International Journal of Public Health, Pharmacy and Pharmacology, 10(1), 83-97, 2025
Print ISSN: (Print) ISSN 2516-0400
Online ISSN: (Online) ISSN 2516-0419
Website: https://www.eajournals.org/
Publication of the European Centre for Research Training and Development -UK

The Place of Male Partner Involvement in the Prevention of Mother-to-Child Transmission of Human Immunodeficiency Virus in Nigeria

Oluwatosin Esther Olafusi
Department of Maternal and Child Health Nursing,University of Ibadan, Ibadan, Nigeria

Beatrice Mgboro Ohaeri
Department of Medical Surgical Nursing,University of Ibadan, Ibadan, Nigeria

Margaret Omowaleola Akinwaare
Department of Maternal and Child Health Nursing, University of Ibadan, Ibadan, Nigeria

doi: https://doi.org/10.37745/ijphpp.15/vol10n18397 Published December 07, 2025

Citation: Olafusi O.E., Ohaeri B.M., and Akinwaare M.O. (2025) The Place of Male Partner Involvement in the Prevention of Mother-to-Child Transmission of Human Immunodeficiency Virus in Nigeria, *International Journal of Public Health, Pharmacy and Pharmacology*, 10(1), 83-97

Abstract: *The elimination of mother-to-child transmission (MTCT) of HIV remains a major public health priority in sub-Saharan Africa, where socio-cultural and systemic barriers limit the effectiveness of prevention interventions. Male partner involvement (MPI) in prevention of mother-to-child transmission (PMTCT) programmes has emerged as a critical strategy to improve maternal and infant health outcomes. This study examined the role of male partners in enhancing PMTCT services in Nigeria, highlighting the socio-cultural, behavioural, and systemic factors influencing their participation. Using a narrative review methodology, peer-reviewed articles, reports, and grey literature published between 2010 and 2024 were systematically analysed. Findings indicate that active male engagement through HIV testing, antenatal clinic attendance, financial and emotional support, and encouragement of ART adherence significantly reduces perinatal HIV transmission, improves retention in care, and promotes holistic family well-being. Socio-cultural norms, stigma, gendered perceptions of reproductive health, limited awareness, and health system constraints were identified as major barriers to MPI. Evidence further suggests that culturally sensitive interventions, community education campaigns, male-friendly clinics, and the involvement of traditional and religious leaders enhance male participation. Overall, male partner involvement not only strengthens biomedical interventions but also addresses behavioural and social determinants critical for the success of PMTCT programmes. This review underscores the necessity of integrating men into maternal and child health initiatives as a transformative approach to reduce vertical HIV transmission, improve ART adherence, and foster shared responsibility within households, ultimately contributing to national and global HIV elimination goals.*

Keywords: Male Partner Involvement (MPI), Prevention of Mother-to-Child Transmission (PMTCT), HIV/AIDS, maternal, child health, socio-cultural factors

INTRODUCTION

In the bid to eliminate paediatric human immunodeficiency virus (HIV) transmission, seven key focus areas have been outlined. These include early diagnosis and lifelong antiretroviral therapy (ART), integration of various interventions, fostering partner engagement, the goal of triple elimination, tackling socio-cultural obstacles, implementing community-based approaches, and leveraging technology and data. Each of these areas plays a complementary role in addressing the multifaceted challenges of HIV prevention, particularly in sub-Saharan Africa where the burden remains disproportionately high. Among these strategies, partner engagement often referred to as male partner involvement (MPI) or male involvement (MI) has received increasing global attention due to its significant role in strengthening the prevention of mother-to-child transmission (PMTCT) of HIV.

Evidence suggests that male involvement not only encourages women to access PMTCT services but also significantly reduces the incidence of perinatal HIV transmission and related mortality (Hampanda et al., 2020; Gamshe & Demissie, 2020; Chibango, 2020). Male partners play a crucial role in decision-making within households, particularly in African contexts where cultural and gender dynamics often influence women's healthcare choices. Their participation in PMTCT interventions therefore fosters shared responsibility, reduces stigma, and encourages adherence to ART by women during pregnancy and breastfeeding. As a result, the health outcomes for both mothers and infants are substantially improved, reinforcing the urgency of integrating men more deliberately into PMTCT programmes.

According to Aliyu et al. (2019), achieving the elimination of mother-to-child transmission (MTCT) of HIV in sub-Saharan Africa will require a paradigm shift beyond purely biomedical solutions. While ART remains a cornerstone of HIV prevention, its success is influenced by behavioural, social, and systemic factors. Male partner involvement has emerged as one of the most promising strategies to bridge this gap, enhancing both the effectiveness and sustainability of biomedical interventions. Studies have demonstrated that when men are actively engaged, there is a higher likelihood of maternal ART adherence, increased uptake of HIV testing and counselling, and improved continuity of care (Aliyu et al., 2019; Ihekuna et al., 2017).

Furthermore, male involvement contributes directly to the survival of infants born to HIV-positive mothers. Infants whose fathers are supportive of PMTCT interventions have higher chances of accessing postnatal care, receiving early infant diagnosis, and adhering to follow-up treatment (Mabachi et al., 2020; Clark et al., 2020; Muwanguzi et al., 2019). Beyond clinical outcomes, male involvement also enhances psychosocial well-being for mothers, reducing stress, stigma, and isolation often associated with HIV diagnosis and treatment. This holistic support system underscores the vital role that gender dynamics play in the success of PMTCT strategies.

Given these insights, this study addressed five critical areas. First, it assessed the level of male partner involvement in PMTCT services in Nigeria. Second, it identified the socio-cultural and systemic factors influencing male involvement in PMTCT programmes. Third, it evaluated the impact of male partner involvement on the prevention of mother-to-child transmission of HIV. Fourth, it explored strategies for enhancing male partner participation in PMTCT programmes in Nigeria. Lastly, it identified and analysed the barriers hindering male partner involvement in PMTCT services in Nigeria. Through this, the study provided an evidence-based

understanding of the importance of engaging men in HIV prevention efforts, while highlighting actionable recommendations to strengthen PMTCT outcomes.

