

Male involvement in the prevention of mother-to-child transmission of HIV



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Abbreviations and acronyms

AIDS	acquired immunodeficiency syndrome
ANRS	National Agency for AIDS Research (France)
ART	antiretroviral therapy
AZT	azathioprine
CDC	Centers for Disease Control
CHAMPION	Channelling Men's Positive Involvement in the National HIV Response
CHTC	couples HIV testing and counselling
CI	confidence interval
COC	couple-oriented post-test HIV counselling
DALY	disability-adjusted life-year
GEM	Gender-Equitable Men (Scale)
HTC	HIV testing and counselling
HIV	human immunodeficiency virus
HPTN	HIV Prevention Trials Network
IDMT	Interdepartmental Management Team
IPV	intimate partner violence
JHHESA	Johns Hopkins Health and Education in South Africa
MDG	Millennium Development Goal
MTCT	mother-to-child transmission
NGO	nongovernmental organization
OR	odds ratio
PEPFAR	The US President's Emergency Plan for AIDS Relief
PMTCT	prevention of mother-to-child transmission
PPTCT	prevention of parent-to-child transmission of HIV
SANAC	South Africa National AIDS Council
SRH	sexual and reproductive health
STI	sexually transmitted infection
TB	tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	voluntary counselling and testing
WHO	World Health Organization

Summary

In 2009, 370 000 children became infected with human immunodeficiency virus (HIV) globally. Nearly all of these children acquired HIV through mother-to-child transmission. Ninety per cent of them live in sub-Saharan Africa. The World Health Organization (WHO) and Joint United Nations Programme on HIV/AIDS (UNAIDS) guidance calls for a global response that is centred on, and responsive to, the realities of women's lives. Because there is ample evidence documenting the impact of men on the various components of prevention of mother-to-child transmission (PMTCT) programmes, male involvement has been recognized as a priority area of intervention within this woman-centred approach. An extensive review of the public health literature was conducted to assess the current level and nature of male involvement and to identify opportunities for the advancement of constructive male engagement in PMTCT. The geographic focus of this paper is on sub-Saharan Africa. This paper highlights the documented benefits of men's engagement in PMTCT of HIV, barriers to men's engagement, and promising strategies to involve men, as well as conceptual and methodological issues that merit further consideration and research. The paper reveals that despite overwhelmingly positive attitudes towards PMTCT programming among men, their engagement remains very low. Barriers to men's participation include fear of knowing one's status, stigma and discrimination. Perhaps the most significant obstacles are the conceptual and policy barriers that inadvertently support men's exclusion from PMTCT and other reproductive health services. The historic institutionalization of reproductive health as women's health has contributed to men's perception of clinic spaces as "women's spaces", and reproductive health as women's work, and has generally produced health services that are not welcoming of men and couples. This paper argues that to maximize the health outcomes of PMTCT for children, women and men, we must move beyond seeing men as simply "facilitating factors", to enable women to access health-care services but view them as constituent parts of reproductive health policy and practice. This paper demonstrates that men's constructive engagement can and does yield positive results for the health of women, children and families.

Introduction

1. This paper seeks to promote fruitful discussions and deliberations to advance constructive men's engagement in the elimination of paediatric HIV and the promotion of women's and family health. Originally written as the background paper for the WHO and UNAIDS sponsored subregional expert consultation on male involvement in PMTCT, held in Kigali, 24–26 August 2011, the paper builds on global and regional efforts to integrate meaningfully men's participation into health services and programmes. These efforts include the Global Task team meeting on elimination of new paediatric HIV infections (GTT) (Johannesburg, May 2011) and as well the USAID/PEPFAR consultation on FP/MNCH/HIV integration (Washington DC, April 2011). With a focus on sub-Saharan Africa, this paper highlights the current literature on men's engagement in PMTCT, including the documented benefits of male involvement in the PMTCT of HIV, barriers to men's engagement, promising strategies to involve men, and conceptual and methodological issues that merit further consideration and research. As a foundation for the discussion, this paper uses the World Health Organization's (WHO's) *PMTCT strategic vision, 2010–2015* (WHO 2010a) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) corresponding *Global plan towards the elimination of new HIV infections among children by 2015 and Keeping Their Mothers Alive, 2011–2015* (UNAIDS 2011) and the *UNAIDS outcome framework: business case 2009–2011* (UNAIDS 2010a). From these documents, this paper specifically highlights *integration of services* and an increased focus on couples as practical and promising strategies, opening the way for increased male involvement. It also deliberately problematizes our current conceptual understanding or acceptance of PMTCT (and HIV and other sexual and reproductive health services) as women's domain. Indeed, this paper argues that to maximize the health outcomes of PMTCT for children, women and men, we must move beyond seeing men as simply "facilitating factors" to enable women to access

health-care services (Peacock et al. 2009; Larsson et al. 2010) but as constituent parts of reproductive health policy and practice (Theuring et al. 2009).

Rationale and background

2. The statistics. In 2009, 370 000 children became infected with HIV globally – more than 1000 every day (UNAIDS 2011). Nearly all of these children acquired HIV through mother-to-child transmission (MTCT) (McIntyre 2006; UNAIDS 2006). Sub-Saharan Africa is disproportionately affected by paediatric HIV. About 2 million HIV-positive children below the age of 15 years live on the continent, accounting for approximately 90% of all the HIV-infected children worldwide (Byamugisha et al., 2010b). Globally, HIV continues to wreak havoc on the health of women. HIV is the leading cause of mortality for women of reproductive age, and in countries with a high burden of the disease, such as South Africa and Zimbabwe, HIV is now the leading cause of maternal mortality (WHO, 2010a). It is estimated that in 2009 between 42 000 and 60 000 pregnant woman died because of HIV (UNAIDS 2011).

3. Despite much progress, access and utilization of PMTCT services are low. In high-income countries, MTCT of HIV has been decreased to about 1% through preventive measures, including effective voluntary or routine counselling and testing for HIV, antiretroviral therapy (ART) and the use of safe, affordable and accessible breast-milk substitutes (Tudor Car et al. 2011). While this fact signals the effectiveness of efforts to halt new infections, the reality in resource-poor countries is starkly different. There, the coverage of women and children with PMTCT interventions remains unacceptably low (Gloyd et al. 2007; Johnson 2009). In 2009, an estimated 26% of pregnant women in low- and middle-income countries were tested for HIV, and 53% of the estimated HIV-positive pregnant women received at least some type of ART prophylaxis. Programme coverage was below

50% in 11 of the 25 countries with the largest number of women needing ART to reduce mother-to-child transmission (WHO/UNAIDS/UNICEF 2010). However, it is important to recognize that since the year 2000, many low- and middle-income countries have made impressive progress in the introduction and scale-up of programmes for PMTCT of HIV as an integrated component of antenatal care.

4. Rapid scale-up of effective interventions with women at the centre of the global response. The WHO's *PMTCT strategic vision, 2010–2015* (WHO 2010a) and UNAIDS's corresponding *Global plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive, 2011–2015* (UNAIDS 2011) and *UNAIDS outcome framework: business case 2009–2011* (UNAIDS 2010a) clearly urge countries to place the reality of women's

lives, reproductive rights, and needs at the centre of their national plans to scale-up interventions to prevent paediatric infection and to promote the health of mothers (see the programmatic framework of the *Global plan* in Table 1). This means that plans must "be firmly grounded in the best interests of the mother and child" (UNAIDS 2011:8) and that services must be holistically responsive to their needs.

5. Increasing responsiveness to the reality of women's lives: HIV and sexual and reproductive health (SRH) integration. Creating linkages between HIV and other SRH services accomplishes many things. *Integration makes "people sense"* and acknowledges the realities of women's needs. For example, the integration of PMTCT interventions within maternal and newborn health-care services makes sense because these services temporally

Table 1. PMTCT and the *global plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive*

What is MTCT?	"HIV infection transmitted from an HIV-infected mother to her child during pregnancy, labour, delivery or breastfeeding is known as mother-to-child transmission (MTCT)." (WHO 2010a)		
The programme framework	The implementation framework for the elimination of new HIV infections among children and keeping their mothers alive will be based on a broader four-pronged strategy. This strategy provides the foundation from which national plans will be developed and implemented and encompasses a range of HIV prevention and treatment measures for mothers and their children, together with essential maternal, newborn and child health services, as well as family planning, and as an integral part of countries' efforts to achieve Millennium Development Goals (MDGs) 4 and 5, as well as 6.		
Prong 1	Prong 2	Prong 3	Prong 4
Prevention of HIV among women of reproductive age within services related to reproductive health such as antenatal care, postpartum and postnatal care and other health and HIV service-delivery points, including working with community structures.	Providing appropriate counselling and support, and contraceptives, to women living with HIV, to meet their unmet needs for family planning and spacing of births, and to optimize health outcomes for these women and their children.	For pregnant women living with HIV, ensuring HIV testing and counselling and access to the antiretroviral drugs needed to prevent HIV infection from being passed on to their babies during pregnancy, delivery and breastfeeding.	HIV care, treatment and support for women and children living with HIV, and their families.

coincide with pregnancy, labour, delivery and early postpartum and because the majority of women attend antenatal clinic at least once (Tudor Car 2011). *Integration upholds the human right to access primary care*: “it recognizes the importance of empowering people to make informed choices about their sexual and reproductive health, and the vital role that sexuality plays in people’s lives” (UNAIDS 2010b:15). It is especially important to consider here the human right of HIV-positive and HIV-negative women alike to decide whether to have children, and, if so, when, and how many to have, given the compelling evidence of family planning as an effective HIV-prevention strategy (Wilcher et al. 2008). *Integration acknowledges the epidemiological reality*: both men and women are at increased risk for acquiring HIV during the woman’s pregnancy (Moodley et al. 2009). “The majority of HIV infections are sexually transmitted or are associated with pregnancy, childbirth and breastfeeding; and the risk of HIV transmission and acquisition can be further increased due to the presence of certain sexually transmitted infections (STIs). Moreover, sexual and reproductive ill-health and HIV share root causes, including economic inequality, limited access to appropriate information, gender inequality, harmful cultural norms and social marginalization of the most vulnerable populations” (UNAIDS 2010b:15). *Integration creates synergy and can lead to cost savings*: because many of the countries with the highest burden of HIV also face the greatest challenges in improving maternal and child health outcomes, utilizing the existing structures and human resources to extend services can serve as a key and cost-effective strategy to achieve equitable and universal access to health care and to improve the health and survival of women and children.

