

Prenatal HIV counselling as an opportunity to reach men?

Conjugal relationships and gender norms in the
context of the Prenahtest ANRS 12127 trial

Pauline Huet, Joanna Orne-Gliemann, Marija Miric,
Angeline Ngo Essounga, Mukta Gadgil, Marina Topuridze,
Eddy Perez-Then, Annabel Desgrées du Loû

Contact • Corresponding Author: Joanna Orne-Gliemann, MPH, PhD

Public health researcher at the Bordeaux School of Public Health (ISPED). She is currently coordinating a multi-country intervention trial on couple HIV counseling and testing and is involved in a treatment as prevention trial in South Africa. Joanna.Orne-Gliemann@isped.u-bordeaux2.fr

Pauline Huet

Trained in health anthropology (Masters Degree at University of Marseille) and psychology (Bachelors Degree at University of Rennes).
pln.huet@gmail.com

Marija Miric

Clinical psychologist. Associate Researcher at CENISMI, and curricular coordinator for the O&Med School of Medicine project, in Santo Domingo, Dominican Republic.
stella_mare@yahoo.com

Angeline Ngo Essounga

Sociologist, currently pursuing doctoral studies in sociology at the University of Yaoundé 1. She is also a researcher at the National Center of Education Institute of Cameroon.
angessounga@yahoo.fr

Mukta Gadgil, MSc

Anthropologist. Senior consultant for social development at State Health Systems Resource Centre (SHSRC), Maharashtra. muktabapat@rediffmail.com

Marina Topuridze, MD, MS

Currently employed at the NGO "Maternal and Child Care Union", Georgia Republic.
topuridzemarina@gmail.com

Eddy Perez-Then, MD, PhD

Director of the O&Med School of Medicine project, the Director of the Knowledge Management Department at CEDIMAT, Dominican Republic, and Associate Professor of the University of Miami.
ept26@yahoo.com

Annabel Desgrées du Loû

Demographer, Research director at IRD (Institut de Recherche pour le Développement), member of CEPED.
annabel.desgrees@ird.fr

Citation recommandée • Recommended citation

Huet P., Orne-Gliemann J., Miric M., Ngo Essounga A., Gadgil M., Topuridze M., Perez-Then E., Desgrées du Loû A. «Prenatal HIV counselling as an opportunity to reach men? Conjugal relationships and gender norms in the context of the Prenahtest ANRS 12127 trial», *Working Paper du CEPED*, numéro 27, UMR 196 CEPED, Université Paris Descartes, INED, IRD), Paris, October 2012.

Available at <http://www.cephed.org/wp>

CEPED • Centre Population et Développement

UMR 196 CEPED, Université Paris Descartes, INED, IRD
19 rue Jacob 75006 PARIS, France
<http://www.cephed.org/> • contact@cephed.org

Les Working Papers du CEPED constituent des **documents de travail** portant sur des recherches menées par des chercheurs du CEPED ou associés. Rédigés pour une diffusion rapide, ces papiers n'ont pas été formellement relus et édités. Certaines versions de ces documents de travail peuvent être soumises à une revue à comité de lecture.

Les droits d'auteur sont détenus par les auteurs.

*CEPED Working Papers are **working papers** on current research conducted by CEPED-affiliated researchers. Written for timely dissemination, these papers have not been formally edited or peer reviewed. Versions of these working papers are sometimes submitted for publication in peer-reviewed journals.*

Copyrights are held by the authors.

Prenatal HIV counselling as an opportunity to reach men? Conjugal relationships and gender norms in the context of the Prenahtest ANRS 12127 trial

Pauline Huet¹, Joanna Orne-Gliemann¹, Marija Miric², Angeline Ngo Essounga³, Mukta Gadgil⁴, Marina Topuridze⁵, Eddy Perez-Then², Annabel Desgrées du Loû⁶

Summary

In the context of the worldwide initiative towards the elimination of mother-to-child transmission of HIV (MTCT), renewed efforts are being made to increase the availability of prenatal HIV testing. These could be seized as an opportunity to increase the overall coverage of HIV testing and to improve the involvement of men in PMTCT. Within the Prenahtest ANRS 12127 trial conducted in Cameroon, Dominican Republic, Georgia and India, a couple-oriented HIV counselling (COC) intervention was delivered to pregnant women, to help them discuss sexual risks and HIV prevention with their male partner, and bring him to HIV testing during prenatal care. Based on in-depth interviews and on published scientific literature, we describe couple relationships and gender roles in the four study sites and explore how these may have enabled or constrained the success of the COC intervention. Three elements were identified as facilitating men's involvement in prenatal HIV counselling and testing: the implication of a health worker as a third and professional voice between husband and wife; the appeal to men's responsibility as fathers for the baby to be born; and a "male-friendly" organisation of prenatal services. Men can be involved in PMTCT and prenatal HIV counselling and testing when services are adapted to both gender norms and cultural contexts.