METHODOLOGY

The study employed a narrative review methodology, which was conducted to synthesise existing literature on male partner involvement in the prevention of mother-to-child transmission (PMTCT) of HIV. Relevant peer-reviewed articles, reports, and grey literature were identified through searches of electronic databases such as PubMed, Google Scholar, Scopus, and institutional repositories. Keywords including "male partner involvement," "PMTCT," "HIV transmission," and "Nigeria" were used to retrieve materials published between 2010 and 2024. Inclusion criteria were studies that focused on male involvement in PMTCT, socio-cultural and systemic influences, and outcomes related to maternal and infant health, while literature outside the geographical context of sub-Saharan Africa or unrelated to PMTCT was excluded. Selected studies were critically appraised for relevance, credibility, and methodological rigour before inclusion. The data extracted from the reviewed literature were synthesised thematically, allowing for the identification of recurring patterns, barriers, and strategies linked to male involvement in PMTCT programmes. This approach provided a comprehensive understanding of the topic by integrating diverse perspectives and evidence from existing research rather than relying on primary data collection.

Overview of PMTCT

The majority of HIV infections among neonates and infants occur through mother-to-child transmission (MTCT), which can take place during pregnancy, childbirth, or breastfeeding. MTCT is globally recognised as the leading cause of HIV infection among children under the age of 15, making it a major public health challenge (Belachew et al., 2020; Ayalew et al., 2020). As highlighted by Muwanguzi et al. (2019), prevention of mother-to-child transmission (PMTCT) is not solely an intervention targeting infants but a holistic strategy designed to benefit entire families, significantly reducing HIV-related morbidity and mortality among children under five. Beyond addressing biomedical outcomes, PMTCT initiatives create opportunities for inclusive family care, which is strengthened by the active participation of male partners in supporting maternal and child health processes (Galle et al., 2021).

In the absence of any preventive measures, the likelihood of MTCT ranges between 20% and 45%, depending on maternal viral load, stage of infection, and breastfeeding practices. However, with appropriate interventions such as timely initiation of antiretroviral therapy (ART), the risk can be drastically reduced to below 2% in non-breastfeeding populations and to 5% or lower among breastfeeding populations (Belachew et al., 2020; Ayalew et al., 2020; Linguissi et al., 2019). These figures underscore the effectiveness of PMTCT interventions in safeguarding the lives of children while also highlighting the urgency of ensuring universal access to such services. PMTCT programmes further serve as entry points for women and their partners to learn their HIV status, thereby providing opportunities for early initiation of treatment and prevention of horizontal and vertical transmission if one or both partners test positive (Borode et al., 2025; Remera et al., 2021).

To scale up global action, the World Health Organization (WHO) developed a comprehensive PMTCT framework based on the "four prongs" approach (Yah & Tambo, 2019). The first

prong emphasises the primary prevention of HIV among women of reproductive age, acknowledging that prevention begins prior to conception. The second prong focuses on preventing unintended pregnancies among women living with HIV, recognising the link between family planning and reduced paediatric HIV incidence. The third prong directly addresses the prevention of HIV transmission from an infected mother to her child through ART and safe delivery practices. The fourth prong extends beyond prevention, ensuring that women living with HIV, their children, and families receive holistic treatment, care, psychosocial support, and rehabilitative services (Ayalew et al., 2020). Collectively, these prongs highlight the multidimensional nature of PMTCT, which integrates biomedical, behavioural, and social interventions.

Despite the comprehensiveness of the WHO framework, the success of PMTCT initiatives has been uneven, particularly in sub-Saharan Africa, where socio-cultural barriers, gender inequalities, and health system constraints persist. Authors have argued that to fast-track the elimination of paediatric HIV transmission and achieve the global 2030 targets, male involvement must be prioritised by encouraging men to attend antenatal clinics with their partners for joint HIV counselling and testing (Clark et al., 2020; Mabachi et al., 2020; Aliyu et al., 2019). Male participation is not only symbolic but practical, as studies have shown that when men are actively engaged especially when their spouses are HIV-positive, it promotes adherence to ART, enhances follow-up care, and improves uptake of preventive practices (Ogidan et al., 2024; Dagnew et al., 2020; Takah et al., 2017). Thus, strengthening PMTCT through male involvement has the potential to transform the trajectory of HIV prevention by addressing both clinical and socio-cultural determinants of health.

Status of PMTCT in Nigeria

Since the inaugural United Nations (UN) General Assembly Political Declaration on HIV and AIDS in 2006, which underscored the elimination of mother-to-child transmission (MTCT) of HIV, global health efforts have increasingly focused on addressing the multifaceted barriers that hinder progress, particularly socio-cultural factors. In Nigeria, these socio-cultural influences significantly affect the uptake of PMTCT services, despite national and international initiatives such as the Start Free, Stay Free, AIDS Free framework launched in 2015, which included 21 African countries and aimed to eliminate new HIV infections among children (Ikpeazu et al., 2023). Cultural norms around gender roles often limit women's autonomy in healthcare decision-making, where male partners traditionally exert control over financial resources and access to medical care, thereby affecting women's ability to attend antenatal visits or adhere to recommended ART regimens. Fear of stigma and discrimination associated with HIV remains pervasive, discouraging pregnant women from disclosing their status to partners or seeking care in formal health facilities (Ajayi et al., 2021; Chizoba et al., 2020).

Religious beliefs and community expectations also shape perceptions of HIV and influence engagement with PMTCT services. In many Nigerian communities, misconceptions about HIV transmission and the effectiveness of ART persist, often reinforced by traditional beliefs and advice from family or community elders, which can conflict with biomedical guidance (Danladi et al., 2020; Dawet et al., 2024). Women may experience pressure to adhere to culturally prescribed roles, such as prioritizing domestic responsibilities over personal health, further limiting their participation in PMTCT programmes. Moreover, low levels of male

partner involvement, often rooted in socio-cultural norms that view pregnancy and child-rearing as predominantly women's responsibilities, reduce support for mothers attending PMTCT clinics, thus affecting service uptake and retention (Iwegbu et al., 2022; Dirisu et al., 2020).