6. Another reality of women’s lives: men. PMTCT programmes focus on women, leading many to call for an examination of men’s engagement in PMTCT to realize the programme’s objectives—not only to reduce the incidence of infection among women and infants but also to better meet the HIV prevention and care needs of the family unit

as a whole. Indeed, during the last decade male involvement has been recognized as a priority for PMTCT programmes (WHO et al. 2007). The reason for this is clear. There is ample evidence documenting the impact of men’s involvement on the various components of PMTCT programmes (Falnes et al. 2011): men play an important role in terms of women’s risk of acquiring HIV (Msuya et al. 2006b), and prevention, in terms of condom use in the couple relationship (Farquhar et al. 2007; Desgrees-du-Lou et al. 2009a). Men also play a role in women’s utilization of services, including testing for HIV (Maman et al. 2001; Baiden et al. 2005; Banjunirwe and Muzoora 2005; Peltzer et al. 2008) and obtaining the follow-up results (Peltzer et al. 2008). Male partners also influence women’s treatment decisions, including whether she receives medication (Farquhar et al. 2004; Msuya et al. 2008; Peltzer et al. 2008) and whether she adheres to infant feeding advice (de Paoli et al. 2002, 2004b; Brou et al. 2007; Farquhar et al. 2004; Msuya et al. 2008; Tijou Traore et al. 2009).

7. Male involvement as part of the global response. In response to this reality, and as part of its woman-centred approach, the *Global plan* declares that “efforts must be taken to secure the involvement and support of men in all aspects of these programs and to address HIV and gender-related discrimination that impedes service access and uptake as well as client retention” (UNAIDS 2011:8). Because SRH programmes and services have been focused primarily on women, men have often lacked information to make informed decisions about healthy behaviours and the roles they might play in promoting overall family health, including accessing HIV prevention, care and treatment services. Studies demonstrate that when given the opportunity to participate in SRH programmes, such as family planning and the PMTCT programmes, men wish to be positively involved in promoting the health of their families and communities (Peacock et al. 2009). The result, as this paper demonstrates, is that men’s constructive engagement can and does yield positive results for the health of women, children and families.

Gender inequality and its impact on PMTCT

8. Historically, many PMTCT programmes have organized their services as if potential clients were free to act independently. Thus, most awareness and implementation efforts related to family planning and HIV prevention and care have been directed primarily at women, disregarding the cultural and gender norms that may impact women's decision-making regarding these issues (Peacock et al. 2009). The reality is that **women's decision-making about their pregnancies and health are deeply influenced by their partners, communities and social norms and beliefs regarding HIV and AIDS** (UNAIDS 2011). Below, recent research illustrates the ways in which patriarchal gender norms affect the various components of PMTCT service utilization, delivery and efficacy.

9. Women may be unable to negotiate sex or safe sexual practices, such as condom or contraceptive use, which can lead to HIV infection, STI or unplanned pregnancy. It is clear from the research that in most settings in sub-Saharan Africa social and cultural norms grant men the power to decide the nature of the sexual relationship. Across many studies, there was a clear consensus among study participants, that the decision to use a condom rested with the male partner (Farquhar et al. 2004; Desgrees-du-Lou et al. 2009b), and that men often associated condom use with infidelity, and thus considered it not appropriate for use within the context of a committed relationship (Falnes et al. 2011). Despite the knowledge about condoms that women gained at clinics, and their subsequent favourable view of them, many women refused to ask their partners to use a condom, in fear of their partners' reactions (Falnes et al. 2011).

10. Fear of rejection, stigmatization, and violence may prevent women from utilizing HIV testing and counselling (HTC) services. Women's fear of their partners' reactions to HIV testing and the disclosure of results was a significant barrier to accessing these services (Maman et al. 2001, 2003; Medley et al. 2004; WHO 2004; Bajunirwe and Muzoora

2005). They feared how their partners would react, abandonment, loss of economic support, fear of stigmatization, rejection, discrimination, violence, upsetting family members, and avoiding accusations of infidelity (Bor 1997, Kilewo et al. 2001; Gaillard et al. 2002; de Paoli et al. 2004a; Medley et al. 2004). In fact, the strongest predictor of willingness to accept an HIV test was the woman's perception that her husband would approve of her testing for HIV. Women who thought their husbands would approve were almost six times more likely to report a willingness to be tested compared to those who thought their husbands would not approve (odds ratio (OR) = 5.6, 95% confidence interval (CI) = 2.8 to 11.2) (Bajunirwe and Muzoora 2005). In one study, partner's consent was the principal reason for opting out of HIV testing (Homsy et al. 2007).

11. However, much of the research cited in paragraph 10 was conducted before the expanded availability of treatment, access to ART and the introduction of opt-out testing. **Opt-out testing was generally more acceptable to men and women.** It is significant to note, that if the HIV test was considered a routine part of the PMTCT protocol, men were much more accepting of their partners' testing (Falnes et al. 2011). Opt-out testing also lessened women's fear and made them more accepting of testing (Byamugisha et al. 2010a). It was much less acceptable for women to seek VCT if it was not a routine part of care. Men interpreted this to mean that a woman either suspected her partner to be unfaithful, or that she herself had been unfaithful (Falnes et al. 2011).

12. Women feel burdened by clinics' request that their partners be tested (Larsson et al. 2011). Due to the fears of testing and disclosure of results to their male partners, women did not feel empowered to ask their partners to undergo an HIV test. Rather, they expressed the desire that the request come from the clinic staff themselves (Falnes et al. 2011).

13. Adherence to infant feeding was influenced by men. Infant feeding was considered to be the domain of women, but only so long as the infant

feeding pattern conformed to social norms. Since infant feeding is often done in public settings, how women chose to feed their babies is evident to neighbours and family members. This choice can inadvertently lead to a disclosure of the woman's HIV-positive status if it does not conform to normative cultural patterns of feeding. This, in turn, can result in the woman facing such sanctions as, "being forced to breast feed, or even being divorced" (Falnes et al. 2011).

14. For all of these reasons, we know that **male involvement and community participation are critical elements of successful programmes**: "The process of developing and implementing programs must include the meaningful participation of women, especially mothers living with HIV to tackle the barriers to services and to work as partners in providing care. In addition, efforts must be taken to secure the involvement and support of men in all aspects of these programs and to address HIV- and gender-related discrimination that impedes service access and uptake as well as client retention" (UNAIDS 2011:8).

The benefits of men's engagement in PMTCT

15. Many of the studies in the last section document the effects of men's lack of involvement in maternal and child health in Africa. It is the kind of information that fuels an often unspoken notion of men as *obstacles to health* instead of partners in promoting family health. However, there is a growing body of evidence indicating that **many benefits can accrue to the overall reproductive health of families when men critically examine norms of power, acquire new knowledge and skills and challenge prevailing gender norms** (WHO 2007).

16. Why is it important to engage men in PMTCT and the promotion of overall family health? A CARE-Burundi staff member at a recent training put it quite simply: "Reproduction requires both a man and a woman. Men are half of the equation. They have to be involved". Currently, men make

many decisions that affect private, family life. **Their constructive involvement and support in the elimination of paediatric HIV and the promotion of women's and family health would not only enable men and women to share responsibility for family health (currently borne disproportionately by women), but would also accelerate global progress towards the achievement of the MDGs** (especially goals 3–6) that are key to national development (see Table 2). If we are truly interested in creating a broad-based global response to the elimination of paediatric HIV, we cannot exclude half the population. We must rally men to the cause and demonstrate the benefits of gender equality, shared decision-making, partnership and non-violence – to themselves and their families. This section documents the effects that men's positive and constructive involvement can have on PMTCT.

17. Men's involvement plays a role in HIV prevention by helping to facilitate couple communication related to sexuality. Partner participation increases spousal communication about HIV and sexual risk (Desgrees-du-Lou et al. 2009a). This becomes especially critical in discordant couples, where men's involvement in testing may enable the couple to address condom use, decrease sex with outside partners and thus help to prevent HIV and other STI transmission to the uninfected partner (Roth et al. 2001; Allen et al. 2003). Studies have also shown an association between men's involvement and contraceptive use (Becker 1996; Sternberg and Hubley 2004). Finally, men as supportive partners can influence the family's social environment, especially with extended family, to create an environment that is more conducive to seeking treatment, being adherent to medications and clinical appointments and remaining in care both during the pregnancy and after delivery. Thus, involving men as supportive partners can help ensure the ongoing health of both parents as well as the prevention of perinatal transmission.

18. A variety of benefits are derived from couple counselling and testing for HIV. In one study in Kenya, seropositive women who attended VCT with their spouse were three times more likely to adhere

Table 2. Millennium Development Goals and the global plan (UNAIDS 2011)

The central importance of PMTCT to global health	The elimination of new HIV infections among children and keeping their mothers alive contributes directly towards achieving four of the MDGs, where HIV currently holds back progress. Similarly, progress on achieving other MDGs contributes to HIV prevention and treatment for women and children.		
MDG 3	MDG 4	MDG 5	MDG 6
Promote gender equality and empower women – by supporting women’s empowerment through access to HIV-prevention information, HIV-prevention and treatment services, and SRH services; by involving mothers living with HIV as key partners in delivering the plan and engaging their male partners. By empowering women, they are better able to negotiate safer sex, and by eliminating gender-based violence, women’s vulnerability to HIV is reduced.	Reduce child mortality – by reducing the number of infants infected with HIV; by providing treatment, care and support for uninfected children born to mothers living with HIV and ensuring effective linkages to life-saving treatment for children living with HIV; and, indirectly, by improving maternal health and ensuring safer infant feeding practices. By improving living conditions and family care practices, survival rates of children born to women living with HIV are increased.	Improve maternal health – through prevention of HIV among women and provision of family planning for HIV-positive women of childbearing age; and by ensuring effective care, treatment and support for mothers living with HIV. Strong health systems can help ensure that every birth is safe and pregnant women are able to detect HIV early and enrol in treatment.	Combat HIV/ AIDS, malaria and other diseases – by preventing the spread of HIV through preventing infection in women of childbearing age; preventing HIV transmission to children and treating mothers; and ensuring strong and effective linkages to ongoing care, treatment and support for children and mothers living with HIV. By providing tuberculosis (TB) treatment, deaths among pregnant women living with HIV are reduced. By preventing TB and malaria, child and maternal mortality among women and children living with HIV is reduced.

to their treatment regimen during pregnancy and at the time of delivery, and five times more likely to adhere to prescribed breastfeeding protocols than those who were individually counselled (Farquhar et al. 2004). In another study, the odds of a woman having a record of facility-based delivery were 28% higher for a woman counselled and tested with her partner than for a woman who tested alone (Conkling et al. 2010). Health-facility-based delivery is helpful to ensure compliance to infant antiretroviral dosing but also to ensure the practice of modified obstetric practices that have been shown to reduce MTCT. Women tested with their partners were less likely to be lost to follow-up than those tested alone (Conkling et al. 2010). When couples received pre- or post-test counselling together, greater use of alternative feeding methods (Farquhar et al. 2004) and greater acceptance of HIV testing (Semrau et al. 2005) were observed among women.