Keywords

Prenatal counselling, HIV testing, gender roles, male, sexual and reproductive health.

Introduction

Since 2000, the scaling-up of prevention of mother-to-child transmission of HIV programmes has improved the availability of HIV testing in antenatal clinics. However prenatal HIV counselling and testing services have been largely focused on pregnant women and have rarely taken into account the male partners and future fathers. Indeed, in the context of antenatal care less than 20% of male partners of pregnant women themselves get tested for HIV (1-3). And this, in spite of compelling data showing that men's HIV testing during their partner's pregnancy contributes significantly to the adoption of preventive behaviours within the couple (4, 5) as well as to child survival (6). The overall coverage of HIV testing among men remains lower than among women, with in 2007-2009, according

¹ ISPED (Université de Bordeaux, Inserm), Centre Inserm U897 – Épidémiologie-Biostatistique, Bordeaux, France.

² Centro Nacional de Investigaciones en Salud Materno Infantil, Santo Domingo, Dominican Republic.

³ Laboratoire d'Épidémiologie et de Santé Publique, Centre Pasteur du Cameroun, Yaoundé, Cameroun.

⁴ Prayas Health Group, Pune, India.

⁵ Maternal and Child Care Union, Neoclinic, Tbilisi, Georgia.

⁶ IRD, CEPED (UMR 196 Université Paris Descartes, Ined, IRD), Paris, France.

to the World Health Organisation, an estimated 34% of women and 17% of men ever informed of their HIV status worldwide (7). Routine offer of HIV testing to men needs to be increased (8). Prenatal HIV counselling and testing addressed to both pregnant women and their male partner could be an opportunity to increase the uptake of HIV testing worldwide as well as improve HIV prevention within couples.

Interventions aiming at increasing HIV testing among male partners in the context of prenatal care are scarce: pregnant women may be encouraged to invite their partner (1-3) or men may be directly provided with an invitation letter for HIV testing (9), or HIV counselling for both couple members may be promoted (10, 11). In unequal couple relationships, if an intervention encouraging a couple approach to HIV counselling and testing is implemented without sufficient and adequate information and support, women may be at risk of negative conjugal, social or psychological events. In order to minimise such risks, the Prenatest intervention trial has tested a new intervention delivered to pregnant women, named couple-oriented post-test HIV counselling (COC). During COC sessions, women were counselled and supported on how to discuss with their male partner about HIV and how to suggest him to come to the antenatal clinic for HIV counselling and testing (12). Men who then came to the health centre received free HIV counselling, individually or during a couple session, as well as free HIV testing if they wished to.

The Prenatest trial evaluated the impact of COC on the frequency of partner HIV counselling and testing and of couple HIV counselling, and on sexual, reproductive and HIV prevention behaviours. It was conducted in four low/intermediate-resource countries with low/medium HIV prevalence countries and with different social and gender contexts: Cameroun, Dominican Republic, Georgia and India. The trial showed that COC increased rates of partner HIV testing as compared to standard post-test HIV counselling (SC), from 15 to 25% in Cameroon, 20 to 23% (not significant) in Dominican Republic, 1 to 27% in Georgia and 26% vs 36% in India (13). However overall partner HIV testing rates remained below 40% of women themselves tested. These results suggest that it is possible to reach men through women during a prenatal session, but that many challenges remain.

In the present paper we explore, based on qualitative data collected during the Prenatest trial and available literature on the four study countries, to what extent COC is adapted to the local social contexts and gender roles. The COC intervention delivered to women is based on several assumptions. It implies the possibility of conjugal communication about sexual risks, HIV testing and prevention. It assumes that the conjugal verbal exchange induced by the counselling delivered to the pregnant woman can be translated into man's attendance to the antenatal clinic. Finally it implies the possibility for men to attend an antenatal clinic to receive HIV counselling and testing, although these clinics provide pregnancy and childbirth services and are therefore a priori considered places dedicated to women. This intervention thus challenges couple relationships and existing gender norms, which may be different and may interact differently according to the social contexts. We describe here how couple relationships and gender roles varied in the four study sites and explore how these may have enabled or constrained the success of the couple-oriented HIV counselling intervention.