Socio-cultural barriers intersect with systemic issues, including uneven distribution of PMTCT services and limited availability of trained healthcare workers. Despite positive attitudes toward PMTCT and awareness of HIV transmission risks, less than 39% of primary healthcare centres in Jos provided PMTCT services, and only 60% of HIV-positive pregnant women accessed these services, highlighting the compounded effect of cultural and structural limitations (Dawet et al., 2024). The persistence of these socio-cultural obstacles underscores the urgent need for culturally sensitive interventions, public education campaigns, and inclusion of male partners and community leaders in PMTCT programmes to enhance acceptance, uptake, and continuity of care for women and their infants (Chizoba et al., 2020; Ezeudoye, 2021).

Male Partner Involvement in PMTCT Services

The concept of male involvement in the prevention of mother-to-child transmission (PMTCT) of HIV is multifaceted and varies considerably across cultural and social contexts, with its interpretation differing from one setting or country to another. Broadly, male involvement encompasses a range of activities, including male partners undergoing HIV testing services (HTS), using condoms, practising exclusive breastfeeding, administering antiretroviral (ARV) drugs to HIV-exposed children, and remaining faithful to their spouses (Chibango, 2020). It also involves accompanying partners to antenatal care (ANC) appointments (Muwanguzi et al., 2019), providing emotional and financial support especially for transportation and assisting HIV-positive partners in adhering to antiretroviral therapy during pregnancy and after childbirth. While attending HIV counselling and testing during ANC is commonly used as a measure of male participation, some researchers argue that this alone is insufficient. They suggest that it does not adequately capture men's attitudes or the level of support they provide, both of which have significant implications for maternal and child health outcomes (Kansinjiro & Nyondo-Mipando, 2021).

To better reflect the essence of male involvement, a broader conceptualisation has been proposed. This includes accompanying partners to ANC appointments, being aware of the ANC schedule, engaging in discussions about ANC interventions, taking financial responsibility for ANC services, being informed about clinic visits, and practising safe sexual behaviours, including condom use during the most recent pregnancy (Galle et al., 2021; Kansinjiro & Nyondo-Mipando, 2021; Clark et al., 2020; Hampanda et al., 2020). A systematic review on male partner involvement in health interventions emphasised the importance of mass campaigns targeting men to increase their engagement in health-related matters (Admire et al., 2022). Evidence from Burkina Faso demonstrates the impact of sustained male involvement in PMTCT programmes, as the World Health Organization declared the country free of paediatric HIV transmission after 15 years of programme implementation, signifying zero prevalence of perinatal HIV transmission (Linguissi et al., 2019).

The prevalence of male involvement in PMTCT varies globally and within Nigeria. Studies indicate that male participation in sub-Saharan Africa remains low, ranging from 12.5% to

18.7% (Kansinjiro & Nyondo-Mipando, 2021). In Ethiopia, only 42.5% of men participated in partner/spousal HIV testing and counselling (Gamshe & Demissie, 2020). Recent studies in Enugu, Nigeria, reported a low level of male involvement, with only 19.8% of men participating in the care of their wives and children in one hospital-based study (Okoro et al., 2025). Conversely, another study in Enugu in 2020 found 80.5% male involvement, with all infants testing HIV negative (Oyeocha et al., 2020). In Northern Nigeria, among 401 male partners of HIV-positive women, 43.6% actively participated in PMTCT services (Iliyasu et al., 2020). In Osogbo, South-west Nigeria, male involvement in PMTCT services was reported to be low, with 45.6% of partners tested for HIV and 54.8% accompanying their spouses to PMTCT clinics during the last pregnancy (Adebayo et al., 2023). These variations highlight the need to address contextual, cultural, and systemic factors that influence male engagement in PMTCT programmes to improve maternal and child health outcomes

Socio-cultural and Systemic Factors influencing Male Involvement in PMTCT

In many sub-Saharan African countries, socio-cultural factors play a crucial role in shaping male partner involvement in the prevention of mother-to-child transmission (PMTCT) of HIV. Evidence from Ethiopia indicates that less than half of men actively participate in PMTCT services, with only 42.5% accepting and attending partner counselling and testing sessions offered to them. This low engagement has been associated with limited awareness of obstetric danger signs and inadequate preparation for birth and potential complications, suggesting that knowledge and readiness are key determinants of male participation (Gamshe & Demissie, 2020). The findings highlight the importance of targeted education and sensitisation campaigns aimed at improving men's understanding of maternal health issues, which could in turn enhance their involvement in PMTCT programmes.

In Tanzania, studies have identified multiple socio-cultural barriers that hinder male participation in PMTCT services. These include fear of HIV status disclosure, which may lead to stigma or relationship conflict, and negative attitudes exhibited by some health workers that discourage male attendance at antenatal clinics. Additionally, poor knowledge of reproductive health services among men, long waiting times at clinics, and the perception that reproductive health services are exclusively for women reduce male engagement. Beliefs in traditional healers and cultural norms that designate clinics as spaces for women further exacerbate low male participation (Chibwae et al., 2018). These factors demonstrate that cultural perceptions and health system practices collectively influence men's willingness and ability to participate in maternal health services.

In Uganda, the historically entrenched notion that reproductive health, particularly maternal and child health, is a woman's domain has led to men perceiving antenatal clinics as "women's spaces." Consequently, many men feel excluded from reproductive health matters and believe that involvement in antenatal care is neither their responsibility nor culturally appropriate. This historical institutionalisation reinforces gendered divisions in healthcare, creating structural and attitudinal barriers to male participation in PMTCT programmes (Muwanguzi et al., 2019). Such findings underscore the need for culturally sensitive interventions that actively engage men and challenge traditional perceptions of maternal health as a female-only concern.