19. There is an association between partner disclosure and HIV prevention. Women who disclosed their HIV status to their partners were more likely to return for post-test counselling, accept antiretroviral prophylaxis, modify infant feeding practices and increase condom use in the postpartum period than those who did not (Kiarie et al. 2006; Farquhar et al. 2004; Semrau et al. 2005; Msuya et al. 2006a). In multivariate analysis, it was found that women who had disclosed their HIV status and who reported less HIV-related discrimination were more adherent to antiretroviral prophylaxis to prevent MTCT. Similarly women whose male partner was involved in antenatal care were more adherent to both the maternal and infant nevirapine doses (Peltzer et al. 2011).

20. Men's involvement positively impacts infant feeding practices and mortality. When men knew that their spouse was HIV-positive and involved in the PMTCT project, they played an active role in applying the advice received, particularly related to exclusive breastfeeding and early weaning (Tijou Traore et al. 2009). The greatest impact of partner participation in one study in Tanzania (Msuya et al. 2008) was on infant feeding practices. In this

study, of those with participating partners who chose exclusive breastfeeding, 64% successfully did not mix-feed and stopped breastfeeding at 4–6 months compared to 28% among those whose partners did not participate. For those who chose formula feeding, where the partner attended, 80% adhered to the method compared with 29% where the partner did not attend. Another study (Aluisio et al. 2011b) in Kenya found that including men in antenatal PMTCT with HIV testing had an impact on infant health outcomes. The authors found that the combined risk of HIV acquisition and infant mortality was lower with male attendance and report of prior male HIV testing, when adjusting for maternal viral load and breastfeeding.

21. Beyond the health benefits, there is some evidence suggesting that male involvement may also be a cost-effective strategy in the prevention of HIV. An early paper (Postma et al. 1999) concerned with HIV infection acquired by women *during their pregnancy*, focused on estimating the cost-effectiveness of expanded antenatal HIV testing in London within the framework of universal voluntary HIV screening in early pregnancy. The scenario analysis was based on data from a French study, which enumerated the numbers of children born HIV-positive despite HIV testing in early pregnancy. The research revealed that screening pregnant women for HIV can avert the lifetime cost of caring for an HIV-positive child (estimated to be \$296 905, using a 5% discount rate for time preference for 1995-6 prices), and could also lead to gains in life-years for both mother and child. The paper concluded that universal, voluntary, antenatal HIV screening is a cost-effective intervention with cost saving potential in areas in which there is a high prevalence of HIV infection among pregnant women. One author of the paper, presenting at the subregional consultation on male involvement in PMTCT in Kigali, arrived at a further conclusion: that universal/selective repeat HIV testing of woman's partners, in addition, would be even more cost-effective if it could avert HIV infection of both the mother and father, in addition to the child. A recent modelling exercise using Rwandan data (Ndagije 2011) reached similar conclusions. In Rwanda,

56% of couples where at least one partner is infected with HIV are serodiscordant. This translates into approximately 133 000 HIV discordant couples in the country. Using assumptions from the peer-reviewed literature about the effectiveness of couple HIV counselling and testing in reducing both horizontal and vertical transmission, the model estimates that national rollout of couples HIV testing and counselling (CHTC) could prevent 31 691 infections at a cost of \$1136 per infection averted. CHTC had 91 infections averted and 2861 disability-adjusted life-years (DALYs) saved – more infections averted and DALYs saved than was observed with the standard HTC option (88 infections averted and 2772 DALYs saved). The author concluded that CHTC is a cost-effective HIV-prevention method for discordant couples and for the prevention of HIV transmission to babies.

What is the nature of men's current participation in PMTCT?

22. Participation by men in antenatal HIV testing and counselling is very low. Despite the many benefits of male involvement, studies from eastern and southern Africa have found testing rates ranging from 8% to 15% (Chandisarewa et al. 2007; Farquhar et al. 2004; Msuya et al. 2008; Katz et al. 2009). Falnes et al. (2011) found a lower male testing rate at the antenatal clinic, at 3%, in the United Republic of Tanzania (Kilimanjaro Region).

23. Even so, men's perceptions about the benefits of PMTCT are positive and, in general, men are supportive of their partners' participation in PMTCT programmes (Maman et al. 2003; Medley et al. 2004; WHO 2004; Theuring et al. 2009). *However, there is a contradiction between men's positive attitudes and their low participation rates in PMTCT sites, which requires explanation* (Theuring et al. 2009).¹

24. Men who participate in PMTCT are generally in more committed relationships and report more communication with their partners about HIV. In a study from Nairobi, men who presented to the antenatal clinic for HCT were more likely to be in monogamous marriages and live with their partners. They were also more likely to have previously discussed HIV testing with their partner (27% versus 19%, $P = 0.001$) and willing to confide in their partner if they tested HIV seropositive (68% versus 59%, $P = 0.004$) than men who did not present to the clinic. In multivariate analysis, living with and reporting having previously discussed HIV testing with female partners remained significantly associated with male attendance at the antenatal clinic (OR (95% CI) = 4.34 (1.05 to 18.0) and 1.49 (1.12 to 1.97), respectively). In addition, women whose partners presented to the antenatal clinic were significantly less likely to test HIV seropositive than women whose partners did not present to clinic (10 versus 16%, respectively; $P = 0.015$) (Katz et al. 2009). Other factors associated with men's participation include education level, knowing their serostatus and having heard about PMTCT (Byamugisha et al. 2010b). If they had heard about PMTCT, men were two times more likely to become involved than those who had not.

Men's participation: the chicken or the egg?

The evidence is not clear. Is it PMTCT programmatic efforts to promote male involvement that are responsible for men's utilization of services? Or is it men who are already constructively involved in their partners' lives that utilize PMTCT services (see Bakari et al. 2000; Msuya et al. 2006a; Katz et al. 2009; Larsson et al. 2010)?

¹ See one possible explanation for this under the section, "The question of relationship quality: the missing piece?" in this paper.

What are the barriers to men's participation in PMTCT?

25. As illustrated below, there are a variety of facility-based (supply) and social (demand) factors that serve as barriers to the meaningful participation of men in PMTCT services. Yet perhaps the most important barriers are the **conceptual and policy barriers that inadvertently support men's exclusion from PMTCT and other reproductive health services**. See Greene and Biddlecom (2000) for an expanded and thoughtful discussion of this issue. Examples of these barriers are described below.

26. Increased international focus and resources have led many countries to concentrate their efforts on the proximate determinants of paediatric infection. Since vertical transmission of HIV to an infant can only occur from an HIV-infected mother, PMTCT programmes focus on women. Women are encouraged to get tested for HIV and are provided with ARV prophylaxis to prevent mother-to-child HIV transmission, if found to be HIV-positive. This emphasis makes biological sense and is in conceptual alignment with the theory and practice of global reproductive health in recent decades, which has made women the centrepiece of its efforts. The global health challenges – population growth, maternal and infant mortality, as examples – that continue to threaten to derail efforts at national development – have been identified and tied to women. No equivalent urgent health issue has been identified with men to the same degree (Gutmann 2007). In addition, the “women and development” model which saw women as good investments in terms of development resources, meant that governments and nongovernmental organizations (NGOs) prioritized the participation of women in many development schemes. However this comes at a cost. The singular focus on women ignores the context of women's lives as members of a partnership, family and community and precludes a broader focus on overall family health, including men (Betancourt et al. 2010; Njeru et al. 2011).

27. Beyond the professional realm of public health, the social or cultural milieu in which we live has also traditionally associated reproduction with the domestic sphere, or women – a sentiment highlighted repeatedly in the literature by men who view health clinics as woman's spaces, and by providers who may also hold negative attitudes towards male involvement in traditionally female services. Both public health and the cultures in which it operates have conspired unwittingly to create a system of thinking that associates SRH with women.

28. This institutionalization of women's health has led to particular antenatal and maternity structures, which has certainly benefited women and families, but it has also served to exclude men from participating in important health arenas. Interventions to protect the rights of women are important in their own right in contributing to reproductive health equity. In addition, interventions that involve men can further strengthen reproductive health equity. “It must be recognized that the ever existent cultural/traditional barrier to male involvement in reproductive health services has been exacerbated by the tendency of health systems to structurally segregate men from reproductive issues” (Theuring et al. 2009:S99).

29. One obvious implication of this system of logic is that HIV testing is usually proposed to men and women separately, and on very different occasions. This does not facilitate communication between couples regarding HIV, their status, or the adoption of preventive behaviours (Desgrees-du-Lou and Orne-Gliemann 2008). As Theuring and her colleagues exhort: “male partners need to be viewed and treated not only as a powerful influencing factor, but as a constituent part of reproductive health, and can no longer be excluded from any debate surrounding issues like pregnancy or HIV/AIDS” (Theuring et al. 2009:S100).

30. There are other, more concrete barriers to men's participation in PMTCT services that can be organized into the following categories: factors related to HIV knowledge, stigma and

discrimination; clinic or supply-side factors; logistical or access challenges; and barriers related to gender norms.

31. HIV-related knowledge, stigma and discrimination. It is clear that much remains to be done to increase knowledge among men about HIV testing and counselling. Some studies showed that men were well aware of media efforts to promote their involvement in testing, but they said that these *media campaigns did a less effective job of explaining why men should be tested and what benefits they would derive from testing* (e.g. Larsson et al. 2010). Other studies showed that there was simply a lot of fear: in one study of men's perceptions about PMTCT, it was shown that 88.5% of sampled men thought that other men did not participate in PMTCT because they feared knowing their HIV status (Katz et al. 2009). In another study, women said that engaging their partners in PMTCT would be particularly challenging if men were unaware of their status, refused to be tested, or were in denial about their HIV status (Reece et al. 2010). There also seems to be a *gap in knowledge related to discordancy*. Some men questioned the need for testing if their partners had already been tested, believing that they would have the same test results as their partners (Falnes et al. 2011). Men also feared discordancy because of the anger and bitterness it

would cause in the relationship, further challenging men's desire to support their wives and even to participate in services (Reece et al. 2010).

