service accessibility while reducing stigma surrounding maternal mental illness.

Systemic Implications

The Nigerian experience illustrates that improving maternal mental health requires coordinated health system reform rather than isolated clinical interventions. Weak screening systems, inadequate counselling services, fragmented referral pathways, limited workforce capacity, and persistent stigma interact to create substantial barriers to care. Addressing these challenges therefore requires integrated approaches that simultaneously strengthen governance, workforce development, service delivery, community engagement, and financing. Such reforms align closely with international commitments to universal health coverage and the Sustainable Development Goals, particularly the commitment to ensuring equitable access to quality healthcare for all populations (United Nations, 2015; Patel et al., 2018).

Conclusion

Maternal mental health remains one of the most neglected components of maternal healthcare despite its profound implications for women, infants, families, and health systems. This review demonstrates that postpartum depression constitutes a significant public health challenge in Nigeria, reflecting broader inequities that persist across many low- and middle-income countries. Persistent deficiencies in routine screening, psychosocial counselling, referral systems, workforce capacity, and service integration continue to limit timely identification and management of maternal mental disorders, contributing to preventable morbidity and widening health inequalities.

The evidence further illustrates that maternal mental health is shaped by an interaction of health system factors, sociocultural influences, and community support structures. Traditional postpartum practices such as *Omugwo* illustrate how family and cultural contexts can either promote maternal resilience or contribute to emotional distress depending on the nature of support

provided. These findings reinforce the importance of designing maternal mental healthcare that is culturally responsive while remaining evidence-based and person-centred

Addressing the maternal mental health treatment gap requires comprehensive health system strengthening rather than isolated interventions. Integrating maternal mental health into primary healthcare, expanding provider capacity, strengthening referral systems, promoting family-centred care, establishing peer support programmes, and implementing task-sharing approaches represent complementary strategies that collectively improve accessibility, quality, and continuity of care. These interventions have consistently demonstrated effectiveness across diverse healthcare settings and provide practical pathways for improving maternal mental healthcare within resource-constrained environments.

Although this review draws primarily on evidence from Nigeria, its implications extend beyond national boundaries. The systemic barriers identified including inadequate integration of mental health into maternal services, workforce shortages, limited access to psychosocial support, and persistent stigma are shared across many LMICs and remain relevant to broader global efforts aimed at achieving equitable maternal healthcare. Consequently, strengthening maternal mental health services should be recognised as an essential component of universal health coverage, health system resilience, and sustainable development.

Future policy and implementation efforts should prioritise the integration of maternal mental health into routine maternal healthcare through evidence-based, culturally responsive, and sustainable service delivery models. Such investments have the potential to improve maternal wellbeing, strengthen early childhood development, reduce health inequities, and contribute substantially to achieving the Sustainable Development Goals and broader global commitments to maternal and child health.

References

Abiodun, O. A. (2006). Postnatal depression in primary care populations in Nigeria. *General Hospital Psychiatry, 28*(2), 133–136.

Adewuya, A. O., Eegunranti, A. B., & Lawal, A. M. (2005). Prevalence of postnatal depression in Western Nigerian women: A controlled study. *International Journal of Psychiatry in Clinical Practice, 9*(1), 60–64.

Dennis, C. L., & Dowswell, T. (2013). Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database of Systematic Reviews*, (2), CD001134.

Fisher, J., Cabral de Mello, M., Patel, V., Rahman, A., Tran, T., Holton, S., & Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: A systematic review. *Bulletin of the World Health Organization, 90*(2), 139–149.

Gureje, O., Abdulmalik, J., Kola, L., Musa, E., Yasamy, M. T., & Adebayo, K. (2015). Integrating mental health into primary care in Nigeria: Report of a demonstration project using the mental health gap action programme intervention guide. *BMC Health Services Research, 15*, 242.

Kakuma, R., Minas, H., van Ginneken, N., Dal Poz, M. R., Desiraju, K., Morris, J. E., Saxena, S., & Scheffler, R. M. (2011). Human resources for mental health care: Current situation and strategies for action. *The Lancet, 378*(9803), 1654–1663.

Lund, C., Brooke-Sumner, C., Baingana, F., Baron, E. C., Breuer, E., Chandra, P., Haushofer, J., Herrman, H., Jordans, M., Kieling, C., Medina-Mora, M. E., Morgan, E., Omigbodun, O., Tol, W., Patel, V., & Saxena, S. (2018). Social determinants of mental disorders and the Sustainable Development Goals: A systematic review of reviews. *The Lancet Psychiatry, 5*(4), 357–369.

O'Connor, E., Rossom, R. C., Henninger, M., Groom, H. C., & Burda, B. U. (2016). Screening for depression in adults: An updated systematic evidence review for the U.S. Preventive Services Task Force. *JAMA, 315*(4), 380–387.

Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., Chisholm, D., Collins, P. Y., Cooper, J. L., Eaton, J., Herrman, H., Herzallah, M. M., Huang, Y., Jordans, M., Kleinman, A., Medina-Mora, M. E., Morgan, E., Niaz, U., Omigbodun, O., Prince, M., Rahman, A., Saraceno, B., Sarkar, B. K., De Silva, M., Singh, I., Stein, D. J., Sunkel, C., & UnÜtzer, J. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet, 392*(10157), 1553–1598.

Rahman, A., Malik, A., Sikander, S., Roberts, C., & Creed, F. (2008). Cognitive behaviour therapy–based intervention by community health workers for mothers with depression and their infants in rural Pakistan: A cluster-randomised controlled trial. *The Lancet, 372*(9642), 902–909.

Rahman, A., Fisher, J., Bower, P., Luchters, S., Tran, T., Yasamy, M. T., Saxena, S., Waheed, W., & Patel, V. (2013). Interventions for common perinatal mental disorders in women in low- and middle-income countries: A systematic review and meta-analysis. *Bulletin of the World Health Organization, 91*(8), 593–601.

Saxena, S., Thornicroft, G., Knapp, M., & Whiteford, H. (2007). Resources for mental health: Scarcity, inequity, and inefficiency. *The Lancet, 370*(9590), 878–889.

Semrau, M., Evans-Lacko, S., Alem, A., Ayuso-Mateos, J. L., Chisholm, D., Gureje, O., Hanlon, C., Jordans, M., Kigozi, F., Lempp, H., Lund, C., Petersen, I., Shidhaye, R., Thornicroft, G., & Susser, E. (2015). Strengthening mental health systems in low- and middle-income countries: The Emerald programme. *BMC Medicine, 13*, 79.

Stein, A., Pearson, R. M., Goodman, S. H., Rapa, E., Rahman, A., McCallum, M., Howard, L. M., & Pariante, C. M. (2014). Effects of perinatal mental disorders on the fetus and child. *The Lancet, 384*(9956), 1800–1819.

Thornicroft, G., Chatterji, S., Evans-Lacko, S., Gruber, M., Sampson, N., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Andrade, L., Borges, G., et al. (2017). Undertreatment of people with major depressive disorder in 21 countries. *The British Journal of Psychiatry, 210*(2), 119–124.

United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.

van Ginneken, N., Tharyan, P., Lewin, S., Rao, G. N., Meera, S. M., Pian, J., Chandrashekar, S., & Patel, V. (2013). Non-specialist health worker interventions for the care of mental, neurological and substance-abuse disorders in low- and middle-income countries. *Cochrane Database of Systematic Reviews*, (11), CD009149.

World Health Organization. (2022). *World mental health report: Transforming mental health for all*. World Health Organization.