Methods

The study was carried out at four urban health centres catering mainly for underprivileged populations: Centre Mère-Enfant de la Fondation Chantal Biya in Yaounde, Cameroon (national HIV prevalence in 2009 estimated at 5.3%), Hospital Materno-Infantil “San Lorenzo” de los Mina in Santo Domingo, Dominican Republic (0.9%), Maternity Hospital N°5 in Tbilisi, Georgia (0.1%) and Sane Guruji Hospital in Pune, Maharashtra, India (0.3%) (14). The purpose of this multi-country design was to evaluate and understand the impact of the COC intervention in different epidemiological contexts – within concentrated or generalised epidemics – and according to different socio-cultural backgrounds. A total of 1943 women were enrolled and randomised to receive either COC or standard post-test HIV counselling : 484 per site in Cameroon, Dominican Republic and India, and 491 in Georgia.

To better understand the mechanisms of COC impact within the various conjugal and socio-cultural contexts of each study site, a sub-sample of the pregnant women enrolled was administered in-depth interviews at enrolment, 2-8 weeks after post-test HIV counselling and at six months post-partum. A semi-structured interview guide was used to explore, from the woman’s point of view, issues around couple relationships, including couple communication, and her attitudes and practices in terms of family planning and HIV prevention. In-depth interviews conducted among 8-12 women in the four sites were analysed. A cross-sectional thematic analysis was conducted for each of the interviews conducted. In addition, we conducted a literature review on conjugality and gender roles in the context of HIV in the four study countries. The following databases were screened: Pubmed, Scopus and Sudoc. The following keywords were used: family, couple, communication, intimacy, sexuality, men’s involvement, PMTCT, gender roles, gender relations.

Four different conjugal contexts but a similar gender hierarchy

The types of union and conjugal organisations, as well as the conditions of conjugal intimacy and communication tended to be largely different in the four sites concerned by the trial.

In Georgia, marriage is the social norm and is constructed on individual and sentimental choices. Almost all the women that we met were officially married, or about to be. Women highly valued the loyalty and emotional involvement of men in the family life and their sincerity within the couple. Women emphasised the closeness, the sentimentality of the relationship. Yet, housing conditions in Georgia are not always in favour of conjugal intimacy. It was very common that women lived together with their husband and his family for economic reasons. And living in a small and overcrowded environment may reduce in particular the space for conjugal intimacy, as related by Erica (Georgia):

“The problem is that we live in a very small apartment and my mother hears everything what we say unless we whisper, and she makes comments like, ‘of course you should have third child!, and things like that. ”

In the Dominican Republic, conjugal unions are rarely formalized and the majority of couples live in free union (13). Conjugal instability is important and conjugal relationships seem looser. Some women, especially among younger couples, were living with their parents and without their male partner, because of financial constraints due to unemployment or because of a separation after

couple's dispute. In addition, male infidelity in some social contexts in the Dominican Republic is valorised and considered a sign of virility (15).

In Cameroon, a variety of conjugal relationships co-exist: free union or marriage, cohabiting union or separate residence, customary marriage or legal marriage, monogamous or polygamous households. The distinction between married and unmarried women can be complex, since marriage is a process that can take years, as described elsewhere in Africa (16, 17). Further, collective housing is frequent (18). In this context, fertility choices sometimes involve not only the couple but the whole family.

In India, marriage is the most socially-acceptable form of couple relationship, and the family plays an important role in finding a partner for an individual. In these contexts of arranged marriages, many Indian girls and boys don't meet before their formal union; the first opportunity for them to see each other, to talk and get to know each other is only after the wedding. After the wedding, the couple traditionally lives in the house of the husband's parents. These traditional structures, however, tend to evolve. Women are increasingly educated and employed, and together with their partner migrate for work, and as a result many couples now live in nuclear families. Often however the couple is not alone, whether in daily life or in the decisions affecting the family, as explained by Nidhi:

"We could only communicate openly after a year of our marriage as (initially) we were staying in joint family... we wanted to talk to each other then but never used to get time and space."

In spite of a wide diversity in conjugal arrangements, it appears that gender hierarchy within the couple was the same in the four study sites: recognising male authority was considered by women a key element of marital stability. Sexuality, and particularly in the context of the study, the resumption of sex after childbirth, has been shown to be a place for crystallization of power relationships in the couple (19). And for many women we interviewed, quickly accessing to men's sexual desire *"is part of married life"* and was seen as a necessity to prevent infidelity, as Savannah, from Georgia, said:

"To be honest after the baby was born I was physically as well as emotionally exhausted and did not have energy or desire to do anything else. However I decided to restart sexual relationship with my husband since he is a man and if I did not do that he could... I mean he could have sex with other women."