32. More work needs to be done to reduce stigma and discrimination in communities, to promote positive preventive behaviours. There was a feeling among men that their involvement in PMTCT services would create the perception that one or both partners was living with HIV (Peacock 2003) and they feared the stigmatizing nature of HIV care (Larsson et al. 2010). Women said that HIV-related stigma was a significant factor in getting the support of their partners for basic activities, such as going to clinics to get infant feeding formula. As a result, women said they were less likely to adhere to a formula-based regimen (Reece et al. 2010). Men also stated that it was difficult to remain engaged in PMTCT infant feeding regimens due to the social stigma from friends and family if feeding practices deviated from local norms, particularly regarding formula use (Reece et al. 2010).

33. Health-facility factors serve as a strong deterrent to utilization of services. Many of the studies reviewed for this paper relied on men's perceptions regarding their involvement in PMTCT services. Participants spoke with particular virulence about the kind of services they experienced at

The HIV Preventions Trial Network study 052

In May 2011, the HIV Prevention Trials Network (HPTN), showed that early – as opposed to delayed—initiation of antiretroviral therapy for the HIV-positive partner in a serodiscordant couple could reduce the risk of HIV transmission to the uninfected partner by 96%. These findings highlight the significance of scaling-up public awareness about the importance of knowing one's HIV status. They also call attention to the need to identify serodiscordant couples through improved partner and couples HIV testing and counselling programs and linking individuals diagnosed as HIV-positive to HIV care and treatment services

The literature review for this paper showed that men were aware of media attempts to get them to test, but understood less well the benefits of testing (Katz et al. 2009; Byamugisha et al. 2010b; Reece et al. 2010). Awareness campaigns that educate men and couples about HIV serodiscordancy are urgently needed so that more men will be motivated to seek HIV testing for themselves instead of using their partner's status as a proxy measure of their own status.

health facilities. Men mentioned the negative attitudes of staff members (Theuring et al. 2009; Reece et al. 2010), staff members' lack of common courtesy, their "rough handling" of pregnant women, and health-care workers not allowing men to enter the antenatal clinic with their partners (Theuring et al. 2009; Byamugisha et al. 2010b; Larsson et al. 2010). In fact, men experienced health-care workers who were reluctant to encourage male attendance in antenatal care at all (Misiri et al. 2004). Many men felt unwelcomed and disrespected (Larsson et al. 2010), and thought it was clear that services were designed without taking their particular needs into consideration (Orne-Gliemann et al. 2010). The charging of unofficial user fees was another barrier cited (Byamugisha et al. 2010b; Larsson et al. 2010). The lack of integration of services was mentioned as discouraging men from getting tested, since they felt they would be "exposed" through special clinics or opening hours (Larsson et al. 2010).

34. Male clients' concerns about their receptivity at health facilities seem to be well grounded, based on self-identified barriers to men's participation on the part of health-care providers.

Health-care providers seem to share the same ideas about gender as their fellow residents in the communities in which they live and work. This is not surprising, since health professions training programmes seldom address gender, and specifically men's involvement in SRH. For example, some providers feared accusations of incompetence. Female providers feared sexual assault from their male clients, and all practitioners expressed discomfort about counselling men with a positive HIV result (Aluisio 2011b; Shemsanga 2011). Despite their universal expression of support for the idea of male involvement, no providers described their services as "male friendly" in one Tanzanian study (Kapata et al. 2010). There is a lack of appreciation of the benefits of male involvement in services, and many practitioners lack knowledge about men's specific SRH concerns and have had no specialized training regarding the integration of men into services (Shemsanga 2011). Infrastructural challenges (e.g. low pay and morale, burnout, personnel shortages, etc.) seem to leave providers

with little motivation to take on the additional demand of providing services to men and couples (Aluisio 2011a; Shemsanga 2011) or to adopt new provider guidelines for services. But even if there was the desire to do so, policy guidelines for male involvement simply do not exist in many places. In the United Republic of Tanzania, for example, men's inclusion in the National Multi-Sectoral Framework on HIV/AIDS is notable, but no clear strategy exists on how, when or by whom the framework's vision for male involvement is to be realized (Katapa et al. 2010).

HPTN study 052 and male-friendly services

Since the results of the HPTN study 052 may give greater personal and interpersonal motivation to seek testing, larger numbers of men will likely utilize both stand-alone HTC sites as well as PMTCT facilities. Greater participation by men may serve both as an impetus to make services more male friendly, and to make men's involvement in PMTCT more accepted or normative, thus decreasing stigma and discrimination.

35. Male involvement in PMTCT clearly goes against prevailing gender norms in many places in sub-Saharan Africa. Reproductive health-seeking was seen by men as "women's work". Men saw the antenatal clinic as women's space, and the definition and organization of the programme as fundamentally female oriented (Reece et al. 2010). Predictably, men thought that antenatal clinic activities fell outside their area of responsibility (Peacock 2003; Orne-Gliemann et al. 2010; Falnes et al. 2011). Consequently, men perceived that attending the antenatal clinic would be "unmanly" (WHO 2003; Montgomery et al. 2006; Chinkonde et al. 2009). They felt uncomfortable at being the only man present in the clinic (Falnes et al. 2011) and feared stigmatization by other men (Byamugisha et al. 2010b; Reece et al. 2010; Falnes et al. 2011). In PMTCT programmes, access to men is gained through women clients, but many men felt that women should not be telling men what to do,

even if the request comes through the doctor (Falnes et al. 2011) and that a man in this context is not supposed to follow his wife; he is supposed to take the lead. Thus, in many men's minds, their participation in PMTCT would signal weakness and lack of masculinity and power to other men.

Language: PMTCT or PPTCT?

At the subregional consultation to discuss strengthening male involvement in the elimination of mother-to-child transmission of HIV, held in Kigali, Rwanda in August 2011, participants discussed whether it would be appropriate to continue to use the term PMTCT, or to switch to PPTCT – for the prevention of **parent**-to-child transmission of HIV.

One group of participants felt that PMTCT simply reflects the biological reality: that despite the behavioural interventions undertaken or the language used, ultimately the goal is to prevent the biological transmission of the virus from the mother to the child.

Another group of participants felt that since men's level of involvement in antenatal care and HIV counselling and testing affects transmission and the well-being of both women and infants, the use of PPTCT not only reflects the social reality of couples and families in the dynamics of transmission, but also helps men to feel more welcomed at health-care facilities.

Both groups seemed to agree that the local language used in the delivery of services should not serve as a deterrent to men's participation. In other words, in the translation of these terms to local languages, it is important that men feel that PMTCT services are inclusive of them, and not designed for women only.

36. Access or logistical challenges on the part of men. Men consistently cited a series of challenges of daily life that prevented them from participating in PMTCT programmes. Men talked about their perceived principal responsibilities as providers. Thus, time spent at clinics and away from work or other income-generating activities was clearly perceived as a barrier to their participation in PMTCT programmes (Byamugisha et al. 2010b; Larsson et al. 2010; Orne-Gliemann et al. 2010; Reece et al. 2010; Falnes et al. 2011). Distance, the cost of transport and clinic operation hours were also mentioned with some frequency (Larsson et al. 2010; Reece et al. 2010). Men felt that it was complex to ask an employer for time off, not only because PMTCT or testing was related to HIV, which might bring up issues of serostatus, but also because these issues were deemed to be primarily women's concerns (Reece et al. 2010). Efforts to address many of these logistical barriers of access and employment by offering weekend clinic hours have achieved mixed results. Although the clinic was well utilized at one site in Nairobi, it did not have a measurable impact on the proportion of men who sought services (Katz et al. 2009). In contrast, other programs have been successful in achieving greater participation of couples during expanded weekend hours (Allen et al. 2003).

The evidence base: moving towards gender-transformative programmes

37. Before we examine PMTCT programmes and assess their success in integrating male involvement, it is important for us to define what we mean by "success". Historically in the field of SRH, when programmes sought to integrate and address gender concerns, they did so utilizing a variety of approaches. Some programmes thought that simply including the opposite sex in their efforts was enough, without taking into consideration the special needs or concerns of men or women. Other programmes have even inadvertently exploited power differences to achieve programme goals, such as taking advantage

of men's decision-making power to increase utilization of family planning, even if it meant less say for women. On the positive end of the spectrum, some programmes have not only included both sexes and addressed their special needs, but have also sought to transform the nature of the relationship of power between men and women to have a long-lasting impact.

38. Table 3 highlights some of the diverse approaches that have been taken in achieving gender integration in programming, and places them in continuum – from exploitative (harmful) to transformative (helpful) approaches. **The continuum is useful because it can help public health policy-makers and practitioners and programme decision-makers to be more intentional about the strategies/activities they undertake to achieve effective and sustainable results.**

39. WHO's *PMTCT Strategic Vision* (WHO 2010a) and UNAIDS's *Global plan and outcome framework: business case* (UNAIDS 2011) explicitly understand gender equality as a foundational condition that, if achieved, would lead to better health outcomes for women, children and men. By taking a woman-centred approach, these global documents promote the full involvement of women in decision-making about family health and development of integrated reproductive and HIV services that address the needs of the entire family.

40. It is the understanding of these documents, too, that PMTCT programmes have the strategic opportunity to influence gender equality and promote shared decision-making and thus have a broad and sustainable impact on women, families and the communities in which they live. Shared power and decision-making between men and

Table 3 Continuum of approaches for achieving gender integration in programming (Gupta 2001)	
Integration Approach	Programmatic Characteristics
Gender-exploitative/ unequal programmes	Take advantage of rigid gender norms and existing imbalances of power. Can result in harmful consequences and undermine a programme's intended objective.
Gender-blind programmes	Give little or no recognition to different gender norms and relations in programme or policy design, implementation or evaluation.
Gender-accommodating/ specific programmes	Acknowledge the role of gender norms and inequities. Develop activities to adjust to and/or compensate for them. Do not actively aim to change norms, but strive to limit the impact of harmful gender norms. Can provide a sensible first step towards gender-transformative programming.
Gender-transformative programmes	Actively strive to examine, question and change rigid gender norms. Examine the vulnerabilities and costs of rigid gender norms for both men and women, for health, and social, economic, political life. Promote the position of women and equality, generally. Challenge the distribution of resources and allocation of duties. Address imbalances in power and promote equitable relationships in diverse settings.

women about SRH can lead to benefits for the entire family – beyond PMTCT – including increased family planning utilization, prevention of the sexual transmission of HIV and other STIs, reduction in maternal and infant mortality, and the prevention of gender-based violence. **This requires that governments and programmes move from seeing men solely as enablers of women’s positive health-seeking behaviours, to viewing them as integral partners in promoting gender equality and health and as clients of SRH services.**

41. Our measure of success, then, is gender-transformative programmes that:

- intentionally and thoughtfully involve both women and men – either simultaneously or sequentially under the same programmatic umbrella (i.e. gender-synchronized programming as clients (not simply enablers) (see Population Reference Bureau (2010) for an overview of gender-synchronized programming and its benefits)
- address the specific needs of men as well as women
- create opportunity for constructive dialogue between men and women
- actively strive to examine, question and change gender norms that increase vulnerability to HIV and other adverse reproductive health outcomes
- address imbalances in power and promote equitable relationships in diverse settings, including the wider community
- achieve a demonstrable health outcome or impact.