In Northern Nigeria, additional socio-cultural and systemic factors have been identified. Financial constraints, poor attitudes of health workers, and clinics designed in ways that are

unfriendly to men reduce male participation in maternal care. Conversely, strong interpersonal relationships within couples positively influence male involvement, as mutual understanding and communication facilitate joint decision-making regarding PMTCT services (Al-Mujtaba et al., 2020). Clark et al. (2020) support these observations, highlighting that male-friendly PMTCT programmes, mutual understanding between partners, and high health literacy within couples and communities enhance male engagement. Similarly, Okafor et al. (2022) emphasise that good knowledge of maternal and child health services is consistently associated with higher male participation, while time constraints, financial limitations, and cultural orientation continue to serve as barriers.

Other contextual factors also affect male involvement. Iwu et al. (2024) reported that men's place of residence, whether rural or urban, significantly influences their participation in reproductive health services. Men living in rural areas often face logistical challenges such as longer travel distances and fewer health facilities, limiting their engagement. Iliyasu et al. (2020) identified paternal education, particularly post-secondary qualifications, and the HIV status of the child as factors associated with male involvement in PMTCT, suggesting that both knowledge and perceived risk influence participation. Dagnew et al. (2020) and Clark et al. (2020) further noted that employment as a civil servant, awareness and knowledge of PMTCT, shorter waiting times, positive health worker attitudes, discussions with a spouse, and formal invitations to attend PMTCT clinics significantly improve male engagement.

As part of the global effort to eliminate HIV infections among children under 15 years, socio-cultural factors continue to play a significant role in shaping the success of interventions such as the World Health Organization's (WHO) Triple Elimination Initiative introduced in 2023. This initiative, which aims to eliminate mother-to-child transmission of HIV, syphilis, and hepatitis B virus (HBV), relies heavily on community acceptance, adherence to health guidelines, and supportive family structures (WHO, 2023a). Socio-cultural norms influence how women access antenatal care, disclose their HIV status, and engage male partners in prevention programmes. In many sub-Saharan African communities, gender roles and patriarchal structures limit women's autonomy, making male partner involvement critical yet challenging (Aliyu et al., 2019; Hampanda et al., 2020). Cultural beliefs regarding illness, stigma, and traditional practices may discourage pregnant women from attending clinics or adhering to antiretroviral therapy, thereby increasing the risk of vertical transmission (Gamshe & Demissie, 2020; Chibango, 2020).

Religious affiliations and community expectations also shape perceptions of HIV testing, treatment, and disclosure, often creating barriers to the integration of sexual and reproductive health services into routine maternal care (Ihekuna et al., 2017). Conversely, communities that actively engage men in reproductive health decisions and provide supportive social networks show higher uptake of PMTCT services and improved maternal and infant outcomes (Mabachi et al., 2020; Clark et al., 2020). Socio-cultural interventions, including community education, male-focused outreach, and culturally sensitive counselling, have been shown to enhance adherence to essential maternal and infant EMTCT services by addressing myths, reducing stigma, and promoting shared responsibility within households (Muwanguzi et al., 2019; Aliyu et al., 2019). Therefore, understanding and addressing socio-cultural factors is crucial for achieving the goals of the Triple Elimination Initiative and ensuring equitable access to preventive and curative services for women, infants, and their families (WHO, 2023a).

Impact of Male Partner Involvement on the PMTCT of HIV

Male partner involvement (MPI) has been widely recognised as a pivotal determinant of the success of prevention of mother-to-child transmission (PMTCT) programmes across sub-Saharan Africa. Evidence from multiple studies highlights that the active participation of male partners in maternal and child health interventions contributes significantly to improved uptake of PMTCT services, adherence to antiretroviral therapy (ART), and overall reduction in perinatal HIV transmission (Aliyu et al., 2019; Clark et al., 2020; Hampanda et al., 2020). In Nigeria, studies have consistently shown that male support positively influences women's utilisation of PMTCT services, including attendance at antenatal clinics, acceptance of HIV testing, and retention in postnatal care (Adebayo et al., 2023; Al-Mujtaba et al., 2020). When men are engaged, women are more likely to initiate ART promptly and maintain adherence throughout pregnancy and breastfeeding, thereby reducing the risk of vertical HIV transmission (Takah et al., 2017; Ihekuna et al., 2017).

Beyond the biomedical impact, male involvement addresses critical socio-cultural and behavioural determinants of maternal health. In many African contexts, men often hold decision-making power within households, influencing health-seeking behaviours and financial support for women's care (Okafor et al., 2022; Gamshe & Demissie, 2020). By fostering male engagement, PMTCT programmes can reduce barriers related to stigma, fear of HIV disclosure, and cultural misconceptions surrounding maternal health services (Aurpibul et al., 2023; Chibango, 2020). Research in Kenya and Uganda has demonstrated that supportive male partners enhance women's confidence in attending clinics, promote adherence to medical advice, and provide emotional and financial support, all of which contribute to improved maternal and infant outcomes (Mabachi et al., 2020; Muwanguzi et al., 2019).

The role of MPI extends to community-level health outcomes, where male engagement can influence normative behaviours and encourage broader acceptance of HIV prevention initiatives. Community-based interventions that incorporate male participation have shown higher rates of couples' HIV testing, increased disclosure of HIV status, and improved postnatal follow-up for both mothers and infants (Clark et al., 2020; Zewude et al., 2022). These interventions not only improve individual health outcomes but also contribute to the broader public health goal of eliminating mother-to-child transmission of HIV, a target endorsed by the World Health Organization and national health policies in sub-Saharan Africa (WHO, 2022; WHO, 2023b).