Is couple-oriented HIV counselling adapted to conjugal realities?

In such contexts of unequal couple relationships, is it possible for a woman to speak about sexual risks, HIV prevention and HIV testing with her partner?

First of all, do couples have a space where it is possible to communicate about sexuality? Overall although the practical conditions of cohabitation were not always conducive to conjugal privacy, our interviews show that spousal communication still existed. For example Erica (Georgia), despite the close contact with her mother who lives with the couple, reported discussing about all her problems with her husband, and reaching consensus with respect to decisions about their married life. Similarly, when they were not staying at the same place as their partner, women who shared an emotional closeness with him would talk to him regularly on the phone and communicate to him the daily news. Even couples living with members of the extended family enjoy a space of intimacy that often suits them (20). It thus appears that conjugal privacy, as a possible space for communication, is more dependent on the quality of the conjugal relationship than on living conditions (20, 21). When the

relationship is strong, both partners find the way to exchange and communicate, regardless of their living condition and the legal form of their couple.

But even when oral exchange exists, discussing the possible risks of acquiring HIV within the couple is not easy and can be considered as a potential threat to the integrity of the couple. This is especially true in contexts where faithfulness is considered as the bedrock of the conjugal life. In Georgia, women showed a real reluctance to consider the possibility of a 'betrayal' of the partner. HIV testing within the couple is accepted when it is supposed to strengthen mutual trust among partners. In Maharashtra (India), though most women mentioned having a very open communication with their husband, only a few of them had had opportunities to ever discuss about HIV/AIDS and condom use. Their discussion regarding sexual and reproductive health issues was focused mainly on when to have children and in some cases on the use of contraceptives, and didn't mention HIV. In this country where HIV prevalence is low, women have a low HIV risk perception. Further, male infidelity is presented in Indian women's discourses as an understandable male weakness but women are expected to not discuss about it (22). In Cameroon, it seems there is a fairly free dialogue between partners regarding sexual and reproductive health issues. With a national HIV prevalence of 5%, Cameroon is highly impacted by HIV; women are aware of the risks associated with HIV and easily talk about it. Most women in Cameroon can address their partner leaving on a journey with a joking tone "don't forget to take condoms!" The Cameroonian women interviewed appeared to distance themselves from the issue of fidelity of their partner and Cameroon is also the only site where one of the women reported having "friends" "outside". Similar attitudes were encountered in the Dominican Republic, due to the pervasiveness of male infidelity in the Dominican society, as Eliana let us believe:

"I tell him to be careful on the streets. If he wants to have something with a woman, to use a condom".

Discussing HIV risks and HIV testing within the couple seems to be easier in social contexts where multipartnership is more frequent. But it remains, in all conjugal situations, a sensitive subject. Direct attempts by women to encourage their partner to better prevent sexual risks, and to receive HIV counselling and testing, may fail. Women may feel unable to change anything in their couple relationship and their first desire would be not to create conflict. In front of these difficulties, the women we interviewed developed several strategies to address the subject of HIV prevention within the couple. Some took the opportunity of a documentary on television to ask their partners to get tested. Others took time and care to create the conditions for dialogue. Sexuality in itself can become a tool for negotiation. Brigitte in Cameroon conditioned the resumption of sex after childbirth to her partner's HIV testing:

"If I ask him like that, he'll refuse ... I forced him. I told him, you can not swear that you did not go somewhere else, in all cases, whether you swear or not, I want my safety, so you have to prove it".

In the four sites, women often declared to be in favour of couple HIV counselling sessions, for this discussion around HIV is then introduced by a third party, the healthcare professional. This allows women to not be personally involved and take responsibility for the HIV testing request or the suggestion of preventive behaviours; these appear as a medical initiative. Men are said to better take into account the advice given by the counsellor, as explained by Aïcha (Cameroon):

"When it is I who says something, it can be neglected, but a third party who provides advice, it's serious."

To bring their spouse to HIV testing and couple HIV counselling, women also relied on another third party, the future child, as reported by Yolandria (Georgia):

"I explained that this test was very important for us and for our future child, and he agreed to be tested without problem. He knows how important is to protect ourselves from the infectious diseases since it can be transmitted to our child as well";

and Brigitte (Cameroon): *"As I was pregnant, I told him it could endanger the baby's life and all that."*

Is couple-oriented HIV counselling adapted to existing gender norms in the society?