42. There are a few programmes focusing specifically on PMTCT and male involvement that have resulted in specific behavioural or health outcomes:

43. Couple voluntary counselling and testing (CVCT) is “the shared participation of a couple in HIV counselling and testing [and] constitutes a foundation for all further decisions undertaken jointly with regard to HIV and PMTCT, like the

decision to enrol in the PMTCT intervention” (Theuring et al. 2009). An excellent article by Desgrees-du-Lou and Orne-Gliemann (2008) reviews what is known about CVCT since the 1990s. The review covers CVCT efforts in both PMTCT and non-PMTCT sites. In PMTCT sites (Zambia and Kenya), where pregnant women were offered individual or couple HIV counselling, the couple counselling improved the uptake of HIV testing, antiretroviral prophylaxis and alternatives to prolonged and mixed breastfeeding, and no increased risk of adverse social events was reported compared with individual counselling (Farquhar et al. 2004; Semrau et al. 2005). The results of studies in non-PMTCT sites were equally positive. Rates of partner disclosure were high, and rarely accompanied by negative reactions on the part of the partner. CVCT also had a dramatic impact on rates of condom use and has been shown to reduce risk among couples (Allen et al. 1992, 2007; Van der Straten et al. 1995; Painter 2001).

44. Family-centred approach. In alignment with WHO’s *PMTCT strategic vision 2010–2015* (WHO 2010a) and its focus on integration and creating a continuum of care, the family-centred approach takes a holistic look at the household unit, with the assumption that HIV-affected families are at risk for a broad range of negative outcomes, which can have a cascading effect on the health of all household members (Betancourt et al. 2010). A holistic approach is achieved by taking traditional PMTCT interventions, and “extending” those services to reach additional members of the family. For example, as part of antenatal care, services might be extended to other members through household HIV testing and counselling, or through risk assessments for gender-based violence. One set of studies reviewed for effectiveness sought to extend HIV testing and counselling to partners of pregnant women attending antenatal care. The review shows that “partner participation was associated with positive outcomes, such as greater use of antiretrovirals and higher acceptance of post-test counselling among pregnant women, as well as increased spousal communication about HIV

and sexual risk. Moreover, when couples received pre- or post-test counselling together, greater use of alternative feeding methods and greater acceptance of HIV testing were observed among women. Partner participation was also often utilized as an entry point for the provision of additional PMTCT services to both male and female participants⁴⁴. It is important to note that the paper by Betancourt et al. also reviewed a second set of studies that focused on extending ART to partners and other family members, finding high adherence to ART among all members. A third category of studies critiqued comprehensive PMTCT models. The authors chose to highlight two as model programmes, which had attained impressive results: (1) the MTCT-Plus Initiative, which addresses the health need of the mother and infant and which recognizes that the mother's family should also be brought into care; and (2) The Centers for Disease Control (CDC)-Uganda, Global AIDS Programme, which focuses on extending HIV testing and counselling through a home-based approach.

45. Intrapartum HIV testing and counselling. A study conducted by Homsy et al. (2006) in a 200-bed hospital in rural Uganda compared the acceptability, feasibility and uptake of routine opt-out antenatal PMTCT services with routine opt-out intrapartum HIV testing and counselling (i.e. during onset of childbirth and delivery) in the maternity ward. The results obtained were impressive. The acceptance of HTC was 97% (3591/3741) among women and 97% (104/107) among accompanying men in the antenatal clinic and 86% (522/605) among women and 98% (176/180) among their male partners in the maternity ward. Thirty-four women were found to be HIV seropositive through intrapartum testing, representing a 12% (34/278) increase in detection of HIV infection. Over the study period, the percentage of women discharged from the maternity ward with documented HIV status increased from 39% (480/1235) to 88% (1395/1594). Only 2.8% of undocumented women had their male partners tested in the antenatal clinic, in contrast to 25% in the maternity ward. Of all male partners who presented to either unit, only 48% (51/107) came together and were counselled with their

wife in the antenatal clinic, as compared with 72% (130/180) in the maternity ward. Couples counselled together represented 2.8% of all persons tested in the antenatal clinic, as compared with 37% of all persons tested in the maternity ward. The study thus demonstrates that intrapartum HIV counselling and testing may be an acceptable and feasible way to increase individual and couple participation in PMTCT interventions.

46. On the “continuum of approaches for achieving gender integration in programming”, the position of these programmes most likely falls in the **gender-accommodating/specific** category. These interventions intentionally involve both men and women. Through couple counselling, they create the opportunity for dialogue between men and women. There is some evidence that the dynamics of power in relationships and gender norms may also be challenged through the interventions. For example, in their review of CVCT, Desgress-du-Lou and Orne-Gliemann (2008) found that in the United Republic of Tanzania, less partner violence was reported among women who disclosed their test results compared to women who did not share their results. On the other hand, **none of these interventions focus explicitly on changing harmful gender norms among men, women and communities, which can enhance the ability of a programme to increase male involvement, prevent HIV infection, STI and unwanted pregnancies, and facilitate women's uptake of PMTCT services.** In addition, despite the many documented benefits of CHTC, acceptability remains low. This raises the question of *how* CHTC is conducted and whether the service indeed addresses men's specific needs or concerns. In other words, do these programmes view men as simply enablers of positive health-seeking behaviour on the part of women, or are men recognized for the expanded roles they can play beyond being supportive partners—as clients themselves and as advocates for social change?

How do we move towards gender-transformative programming? Suggested characteristics of male involvement programmes in PMTCT

47. Broadly speaking, the WHO study (2007), *Engaging men and boys in changing gender-based inequity in health: evidence from programme interventions*, aimed to examine the evidence regarding the effectiveness of programmes engaging men and boys in reproductive health programmes. While some programmatic efforts within each of the intervention categories examined (e.g. group education, health services and community mobilization and engagement) showed significant results, **those programmes that combined different types of intervention, particularly with community outreach, mobilization and mass media campaigns, were most effective in producing behavioural or health outcomes (e.g. increased condom usage, delayed sexual debut, decreased violence, lower rates of STIs, etc.).**

48. The WHO study identified critical elements of successful male-involvement programming, which have been subsequently confirmed by another study (Pulerwitz et al. 2010). They included:

- critical reflections about what it means to be men
- reinforcing messages in well-designed community and mass media campaigns
- engaging girls, women, the community and service providers
- engaging community allies
- acknowledging men's needs as well as their need to support and accept women's rights.

49. Suggested characteristics drawn both from the WHO male involvement study (WHO 2007) and the current literature on PMTCT are discussed next. These characteristics can be roughly grouped into clinic, or supply-side factors, and community, or demand factors. In keeping with the

recommendations of the WHO study on engaging men and boys (WHO 2007), **it is important to consider how supply and demand factors can be addressed together and coherently to not only increase men's engagement in PMTCT, but also transform gender norms to foster sustained positive social change and equality.**

50. Facility-based or supply-side strategies for promoting male involvement. Men can play a variety of roles that contribute to the overall SRH of families and to development. One role is **men as clients** (for a complete discussion on men's involvement see Green et al. (1991)). In this role, men are encouraged to seek out services not only to improve their own health, but also as way to share equal responsibility and to participate in joint decision-making with their partners, without necessarily controlling those decisions, and to contribute to overall family health.

51. To promote positive health-seeking behaviour and men's participation in PMTCT programmes, **it is critical both that services are welcoming to male clientele and that their staff are competent to meet their needs.** The ability to increase men's utilization of HIV and reproductive health services and support for partners utilizing services to promote family health will rest largely on a site's capacity to address organizational and attitudinal barriers that may exist when initiating, providing, or expanding services that are inclusive of men.

52. Trained, competent and male-friendly staff are essential. Suggestions for how to improve staff and the quality of care they provide come from a variety of sources. Staff members themselves felt that refresher courses, including customer care, and better remuneration for staff were important (Byamugisha et al. 2010b). Men suggested teaching staff how to better meet men's needs, and make services more male friendly and less stigmatizing (Larsson et al. 2010). One author suggested that training for service providers on the importance of partner integration and couple testing and counselling would represent an important strategy in increasing men's participation (Walston 2005;

Theuring et al. 2009). Another researcher suggested that the guidelines contained in WHO's document, *Integrating gender into HIV/AIDS programmes* (WHO 2003) should be incorporated into the work routine by including them into terms of references of health-care workers, for example (Amin et al. 2007). This was felt to be especially important with antenatal care counsellors, who represent a crucial link between policy and practice of health services, and whose attitudes and practices in giving advice would significantly influence the intervention's outcome (De Paoli et al. 2002; Theuring et al. 2009).

53. Range of services, their structure and organization. The literature makes a series of recommendations concerning the type of services that could increase the active engagement of men. They include offering alternative HIV testing methods such as *mobile clinics, workplace testing, and door-to-door testing*, which have been shown to increase uptake of services and reduce stigma (Larsson et al. 2010). CHTC was considered a good idea because it provided an opportunity to get information, be tested and hear the results together. Studies suggested a diversity of opinion regarding the preference for couple, as opposed to individual, testing for HIV (Larsson et al. 2010; Falnes et al. 2011). Because of this, Katz et al. (2009) suggest that antenatal clinics offering services to men should consider including *options for both couple and individual counselling*.

54. Making services more male friendly. Both men and women expressed support for *more initiatives that are exclusively for men and that are led by men*. They suggested that interventions such as a men's psychosocial support group was a perfect example of an effort that could be helpful in engaging and retaining men in HIV-related services (Reece et al. 2010). Another suggestion was to *offer service/appointments to men at the same time* – presumably to address men's specific health concerns (Reece et al. 2010), which is in line with another suggestion to *integrate HIV care into general health care* to make testing, monitoring and ART provision more sustainable, but to also help reduce stigma (Larsson et al. 2010). Women suggested that employing more

men as staff members would make their spouses more comfortable and would help them to talk about sensitive subjects. To lessen stigmatization by other men, some authors suggested a *male-sensitive revision of antenatal sites* (Theuring et al. 2009), facilities for men only, or facilities designed especially for pregnant couples (Falnes et al. 2011). Finally, having *fathers directly invited to be tested by health personnel*, for example, by giving them invitation letters, emerged repeatedly in the literature as a good strategy to increase men's participation in sub-Saharan Africa. Doing this may make men feel more included in the PMTCT programme and therefore more likely to take action (Theuring et al. 2009; Byamugisha et al. 2010b; Falnes et al. 2011).