Furthermore, male partner involvement supports psychosocial wellbeing for both parents and children. When men are engaged, women report lower stress levels, reduced experiences of stigma, and greater adherence to health recommendations, while infants benefit from timely immunisation, early HIV diagnosis, and consistent follow-up care (Iwu et al., 2024; Admire et al., 2022). Overall, the integration of male partners into PMTCT programmes is not merely supportive but essential, addressing structural, cultural, and behavioural factors that significantly enhance the effectiveness, sustainability, and equity of HIV prevention strategies (Aliyu et al., 2019; Chizoba et al., 2020). The cumulative evidence therefore underscores MPI as a transformative element in reducing vertical HIV transmission and improving maternal and child health outcomes

Barriers Hindering Male Partner Involvement in PMTCT Services

Despite its demonstrated benefits, male partner involvement (MPI) in prevention of mother-to-child transmission (PMTCT) programmes faces multiple barriers that limit participation and programme effectiveness. Socio-cultural norms and gendered expectations remain significant obstacles in many sub-Saharan African contexts, including Nigeria. Patriarchal family structures often position men as decision-makers while simultaneously discouraging their involvement in maternal health services, which are traditionally considered the domain of women (Okafor et al., 2022; Chibango, 2020). Such cultural constructs not only restrict men's engagement but also perpetuate misconceptions that attendance at PMTCT clinics undermines masculinity or authority within the household (Danladi et al., 2020; Ogueji & Omotoso, 2021).

Stigma associated with HIV further exacerbates the challenge of male involvement. Fear of being associated with HIV-positive status or of community gossip deters men from accompanying their partners to antenatal clinics or participating in HIV testing and counselling (Dirisu et al., 2020; Hallberg et al., 2019). This reluctance often leads to delayed disclosure of HIV status within couples, reducing timely uptake of PMTCT services and adherence to ART. Additionally, socio-economic factors, including work obligations, lack of time, and financial constraints, hinder men's consistent engagement in PMTCT programmes (Ayalew et al., 2020; Zewude et al., 2022). Men who are primary income earners may prioritise employment over clinic attendance, particularly where health services operate during standard working hours or fail to accommodate male schedules (Al-Mujtaba et al., 2020; Iliyasu et al., 2020).

Health system-related barriers also limit male participation. Many PMTCT services are designed primarily for women, with clinic environments that may feel unwelcoming or lack privacy for male partners, creating perceptions of "female-only" spaces (Clark et al., 2020; Dawet et al., 2024). Additionally, inadequate health provider training on engaging men and insufficient outreach to the male population further restrict MPI. Studies have indicated that clinics lacking male-friendly services and community-based interventions experience lower male attendance and engagement (Okoro et al., 2025; Chibwae et al., 2018).

Knowledge gaps and low awareness regarding the benefits of MPI compound these challenges. Men often have limited understanding of the critical role they play in reducing vertical HIV transmission and supporting maternal adherence to ART, which diminishes motivation to participate (Adebayo et al., 2023; Aliyu et al., 2019). Fear of disclosure, misconceptions about HIV, and societal pressures create a cycle where male disengagement continues, negatively affecting both maternal and infant outcomes (Aurpibul et al., 2023; Danladi et al., 2020).

Addressing these barriers requires comprehensive strategies that target socio-cultural norms, reduce stigma, provide education, and restructure health services to be more inclusive of men. Failing to overcome these impediments risks limiting the effectiveness of PMTCT programmes, perpetuating high rates of mother-to-child HIV transmission, and undermining public health goals in sub-Saharan Africa (Yah & Tambo, 2019; Leach-Lemens, 2019). Interventions that combine community engagement, flexible clinic hours, male-friendly services, and awareness campaigns have been recommended as essential for fostering sustainable male involvement (Admire et al., 2022; Zewude et al., 2022; Clark et al., 2020).

Strategies for Enhancing Male Partner Participation in PMTCT Services

Community leaders, as well as religious and traditional leaders, play a pivotal role in promoting male partner involvement (MPI) in maternal and child health interventions, particularly in the prevention of mother-to-child transmission (PMTCT) of HIV. Engaging these leaders strategically through awareness campaigns, conferences, and workshops can target men across all tribes, age groups, and professional backgrounds, providing them with the knowledge necessary to make informed decisions about maternal and child health (Ekeocha et al., 2024; Al-Mujtaba et al., 2020; Clark et al., 2020; Chibango, 2020; Dagnew et al., 2020). These educational initiatives are essential for addressing socio-cultural barriers that often hinder male participation, such as prevailing gender norms, misconceptions about HIV, and community stigma. When men are adequately informed, they are better positioned to support their partners throughout the continuum of maternal care, including antenatal, delivery, and postnatal services, which is crucial for the effectiveness of PMTCT programmes.

In addition to education and awareness, community-based outreach services are critical for increasing male engagement. Initiatives such as couples' HIV voluntary counselling and testing, as well as the establishment of male-friendly PMTCT clinics, create a more inclusive environment that encourages men to actively participate in maternal and child health interventions (Okoro et al., 2025; Zewude et al., 2022; Clark et al., 2020; Aliyu et al., 2019). Male-friendly services reduce the perception that maternal health is solely a woman's responsibility, thereby fostering shared responsibility and promoting adherence to treatment and follow-up schedules. By directly involving men in the healthcare process, programmes can enhance the retention of mothers and children within PMTCT services, ultimately improving health outcomes and reducing HIV transmission rates.

The success of PMTCT programmes is closely tied to the sustained involvement of male partners. According to Linguissi (2019), the elimination of HIV among mothers and children is contingent not only upon the availability of ART and PMTCT interventions but also on the active participation of men in supporting their partners, both during and after pregnancy. Retention in care, adherence to ART, and timely infant testing are all improved when male partners are engaged, highlighting the integral role of men in achieving programmatic goals.

Finally, engaging both men and women in the planning and implementation of health services, particularly HIV programmes, has been shown to improve service uptake, participation, and outcomes (Iwu et al., 2024; Admire et al., 2022). Collaborative involvement fosters a sense of ownership, accountability, and shared responsibility, which is essential for sustaining the impact of PMTCT interventions. When communities perceive health initiatives as inclusive and culturally sensitive, participation increases, and health behaviours become more positively reinforced. In this context, the strategic inclusion of men in PMTCT programmes is not merely a supportive measure but a necessary strategy for ensuring comprehensive maternal and child health care.

CONCLUSION

The review underscores the critical role of male partner involvement (MPI) in enhancing the prevention of mother-to-child transmission (PMTCT) of HIV in Nigeria. Evidence consistently demonstrates that when male partners are actively engaged in maternal health services, women

are more likely to access and adhere to antiretroviral therapy, attend antenatal and postnatal clinics, and ensure timely testing and care for their infants. Beyond improving clinical outcomes, MPI addresses socio-cultural and behavioural determinants, including reducing stigma, fostering shared decision-making within households, and providing emotional and financial support. Consequently, male involvement not only strengthens maternal and child health outcomes but also contributes to broader public health goals, including the elimination of paediatric HIV.

However, multiple barriers continue to limit male participation, including patriarchal cultural norms, fear of HIV-related stigma, low awareness of PMTCT benefits, socio-economic constraints, and health system inadequacies. Addressing these challenges requires multi-faceted strategies such as culturally sensitive education, community and religious leader engagement, male-friendly health services, flexible clinic scheduling, and targeted outreach campaigns. Strengthening male partner engagement is therefore essential for achieving sustainable PMTCT outcomes in Nigeria.

REFERENCES

Adebayo, V., Olowookere, S. A., Taofik, O. A., Owolabi, E. M., & Babatola, S. O. (2023). Male partner involvement in prevention of mother-to-child transmission of HIV among women attending State Specialist Hospital, Osogbo, Nigeria. *British Journal of Medical and Health Research, 10*(03), 42–59.

Admire, C., Nhlanganiso, N., & Justice, M. (2022). Male partner involvement in health interventions: A systematic review of best practices in Sub-Saharan Africa. *Journal of Practice Teaching & Learning, 19*(1–2),.

Ajayi, A. I., Awopegba, O. E., Owolabi, E. O., & Ajala, A. (2021). Coverage of HIV testing among pregnant women in Nigeria: Progress, challenges and opportunities. *Journal of Public Health (Oxford), 43*(1), e77–e84. https://doi.org/10.1093/pubmed/fdz152

Al-Mujtaba, M., Sam-Agudu, N. A., Torbunde, N., Aliyu, M. H., & Cornelius, L. J. (2020). Access to maternal-child health and HIV services for women in North-Central Nigeria: A qualitative exploration of the male partner perspective. *PLoS ONE, 15*(12), e0243611. https://doi.org/10.1371/journal.pone.0243611

Aliyu, H. M., Agudu, N. A. S., Shenoi, S., Goga, A. E., Ramraj, T., Vermund, S. H., & Audet, C. M. (2019). Increasing male engagement in the prevention of vertical transmission of HIV: What works in Sub-Saharan Africa? *BMJ, 365*, l1965. http://dx.doi.org/10.1136/bmj.l1965

Aurpibul, L., Tangmunkongvorakul, A., Detsakunathiwatchara, C., Masurin, S., Srita, A., Meeart, P., & Chueakong, W. (2023). Social effects of HIV disclosure, an ongoing challenge in young adults living with perinatal HIV: A qualitative study. *Frontiers in Public Health, 11*, 1150419. https://doi.org/10.3389/fpubh.2023.1150419

Ayalew, M., Gebrie, M., Geja, E., & Beyene, B. (2020). Determinants of male partner involvement towards prevention of mother-to-child transmission service utilization among pregnant women who attended focused antenatal care in Southern Ethiopia. *HIV/AIDS – Research and Palliative Care, 87–95*. https://www.dovepress.com/determinants-of-male-partner-involvement-towards-prevention-of-mother--peer-reviewed-fulltext-article-HIV

Belachew, A., Tewabe, A., & Malede, G. A. (2020). Prevalence of vertical HIV infection and its risk factors among HIV-exposed infants in East Africa: A systematic review and meta-analysis. *Tropical Medicine and Health, 48*(85), 1–11. https://doi.org/10.1186/s41182-020-00273-0

Borode, S.B., Gentry, O.A., Adelani, A.A., **Olofin-Samuel, M.A.,** Oyelami, B.F., & Ilugbaro, D.O. (2025). Assessment of compliance to highly active anti-retroviral therapy (HAART) among patients in selected Hospitals in Ibadan, Oyo State. *International journal of Ebola AIDS HIV and Infectious disease and immunit*y 10(1), 1-12

Chibango, V. (2020). Exploring the meanings of male partner involvement in the prevention of MTCT of HIV in Zimbabwe. *AOSIS Journals, 76*(3). https://hts.org.za/index.php/hts/article/view/6023/16723

Chibwae, A., Kapesa, A., Jahanpour, O., Seni, J., Namanya, B., Kadelya, E., et al. (2018). Attendance of male partners to different reproductive health services in Shinyanga District, Northwestern Tanzania. *Tanzania Journal of Health Research, 20*(2), 1–8. http://www.bioline.org.br/pdf?th18020

Chizoba, A. F., Adogu, P. O. U., & Chineke, H. N. (2020). A review to identify the gaps in prevention of mother-to-child transmission of HIV services in Nigeria. *Journal of Scientific Research & Reports, 26*(8), 67–78. https://doi.org/10.9734/JSRR/2020/v26i830296

Clark, J., Sweet, L., Nyoni, S., & Ward, P. R. (2020). Improving male involvement in antenatal care in low- and middle-income countries to prevent mother-to-child transmission of HIV: A realist review. *PLoS ONE, 15*(10), e0240087. https://doi.org/10.1371/journal.pone.0240087