Resource on male-friendly services: EngenderHealth's men's reproductive health curriculum

This is a three-part curriculum designed to provide a broad range of health-care workers with the skills and sensitivity needed to work with male clients and provide men's reproductive health services. The curriculum includes the following sections:

- **Introduction to men's reproductive health services, revised edition (2008).** The first module of the curriculum is designed to help sites and health-care workers address organizational and attitudinal barriers that may exist when initiating, providing, or expanding a men's reproductive health services programme
- **Counselling and communicating with men.** The second module focuses on strengthening service providers' ability to interact with, communicate with, and counsel men – with or without their partners – on reproductive health issues
- **Management of men's reproductive health problems.** The third module provides information to clinicians and other service providers in diagnosing and managing reproductive health disorders in men.

For more information, contact Lori Rolleri (LRolleri@engenderhealth.org) at EngenderHealth.

55. Behaviour-change communication and community engagement.

Another role that men can play is that of *supportive partners* (Greene et al. 1991). This role recognizes the influence that men can have on the SRH of their partners, including in decision-making, planning and the provision of resources for care. In reaching out to men to encourage them to play this role, it is important to view men as allies and resources in promoting the health of families. Men want to be supportive to their pregnant partners, but often did not know how (Peacock et al. 2009), or seemed to have vague concepts of paternal responsibility. In response, behaviour-change communications campaigns have an unparalleled opportunity to diffuse

gender-transformative messages that challenge the status quo and encourage new ways of thinking in the community about men, women and relationships. For example, campaigns that highlight *role models of responsible fatherhood* could be a major emphasis in public information, education and communication efforts to increase partner involvement in antenatal care/PMTCT (Theuring et al. 2009). *Promoting couple communication regarding HIV/AIDS* through the media may increase the number of men accompanying their female partners to antenatal clinics when male VCT is available. Special efforts may be necessary to reach male partners of unmarried women seeking antenatal care (Katz et al. 2009).

A new initiative to watch: MenCare campaign in South Africa

Of all the topics discussed in engaging men in gender equality, the issue of men and caregiving, including men's involvement in maternal health, remains conspicuously absent and underexplored. To address this void, the Sonke Gender Justice Network, Promundo and others have recently launched MenCare to create and implement a world-wide campaign that promotes men's greater involvement: in care work and domestic work, including in the context of HIV/AIDS; as engaged fathers; and as partners in maternal and child health. The campaign seeks to provide policy-makers, the media, the health and social services sector, NGOs and community groups, and men and women with positive images of men's roles as caregivers, along with concrete programme and policy examples of how to increase such positive involvement.

"While we have talked much of the intergenerational transmission of violence, we have talked much less of the intergenerational transmission of caregiving and gender equality."

The MenCare campaign is framed with the belief that men's participation in caregiving and maternal health is positive for women, children, societies and men themselves. As such, caregiving provides a "positive hook" for engaging men in gender equality and reducing violence against women and children. It provides an alternative identity for men that can serve to galvanize men's participation in gender equality in ways that have yet to be fully realized.

For more information, contact Sonke Gender Justice Network (info@genderjustice.org.za).

56. Men were clear that they preferred community-based events. Because of their specific needs for information, men preferred community events where they would have the opportunity to ask questions. They specifically thought that it would be useful to hear from men who had already been tested and who could talk about their own experiences, and from HIV-positive men so they could learn more about the reality of their lives. They said they would also find it helpful to have organized discussions between health-care workers and the community, to learn more about services (Larsson et al. 2010).

Resource on behaviour-change communication: Brothers for Life

Brothers for Life (www.brothersforlife.org) is a national campaign targeting mainly men aged 30 years and over, to address the risks associated with having multiple and concurrent partnerships, sexual intercourse and alcohol, and gender-based violence, and promotes HIV testing, male involvement in PMTCT and other health-seeking behaviours. The campaign uses interpersonal communication, mass media and advocacy to reach its audiences.

Brothers for Life utilizes the Men's Wellness Toolkit to engage men within communities around priority topics that continue to undermine the health of men and women. The community-level work is supported by a beautifully designed and hard-hitting mass media component. Using television and radio, the campaign draws on the concept of brotherhood to convey the importance of men's decisions to their own health and the health of the people who depend on them.

The campaign is a collaborative effort led by South African National AIDS Council (SANAC), the Department of Health, the United States Agency for International Development/US President's Emergency Plan for AIDS Relief (USAID/PEPFAR), Johns Hopkins Health and Education in South Africa (JHHESA), Sonke Gender Justice, the United Nations Children's Fund (UNICEF), the Interdepartmental Management team (IDMT), the United Nations System in South Africa and more than 40 other civil society partners.

For more information, contact Johns Hopkins Health and Education in South Africa (joinbrothers@jhuccp.co.za).

57. Peer education and outreach was another strategy that was advocated for by men. Peer sensitization of men (Larsson et al. 2010) could include recruiting leaders from the men's support groups to serve as peer discussion leaders to deliver educational sessions to other men in their communities about the importance of men's support and engagement with programmes like PMTCT (Reece et al. 2010).

Resource on a multiple intervention approach: Promundo's Program H

Program H: Engaging Young Men in Gender Equality seeks to engage young men and their communities in critical reflections about rigid norms related to manhood. It includes group educational activities, community campaigns, and an innovative evaluation model (the Gender-Equitable men (GEM) scale) for assessing the programme's impact on gender-related attitudes. After participating in Program H activities, young men have reported a number of positive attitudinal as well as behavioural changes, from higher rates of condom use and improved relationships with friends and sexual partners, to greater acceptance of domestic work as men's responsibility and lower rates of sexual harassment and violence against women. In 2008, the United Nations Population Fund (UNFPA) recognized Program H as an effective strategy for engaging young men in the promotion of SRH in its State of the Population Report.

For more information, contact Piotr Pawlak (p.pawlak@promundo.org.br) at Promundo.

58. Men as agents of change. The final role that men can play is as *agents of change*. The critical aspect of this role is its emphasis on questioning, challenging and actively working to change gender norms that negatively affect the health of women, children and men. Though here the usage of the term is beyond that of its initial conceptualization (Greene et al. 1991), it is critical that the expectation is that men have a role beyond being passive recipients of new knowledge, skills and awareness, and that they have a responsibility beyond being personally transformed (more gender equitable) in their relationships. The question of roles and responsibilities brings us to **leadership – personal, communal, national and global**. In their roles as policy-makers, men are in a position of power to bring about systemic change – from challenging conceptual barriers with global implications to addressing national and subnational policy development and implementation with direct, local-level effects. On the international stage, policy-makers can challenge restrictive demographic thinking (with its often mechanistic and reductive focus on proximate determinants), which has supported the logic of men's exclusion in reproductive health settings. Instead, by taking a health and human rights approach and acknowledging the social reality of families, decision-makers are in a unique position

to advocate for policies that reflect the dynamics of infection in communities. It is important that a broader vision of gender equality—that is inclusive of male involvement—is “mainstreamed” into national HIV frameworks for action, including supporting implementation guidance and support to enable action. An important action would be to support policy initiatives that incentivize men's participation in services, promoting joint responsibility for testing and mutual disclosure and encouraging an often unwilling partner to test. Normalizing men's involvement would also address many of men's concerns (e.g. it is women's work, the fear of being seen by other men, etc.), because the expectation is that all men would participate. Perhaps the same kind of incentives can be used to encourage men's participation in antenatal care, to include birth-preparedness planning and the promotion of facility-based deliveries. But this issue of leadership goes well beyond global or national actors. Local leadership is critical for quality implementation. The Government of Rwanda has recognized this and has incentivized local leaders' participation in promoting men's involvement in PMTCT by making this a criterion of their job performance (see the country spotlight box). Ultimately, being an agent of change is personal. It is about commitment to equality and recognizing its benefits for the entire community. From this basic

commitment, the expectation is that action will flow – from policy formulation on the grand scale, to speaking out against gender-based violence in one's local community and holding other men accountable for inequitable speech and actions. To

be “sensitized” to gender is not sufficient. To make a real change in the elimination of paediatric HIV and maternal health, we need more than sensitive men. We need leaders.

Country spotlight: Rwanda

In response to an identified lack of participation of men in PMTCT, Rwanda developed the “Going for the gold” campaign, which aims to support a family-package approach to PMTCT in line with national strategies, with strong emphasis on male participation, encouraging male partners to participate in HIV counselling and testing.

Components of the campaign include:

- high-level advocacy with the involvement of high-level leaders and authorities
- promotion of HIV counselling and testing for couples as a national strategy
- community mobilization with local authorities and community health-care workers
- capacity building of health-care staff on HIV counselling and testing for couples
- public awareness campaigns using mass media for couples' testing
- introduction of couples' HIV testing indicators into the performance contract of local authorities with the government
- couples' HIV counselling and testing indicators integrated within a performance-based financing programme at health facilities and at the community level
- organization of weekend HIV counselling and testing sessions for partners who are not available on weekdays
- introduction of invitation letters for male partners.

Results: The uptake of couples' testing has dramatically increased from a national average of 33% in 2005 to 78% in 2008, with some health-care facilities reaching 90% partner testing uptake. The number of couples tested through the PMTCT programme has increased almost fourfold, from 58 700 in 2005 to 229 200 in 2008. Within the programme, HIV testing coverage increased from 10% of the total number of expected pregnant women in 2002 to 50% in 2005 and 75% in 2008. A relative decrease in the prevalence of HIV among pregnant women and their male partners was also reported: from 9.1% in 2003 to 2.98% in 2008 among pregnant women, and from 10.2% in 2003 to 3.07% in 2008 among male partners.

For more information, contact Placidie Mugwaneza (mu_placy@yahoo.fr) of the Treatment and Research on AIDS Center/Ministry of Health.

The question of relationship quality: the missing piece?

59. In the section on obstacles to men's participation in PMTCT, conceptual barriers were highlighted. It was asserted that both public health and the cultures in which it operates have conspired unwittingly to sustain a **paradigm that associates SRH with women, and has served to inadvertently exclude men from participating in important reproductive health areas.**

60. If men have largely been missing, so too have couples – the essential biological and social dyad of biological and social reproduction whose health outcomes have significant implications for national development. When couples have been considered, it is still with a focus on the proximate determinants of paediatric infection in mind: how do we get men to cooperate with women to adhere to prevention and treatment guidelines to eliminate paediatric HIV? What is missing is a consideration of the nature and quality of the relationship between men and women, including the “entanglement between sexual behaviour and affective relations” (Cole and Thomas 2009). If we exclude this more “distal variable” from consideration of our work, how faithful can we be to the imperative of the global plan (UNAIDS 2011) to consider the reality of women's lives as central to our response to paediatric HIV infection? How successful will we be in mobilizing programmes and services to achieve holistic family health and a continuum of care?

61. Researchers have begun to note the paucity of literature on relationships and the need for more information to strengthen public health programming for couples. “In sub-Saharan Africa, there is still inadequate socio-behavioural knowledge of HIV prevention within the dynamics of couple relationships” (Painter 2001). This includes couple communication on sexual risk; the evolution of preventive behaviours over time (e.g. by duration of relationship and time since VCT); and gender issues of negotiation and violence (Desgrees-du-Lou and Gliemann 2008). In another recent multi-country study to assess the acceptability of couple-oriented post-test HIV

counselling (COC), the authors found that one of the keys to men's involvement within prenatal HIV testing and counselling is “the better understanding of couple relationships, attitudes and communication patterns between men and women, in terms of HIV and sexual and reproductive health. This conjugal context needs to be taken into account in order to provide quality prenatal HIV counselling, which aims at integrated PMTCT and primary prevention of HIV” (Orne-Gliemann et al. 2010).² It is also important to note, however, that the types of relationships men and women have with one another can vary dramatically (i.e., polygamous marriages, co-resident vs. visiting relationships, the self-identification of people as single, etc.), and that type of relationship affects the nature and even definition of male involvement (please see “Issues for Consideration: Couples” in this paper).

62. Why is it important to learn about the nature of relationships? Simply put, because **most infections happen in stable relationships in sub-Saharan Africa**, either due to previous infection by one of the partners, or because of infidelity (Carpenter et al. 1999; Malamba et al. 2005; Chomba et al. 2008). Data from recent large-scale surveys in Burkina Faso, Cameroon, Ghana, Kenya and the United Republic of Tanzania reveal that serodiscordancy is a serious reality: at least two thirds of couples in each country with at least one HIV-positive partner were HIV serodiscordant (Desgrees-du-Lou and Orne-Gliemann 2008).

63. One potential epidemiological reason for a lack of focus on couples is a **misapprehension on the part of professionals concerning the extent of HIV serodiscordancy, and denial on the part of the public that it is possible.** In the literature review conducted for this paper, it was noted on at least a few occasions that men did not seek testing and counselling because the serostatus of their partners was known to them and they assumed that their HIV status would be the same as their partners' (e.g. Brou et al. 2007). If both partners believe they have the same HIV serostatus, the use of prevention during sexual intercourse will not seem logical (Desgrees-du-Lou and Orne-Gliemann 2008).

² Couple-oriented post-test HIV counseling (COC) is a clinic-based behavioral intervention which replaces standard post-test HIV counseling delivered to a pregnant woman. “It provides the woman with personalized information as well as tools and strategies to actively involve her partner within the prenatal HIV counseling and testing process (Orne-Gliemann et al. 2010).

64. Therefore, the use of condoms remains low in “committed” relationships (United Nations 2002; De Walque, 2007). We also know that the condom is a loaded symbol, associated with casual partners and infidelity (Bauni and Jarabi 2003; Chimbiri 2007), making it difficult for both women and men (Maharaj et al. 2005; Chimbiri 2007) to suggest or adopt preventive behaviours with their regular partners. Given the reality and extent of serodiscordancy, this places individuals in serodiscordant relationships at risk for infection subsequently, as well as risking paediatric HIV infection.

65. We know that that condom use is higher in couples where there is dialogue on sexual risks (Zamboni et al. 2000; Desgrees-du-Lou et al. 2009b). **But what we find is that the quality of relationships, as reported by respondents in studies, is in fact quite poor.** One study in Uganda reported that men thought their relationships were fundamentally unstable and distrustful. Larsson et al. (2010) found that “mistrust was widespread, and extramarital affairs were common, especially among men. Extramarital affairs were in general tacitly accepted within a marriage, and rarely discussed between spouses. However, the ever-present suspicion, that one’s partner would be unfaithful, created a pervasive atmosphere of mistrust between husbands and wives”. It was no surprise then that men found the idea of couple testing at PMTCT sites unappealing because of the conflicts it could generate in the relationship. These studies about individuals’ perceptions about the nature and quality of their relationships are suggestive, and perhaps explain why, despite the positive outcomes of couple HTC programmes, the acceptability of these services remains low (Desgrees-du-Lou and Orne-Gliemann 2008). Couple HTC is a great idea, but may spur conversations and bring up issues that the couple is not interested in, or is unwilling or does not have the skills or power to engage, even if to protect oneself or one’s partner.

Promising initiative: CoupleConnect

EngenderHealth’s CoupleConnect is an interactive, skills-based curriculum designed to prevent HIV infection among couples from the United Republic of Tanzania, which focuses on strengthening “couple connectedness”, that is, “the quality of the emotional bond between partners that is both mutual and sustained over time”. In line with the project’s objectives, couples are defined as those who live in or near an urban area, have been married within the past five years, are of low to middle socioeconomic class, are literate, are at least 20 years old, and are non-polygamous. EngenderHealth operationalizes couple connectedness through the promotion of nine key couple behaviours. A major theme of the curriculum is how gender inequality and harmful gender norms affect the nine behaviours that comprise the condition of couple connectedness. As such, the curriculum raises awareness about harmful gender norms, questions the cost of these norms and redefines them into healthier alternatives throughout the programme.

CoupleConnect is based on the hypothesis that couples who report a higher sense of couple connectedness are more likely to engage in healthier sexual behaviours compared to couples who report a lower sense of couple connectedness. CoupleConnect is currently in the pilot phase of implementation.

For more information contact: Dr Dunstan Bishanga (DBishanga@engenderhealth.org), CHAMPION Project, EngenderHealth, United Republic of Tanzania.

66. We are back, then, to the chicken or the egg question raised earlier: **do men participate in PMTCT programmes because of the good outreach efforts conducted by these programmes? Or is it men who already feel a sense of commitment and have good communication with their partners that participate? Studies seem to support the latter conclusion:**

- the pre-existing level of communication within the couple around SRH issues influences the acceptability of prenatal HIV counselling and testing (Bakari et al. 2000)
- in an urban area of the United Republic of Tanzania, women were less likely to collect their test results if they had never discussed reproductive health matters with their partner (Msuya et al. 2006)
- greater commitment to a female partner may increase a man's motivation to participate in VCT and in antenatal care, and having discussed HIV in the past may motivate or simplify HIV test seeking (Katz et al. 2009)
- both men and women in one study thought that good and open communication would support them in seeking routine HIV testing, discussing the challenges of living with HIV, and being more supportive of their HIV-infected partners (Reece et al. 2010).

67. Bringing women, men and integration together: couples as a part of a focused global response. Couples represent a wonderful, but as yet, unexploited opportunity to promote reproductive and family health within the context of integrated services. These missed opportunities for integrating the primary prevention of HIV and PMTCT should urgently be addressed. A couple-centred approach to HIV testing and counselling, involving men, would contribute to improving reproductive health, partner communication about sexuality, and the prevention of HIV and other STI within the relationship (Orne-Gliemann et al. 2010). Now, with the advent of the HPTN study 052

and its implications for serodiscordant couples, the importance of couple counselling to address prevention and the quality of the relationship becomes all the more imperative. The question becomes: how can we foster communication in couples in our communities to predispose them to utilize a range of SRH services to prevent paediatric AIDS, promote maternal health, and improve the well-being of the entire family?

Methodological considerations, questions and resources

68. How do we define male involvement?

Currently, male involvement in PMTCT is measured primarily through men's attendance at HIV testing and counselling and through its associated behavioural and health outcomes (for example, condom usage or adherence to prescribed infant feeding regimens). **Is testing a good proxy indicator of men's constructive involvement in PMTCT?** Does a man's participation in testing guarantee that he or the couple will adopt less risky sexual behaviours? Does it assure that the man will support his partner in her efforts to adhere to treatment and care regimens (Ghanotakis, personal communication, 2011)?

69. There are, in fact, many components of PMTCT service delivery. Not all components have received equal attention regarding men's engagement.

Three examples are: (1) men's involvement in family planning among infected or discordant couples, though the study by Wanyenze et al. (2011) is a recent and notable exception; (2) men's participation more generally during pregnancy, focused antenatal care and especially in birth-preparedness planning, including the promotion of facility-based delivery; (3) effect of antenatal syphilis testing and partner treatment in engaging men in antenatal care, including acceptance of HIV testing.

70. So, what constitutes male involvement in PMTCT? What do men need to know, believe or do to be "involved"? Participation by men in which of the components of PMTCT constitutes involvement?

For example, if men have positive gender attitudes and behaviours (e.g. do not have multiple sexual partners or commit intimate partner violence (IPV)) and are supportive of their partners' uptake of services (e.g. provide financial support), is it critical for them to attend the PMTCT facility with their partner? This question becomes especially salient if health-care services are not male friendly, and may in fact reinforce harmful gender norms (Ghanotakis, personal communication, 2011). The question is critical too in the context of high prevalence of serodiscordancy among couples.

71. Two research groups (Byamugisha et al. 2010b; Peltzer et al. 2011) have utilized scales or indices to gauge the level of male involvement. For example, the study by Byamugisha and colleagues sought to determine the level of male involvement and its determinants in a PMTCT programme in eastern Uganda. To gauge the level of male involvement, the authors utilized an "ad hoc male involvement index". The index consisted of six items, with each being given equal weight in the analysis. The items consisted of the following:

- the man attends antenatal care with his partner
- the man knows the partner's antenatal appointment
- the man discusses antenatal interventions with his partner
- the man supports his partner's antenatal visits financially
- the man has taken time to find out what goes on in the antenatal clinic
- the man has sought permission to use a condom during the current pregnancy.

"The involvement score for each respondent could range from 0 = no involvement to 6 = involved in all six activities. A total score of 4–6 was considered as a 'high' male involvement score and 0–3 as 'low' relative to this particular population. Bivariate analysis was performed between high male involvement index as the dependent variable and each independent variable" (Byamugisha et al. 2010b). Unfortunately, there was no discussion

in the article regarding the rationale for the selection of these criteria, their validity, or their generalizability to other locations.

72. Horizons and Promundo developed the Gender-Equitable Men (GEM) scale to quantitatively measure change in attitudes about gender norms and an intervention's effects on gender norms and sexual risk behaviours.