Dagnew, E., Andualem, M., Worku, T., Gebeyehu, D., Taklual, W., & Melkie, A. (2020). Male involvement in prevention of mother-to-child transmission of human immunodeficiency virus and associated factors among partners of reproductive-age women at Debre Tabor town, Northwest Ethiopia: A community-based cross-sectional study. *BMC Research Notes, 13*(190), 1–6. https://doi.org/10.1186/s13104-020-05023-3

Danladi, S. E., Ukatu, E. E., Okonkwo, O. S., Upaka, O. A., Oyindolapo, S. G., & Dongs, I. S. (2020). Perception and barriers to prevention of mother-to-child transmission (PMTCT) of HIV among pregnant women attending antenatal clinic in urban maternity, Bauchi State, Nigeria. *American International Journal of Biology and Life Sciences, 2*(1), 42–49. https://www.scirp.org/html/3-5200492_108183.htm

Dawet, M. P., Noel, N. B., & Dabo, J. C. (2024). Availability and utilization of PMTCT services in primary health care centres of Jos South, North-Central Nigeria. *International Journal of Healthcare Sciences, 12*(1), 16–21. https://doi.org/10.5281/zenodo.11518219

Dirisu, O., Eluwa, G., Adams, E., Torpey, K., Shittu, O., & Adebajo, S. (2020). "I think this is the only challenge… the stigma": Stakeholder perceptions about barriers to antenatal care (ANC) and prevention of mother-to-child transmission (PMTCT) uptake in Kano state, Nigeria. *PLoS ONE, 15*(4), e0232028. https://doi.org/10.1371/journal.pone.0232028

Ekeocha, E. J., Nwafia, A. E., Joy, C. I., Ifeadike, C. O., Okoye, C. F., Afonne, O. J., Ajator, C. C., & Izuchukwu, D. B. (2024). Assessment of male partner involvement in PMTCT of HIV/AIDS among HIV-positive pregnant women attending adult HIV care in Nauth, Nnewi. *Microbes and Infectious Diseases, 5*(2), 489–500. https://doi.org/10.21608/MID.2023.227079.1585

European AIDS Treatment Group. (2025). Trump's sudden suspension of foreign aid puts millions of lives in Africa at risk. https://www.eatg.org/hiv-news/trumps-sudden-suspension-of-foreign-aid-puts-millions-of-lives-in-africa-at-risk/

Ezeudoye, T. C., Ibe, S. N. O., & Nwufo, C. R. (2021). Adequacy of PMTCT facilities for PMTCT service delivery in Abia State, Nigeria. *World Journal of Innovative Research, 10*(2), 22–28.

Galle, A., Plaieser, G., Steenstraeten, T. V., Griffin, S., Osman, N. B., Roelens, K., & Degomme, O. (2021). Systematic review of the concept 'male involvement in maternal health' by natural language processing and descriptive analysis. *BMJ Global Health, 6*(4), e004909. https://gh.bmj.com/content/6/4/e004909

Gamshe, E. N., & Demissie, D. B. (2020). Male involvement in prevention of mother-to-child transmission (PMTCT) and associated factors in Ambo Town, Ethiopia. *EC Gynaecology, 9*(4), 01–10.

Hallberg, D., Kimario, T. D., Mtuya, C., Msuya, M., & Björling, G. (2019). Factors affecting HIV disclosure among partners in Morogoro, Tanzania. *International Journal of Africa Nursing Sciences, 10*, 49–54. https://www.sciencedirect.com/science/article/pii/S2214139118300507

Hampanda, K. M., Mweemba, O., Ahmed, Y., Hatcher, A., Turan, J. M., Darbes, L., & Abuogi, L. L. (2020). Support or control? Qualitative interviews with Zambian women on male partner involvement in HIV care during and after pregnancy. *PLoS ONE, 15*(8), 1–17. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7451516/pdf/pone.0238097.pdf

Ihekuna, D., Rosenburg, N., William Nii Ayitey Menson, W. N. A., Gbadamosi, S. O., Olawepo, J. O., Chike-Okoli, A., Cross, C., Onoka, C., & Ezeanolue, E. E. (2017). Male partner involvement on initiation and sustainment of exclusive breastfeeding among HIV-infected post-partum women: Study protocol for a randomized controlled trial. *Maternal & Child Nutrition, 14*, e12545. https://doi.org/10.1111/mcn.12545

Ikpeazu, A. E., Anya, S. E., Amenyah, R. N., Ijaodola, O. A., Bashorun, A. T., Ndukwe, C. D., et al. (2023). An analysis of the uptake of anti-retroviral treatment among pregnant women in Nigeria from 2015 to 2020. *PLOS Global Public Health, 3*(4), e0001749. https://doi.org/10.1371/journal.pgph.0001749

Iliyasu, Z., Galadanci, H. S., Muhammad, B., Yadudu, F. Z., Kwaku, A. A., Salihu, H. M., & Aliyu, M. H. (2020). Correlates of HIV-positive fathers' involvement in prevention of mother-to-child transmission programs in Northern Nigeria. *Current HIV Research, 18*(6), 443–457. https://doi.org/10.2174/1570162X18666200810133347

Iwegbu, E. R., Adabenege, F. O., & Nosamudiana-Ede, O. A. (2022). Prevalence of HIV/AIDS transmission from mother to child (MTC) and its associated risk factors in Nigeria: A systematic review. *International Journal of Innovative Research and Advanced Studies, 9*(11), 26–32.