The scale is designed to provide information about gender norms in a community, as well as the effectiveness of interventions that try to change them (Pulerwitz and Barker 2008). The GEM scale is intended to "(1) be multifaceted and measure multiple domains within the construct of gender norms, with a focus on support for equitable or inequitable gender norms; (2) target program goals related to sexual and intimate relationships, and sexual and reproductive health and disease prevention; (3) be broadly applicable yet culturally sensitive, so indicators can be applied in and compared across varied settings and be sufficiently relevant for specific cultural contexts; and (4) be easily administered so that a number of actors – including the organizations that are implementing the interventions – can take on this type of evaluation". Respondents with a higher GEM scale score (indicating greater support for inequitable gender norms) were significantly more likely to report STI symptoms and physical and sexual violence against a partner than respondents with lower GEM scale scores" (Population Council, undated). The GEM scale has been validated for Ethiopia, Kenya, India and Brazil.

73. Monitoring male involvement in programme implementation and quality. EngenderHealth's CHAMPION (Channeling Men's Positive Involvement in the National HIV Response) project in the United Republic of Tanzania developed a series of standards of performance for each of its programmatic areas (Ramirez-Ferrero et al. 2010). They were designed for the purpose of monitoring and evaluating CHAMPION or other male involvement programmes at the community level, principally through local partner organizations.

Standards of performance have been developed for a number of programmatic areas, including peer education, curriculum-based education, community engagement, male-friendly health services, advocacy and gender-based programming (or organizational gender mainstreaming). Programme assessment may be completed by administrative or programmatic staff, or by an external organization, on a periodic basis. The standards serve three principal functions:

- to establish a baseline of performance and to identify technical assistance needs;
- to provide guidance to CHAMPION staff and implementing partners, helping them identify key areas for monitoring and for improving the quality of programming;
- to evaluate, over time, the effectiveness of technical assistance by monitoring the number of indicators (or standards) that have been met since baseline.

Issues for consideration

74. Conceptual issues

- **From seeing men as obstacles and enablers to seeing them as partners, clients and agents of change.** A radical (i.e. at the root level) reorientation is needed to address the conceptual and policy barriers to male involvement and integration of services – to move beyond seeing men as simply a facilitating factor to enable women to access health-care services, and toward seeing men as partners and clients of reproductive health policy and practice and as advocates for social change
- **Gender is relational.** Insufficient attention was paid in this paper to a foundational assumption of gender-transformative programming – that gender is relational. That is, gender norms, roles and the particular cultural vulnerabilities of the sexes are continually constructed through individual and collective interactions between men and women throughout the life-cycle.

“The social meanings of masculinities and femininities – and all that happens because of these meanings – are constructed in contrast and relation to each other” (Population Reference Bureau 2010). Gender-transformative programming seeks to increase understanding of how everyone shapes and is shaped by social constructions of gender. So, if we are interested in bringing about sustainable social change more effectively, we must move beyond getting men simply to come to the health-care facility, but intentionally intersect our gender-based programming work with men and women, i.e. bring together both men and women when examining etc. to engage everyone in examining, questioning and challenging restrictive constructions of masculinity and femininity that drive inequality and hinder health and well-being.

75. Couples

- **Relationship quality and its implications for HIV.** We need to learn more about the dynamics and qualities of the relationship of our clients. The contradiction between men’s positive attitudes towards services and their low participation rates in PMTCT sites is suggestive of dynamics within relationships that we currently do not fully understand. Increased understanding is imperative given the high rate of serodiscordancy, as well as the very positive potential of couples to serve as entry points to promote whole-family health and wellness.
- **Diversity of relationship types and the definition of male involvement.** It is important to recognize the “complex spectrum of marital types” that constitute the “in union” category in Africa (Desgrees-du-lou et al. 2009b). Marital status can be difficult to define. Marriage itself can be imprecise, as it may not be reducible to a single event, but rather a process that can take years to complete. In addition there are variables regarding cohabitation (co-residence, or visiting unions) and number of spouses within a marriage, with polygamy being frequently practiced in parts of Africa. Desgrees-du-lou and her colleagues (2009b) conclude that the

“in union” category, which includes all persons who declare having a regular partner, seems to be the most relevant category to take into account in order to explore the prevention of HIV transmission within conjugal relationships here. Even so, the temporal aspects of the formation of unions, the variety of unions, and diversity of marital status call into question how we define male involvement in diverse settings. What does it look like, for instance, in places where the majority of women attending a clinic consider themselves single? How would our services and policies differ as a result?

76. Integration

- **Family planning.** Despite being a cornerstone of the four prongs of PMTCT, the focus on family planning continues to get lost. This is unfortunate since there is ample evidence documenting family planning’s effectiveness in preventing HIV infection, and reducing maternal and infant mortality. There is also a human rights imperative here: family planning enables HIV-positive and HIV-negative women, men and couples to decide if they want to have children, and when and how many.
- **Sexually transmitted infection.** HIV and other STI control efforts are not optimally integrated, even though it is widely recognized that STI contribute to HIV acquisition and transmission, that HIV prevalence is higher among patients with STI, and similar interventions (condoms, circumcision, and behavioural change) prevent both HIV and other STI (Fleming et al. 1999, WHO 2007). Strategies for engaging male partners in PMTCT of HIV should explore potential synergies with STI, such as the role of routine antenatal syphilis testing and syndromic STI diagnosis in engaging male partners in antenatal care.
- **Gender-based violence.** Gender-based violence is an immediate sexual and reproductive health and rights (SRHR) concern – because it speaks to the basic protection of people from physical harm. Not only is physical injury a priority concern, but the implications of violence on SRH are profound. Violence in relationships has been linked to increased rates of unintended pregnancy and STI and HIV transmission,

underutilization of antenatal care, depression and low self-esteem, pregnancy and of covert contraceptive use (Heise et al. 1999).

77. Health services

- **Quality care.** Quality of services is a significant concern that serves as a barrier to care. The good news is that initiatives, such as male-friendly services, are not only a way to enhance the range of services, but they are also useful quality-improvement tools. In the provision of male-friendly services training, attention should be paid to addressing two concerns already expressed – how to work more effectively with couples (see “Promising initiative” box that follows) in ways that challenge harmful gender norms and promote shared decision-making, and how to screen for IPV. A study conducted in South Africa revealed a myriad of benefits to IPV screening. Not only were the questions well received by female clients, but it also enabled women to access treatment and psychosocial sources of support. Women found that simply discussing experiences of violence was helpful. The authors report that women easily made the connection between their experiences of violence and gender inequality (Christofides and Jewkes 2010).
- **Scaling-up services.** Although PMTCT includes a variety of services, HIV testing and counselling are critical, serving, as already noted, as the starting-point for couples to make a series of decisions regarding HIV and PMTCT. Quality services help to ensure clients’ human rights to not only access couple HTC, but also to be linked to effective prevention, treatment and care programmes. When components are added to couple HTC, like challenging harmful gender norms, the quality of that counselling becomes all the more important – and so are the challenges in terms of scale-up. Given the infrastructural problems that many health systems in sub-Saharan Africa face (e.g. human resources shortage), it is important to remember that maintaining quality in the face of WHO’s call to scale-up effective PMTCT programmes is not a matter of chance, but one of choice. WHO is one among a number of organizations that provide technical guidance on quality assurance and improvement at the national and subnational levels. A key point of all quality-assurance and improvement efforts

is that quality must be planned. A recent WHO technical brief (WHO 2011) on the topic provides a useful quality-improvement framework for policy-makers and public health practitioners, which includes 10 fundamental building blocks required to institutionalize quality HIV counselling and testing within different contexts and settings.

Promising initiative: couple-oriented post-test HIV counselling

COC is a clinic-based behavioural intervention that replaces standard post-test HIV counselling delivered to a pregnant woman. "It provides the woman with personalized information as well as tools and strategies to actively involve her partner within the prenatal HIV counselling and testing process" (Orne-Gliemann et al. 2010). The expanded couple-oriented counselling components include: identification of the partner and discussion about the type of relationship; assessment of the level of communication regarding SRH and HIV; discussion about disclosure, partner testing, and couple counselling; provision of tools and strategies to help women address these issues with their partners; and anticipation of partners' possible negative reactions, and strategies to overcome them.

The COC effort is part of the French National Agency for AIDS Research (ANRS) 12127 antenatal multisite HIV-prevention trial, which is only now at the acceptability stage of the trial. Even so, in their baseline assessment, the authors found that one of the keys to men's involvement within prenatal HIV counselling and testing is "the better understanding of couple relationships, attitudes and communication patterns between men and women, in terms of HIV and sexual and reproductive health. This conjugal context needs to be taken into account in order to provide quality prenatal HIV counselling, which aims at integrated PMTCT and primary prevention of HIV" (Orne-Gliemann et al. 2010).

Gaps in knowledge and suggestions for further work

78. Men

- Most of the available information regarding men and PMTCT relates to HIV testing. More research is needed regarding ways to involve men in the other components of PMTCT.
- There is hardly any mention of men's participation in birth-preparedness planning, the promotion of facility-based deliveries and HIV transmission.
- There is inadequate research on the role of routine antenatal syphilis screening in engaging men in a woman's pregnancy, and the potential influence that STI screening could have in increasing testing coverage of male partners and identifying women at increased risk of HIV acquisition.
- Men's use of women as proxies for their own HIV testing suggests limitations in men's understanding of the dynamics of transmission and serodiscordancy.
- Most of the available information we have about men and PMTCT comes from women and, less so, from men who attend clinic. There is little information about men and couples who do not utilize services.

79. Couples

- Research on HIV risk management and prevention within couple relationships should be strengthened. In sub-Saharan Africa, there is still inadequate socio-behavioural knowledge of HIV prevention within the dynamics of couple relationships (Painter 2001). This includes couple communication on sexual risk; the evolution of preventive behaviours over time (e.g. by duration of relationship and time since VCT); and gender issues of negotiation and violence (Desgrees-du-Lou and Gliemann 2008).
- Research on the difference between couples who utilize services and those who do not would be useful. What is the relationship between couple quality, utilization and male involvement? Is couple connectedness a confounding factor between utilization and health or behavioural outcomes?

80. Integration

- Further research is needed to assess the effect of integrating perinatal PMTCT with other health services regarding coverage, utilization, service quality and health outcomes and the optimal integration modality (Tudor Car et al. 2011).
- Family-centred approaches remain largely underdeveloped and under-documented. There are few formal published evaluations of family-centred PMTCT models, and almost no comparative research in this area (Betancourt et al. 2010).

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For more information, please contact:

Department of Reproductive Health and Research
World Health Organization
Avenue Appia 20, CH-1211 Geneva 27, Switzerland
Fax: +41 22 791 4171
E-mail: reproductivehealth@who.int
www.who.int/reproductivehealth

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