Iwu, L. O., Yahaya, A., & Nwabuko, O. C. (2024). Male gender engagement in sexual and reproductive health services in Nigeria: A comparative study. *International Research*

Journal of Public and Environmental Health, 11(2), 53–62. https://doi.org/10.15739/irjpeh.24.007

John, M. E., & Chipwaza, B. (2022). HIV status disclosure among adults attending care and treatment clinic in Kilombero district, South-Eastern Tanzania. *International Journal of Africa Nursing Sciences, 17*, 100434. https://www.sciencedirect.com/science/article/pii/S2214139122000415

Kansinjiro, B. M., & Nyondo-Mipando, A. L. (2021). A qualitative exploration of roles and expectations of male partners from PMTCT services in rural Malawi. *BMC Public Health, 21*, 626. https://doi.org/10.1186/s12889-021-10640-z

Kram, N. A.-Z., Yesufu, V., Lott, B., Palmer, K. N. B., Balogun, M., & Ehiri, J. (2021). 'Making the most of our situation': A qualitative study reporting health providers' perspectives on the challenges of implementing the prevention of mother-to-child transmission of HIV services in Lagos, Nigeria. *BMJ Open, 11*, e046263. https://doi.org/10.1136/bmjopen-2020-046263

Leach-Lemens, C. (2019). What challenges must Nigeria overcome to eliminate vertical transmission of HIV? *aidsmap Health services & systems*.

Linguissi, L. S. G., Sagna, T., Soubeiga, S. T., Gwom, L. C., Nkenfou, C. N., Obiri-Yeboah, D., Ouattara, A. K., Pietra, V., & Simpore, J. (2019). Prevention of mother-to-child transmission (PMTCT) of HIV: A review of the achievements and challenges in Burkina Faso. *HIV/AIDS – Research and Palliative Care, 11*, 165–177. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6664853/

Mabachi, N. M., Brown, M., Sandbulte, M., Wexler, C., Goggin, K., Maloba, M., & Finocchario-Kessler, S. (2020). Using a social support framework to understand how HIV positive Kenyan men engage in PMTCT/EID care: Qualitative insights from male partners. *AIDS and Behavior, 24*(1), 18–28. https://doi.org/10.1007/s10461-019-02451-6

Muwanguzi, P. A., Nassuna, L. K., Voss, J. G., Kigozi, J., Muganzi, A., Ngabirano, T. D., Sewankambo, N., & Nakanjako, D. (2019). Towards a definition of male partner involvement in the prevention of mother-to-child transmission of HIV in Uganda: A pragmatic grounded theory approach. *BMC Health Services Research, 19*, 557. https://doi.org/10.1186/s12913-019-4401-x

Okafor, I. P., Chukwudi, C. L., Igwilo, U. U., & Ogunnowo, B. E. (2022). "Men are the head of the family, the dominant head": A mixed method study of male involvement in maternal and child health in a patriarchal setting, Western Nigeria. *PLoS ONE, 17*(10), e0276059. https://doi.org/10.1371/journal.pone.0276059

Ogidan, O.C., Olowokere, A.E., Tope-Ajayi, T.O., Ogunmoroti, O.D., Olofinbiyi, R.O., Olofin-Samuel, M.A., Odiru, A.D. (2024). Examining the interplay of emotional and physiological factors in sexual well-being of men in Ekiti State, Nigeria. SLJM 1(2), 97-104. https.//doi.org/10.69524/sljm.v12.56

Ogueji, I. A., & Omotoso, E. B. (2021). Barriers to PMTCT services uptake among pregnant women living with HIV: A qualitative study. *Journal of HIV/AIDS & Social Services, 20*(2), 115–127. https://doi.org/10.1080/15381501.2021.1919276

Okoro, O. S., Nkwo, P. O., Adiri, C. O., Asimadu, E. E., Nnagbo, J. E., & Eze, M. I. (2025). Male participation in prevention programs of mother to child transmission of HIV in

Enugu, South Eastern Nigeria: A cross sectional survey. *American Journal of Public Health Research, 13*(1), 12–16. https://doi.org/10.12691/ajphr-13-1-2

Oyeocha, H. C., Sule, H. M., Ejeliogu, E. U., Omoregie, R. K., Agada, C. Y., & Yuwa, V. (2020). Assessment of male partner involvement in prevention of mother to child transmission of HIV amongst HIV-positive women in Jos, Nigeria. *Highland Medical Research Journal, 20*(2), 1–6.

Remera, E., Mugwaneza, P., Chammartin, F., Mulindabigwi, A., Musengimana, G., Forrest, J. I., Mwanyumba, F., Kondwani, N., Condo, J. U., Riedel, D. J., Mills, E. J., Nsanzimana, S., & Bucher, H. C. (2021). Towards elimination of mother-to-child transmission of HIV in Rwanda: A nested case-control study of risk factors for transmission. *BMC Pregnancy and Childbirth, 21*, 339. https://doi.org/10.1186/s12884-021-03806-5

Takah, N. F., Kennedy, I. T. R., & Johnman, C. (2017). The impact of approaches in improving male partner involvement in the prevention of mother-to-child transmission of HIV on the uptake of maternal antiretroviral therapy among HIV-seropositive pregnant women in Sub-Saharan Africa: A systematic review and meta-analysis. *BMJ Open*. https://bmjopen.bmj.com/content/bmjopen/7/11/e018207.full.pdf

World Health Organization. (2022). HIV. Retrieved June 19, 2023, from https://www.who.int/hiv/topics/mtct/about/en/

World Health Organization. (2023a). HIV, number of new HIV infections. Retrieved June 19, 2023, from https://www.who.int/data/gho/data/indicators/indicator-details/GHO/number-of-new-hiv-infections

World Health Organization. (2023b). Introducing a framework for implementing triple elimination of mother-to-child transmission of HIV, syphilis and hepatitis B virus: Policy brief. ISBN 978-92-4-008678-4

Yah, C. S., & Tambo, E. (2019). Why is mother to child transmission (MTCT) of HIV a continual threat to new-borns in Sub-Saharan Africa (SSA)? *Journal of Infection and Public Health, 12*(2), 213–223. https://doi.org/10.1016/j.jiph.2018.10.008

Zewude, S. B., Dagne, A. H., & Ajebe, T. M. (2022). Importance of male partner's involvement in prevention of mother to child transmission of HIV/AIDS in Ethiopia: A systematic review and meta-analysis until June 2021. *Archives of Public Health, 80*, 223. https://doi.org/10.1186/s13690-022-00971-7