The aim of COC was to encourage men to attend a maternal and child health centre and to receive individual or couple HIV counselling and testing, thereby assuming that men are able to invest the sphere of reproductive health. But do the gender systems in place in the different study settings allow this men's involvement in reproductive health?

Françoise Héritier explains gender differences through the concepts of inside and outside, attributed to women and men, respectively (23). The domain of women is "inside": interiority, emotions, pregnancy, home, children's care and education. And the domain of men is "outside": exteriority, strength, street, economic survival of the household. Hence the health of the family and of the children is in the women's hands. Health centres, and specifically maternities, are not places for men. Masculinity is often constructed, for a large part, on "strength", recklessness in relation to suffering, illness and death. Attending a health centre for a consultation or laboratory analyses is considered a sign of weakness. The hospital is a place that men usually attend only when necessary (24). In the Dominican Republic, De Moya also confirms this partition between gender roles (15). Bila expresses the same idea for West Africa:

"In the Mossi culture, men and women do not share the same spaces. The boundaries are strictly enforced, and any transgression of the boundaries between genders is seen as inappropriate or incongruous" (25).

The interviews in the four countries confirm these gender norms. In the Cameroon and Dominican Republic contexts, men's presence in the reproductive sphere seems far from cultural expectations. In the Dominican Republic, José thought that his friends or neighbours would laugh at him if they saw her husband leave for the maternity. Eliana, also in the Dominican Republic, preferred to come with her mother, who has had this experience of pregnancy and was more able to understand and support her. Further, many women underlined the fact that maternities were already too crowded to add men on top. Men tend to feel ill-at-place in this setting designed for pregnant women (26, 27). In Maharashtra (India), most women were accompanied to antenatal care by their husband. But this is more likely a sign of men's control on women's bearings rather than the sign of men's involvement in the reproductive sphere. In the Indian society indeed, most women are not supposed to leave the house without permission from their partner, or without being chaperoned (20). In Georgia, although gender inequality seemed less pronounced than in the three other sites, men's involvement in the domestic sphere, in the care of children and in the pregnancy is not so easy and some women actually underlined that it may be criticized.

In the four study sites, the majority of women explained that their male partner did not come to the clinic because he was working and was not available. Men's professional occupation seems to be one of the first barriers to their involvement within prenatal HIV counselling and testing process: the opening hours of health centres generally coinciding with working hours. This corresponds to the division of responsibilities within the couple fitting with gendered roles defined above.

If accompanying their female partner to prenatal care is not a self-evident behaviour for many men, women reported other means of men's involvement during their pregnancy. Often, women defined their partner's involvement as their financial contribution. The role of man as the breadwinner in the family was clearly established by the women surveyed, although this is not his only contribution. Indeed, many women reported that their partner helped them, to carry heavy loads for example, or by showing empathy in relation to their state of fatigue or emotion.

Overall, even if antenatal services did not appear as "a place for the men" due to gendered representations, we were able to observe that men were somehow involved in the pregnancy. This involvement of men in pregnancy, whatever the form of involvement, is an enabling factor for women to motivate their partner to receive HIV counselling and testing as part of prenatal care.

Conclusion

Among the various approaches evaluated to encourage a couple approach to HIV prevention, couple-oriented HIV counselling delivered to the pregnant woman has one great advantage: it empowers the woman and leave to her the decision of whether, when and how to speak with her partner about HIV prevention and HIV testing. The quantitative data has shown that women who received the COC intervention were more likely to discuss with their spouse about the prevention of sexual risks than women who received standard post-test HIV counselling (28-30), and did not report more intimate partner violence (13). Yet this COC intervention does raise conjugal and gender issues. Three main points should be underlined:

First, a conjugal discussion about sexual risks and HIV may question the stability of the couple relationship. It was shown that this type of intervention may be more likely to work in couples with a strong emotional foundation, mutual trust and a desire to be together (21, 31); our interviews tended to confirm this. HIV testing can help strengthen some couples acting as a "proof of sincerity", but it can also weaken other couples, and be considered as a "proof of suspicion or infidelity". Yet regardless of the conjugal situation, we observed that the women interviewed were enthusiastic about the project: they wanted their partner to also receive the information delivered during HIV counselling and testing, individually or as a couple, because they had little opportunity to discuss with their partner of his potential infidelity and his preventive behaviours. One of the strengths of the intervention was the possible involvement of a professional third party: partners returning to the health centre could receive couple HIV counselling during which information was provided by a caregiver. Some women appreciated not being personally involved in the HIV testing proposal and suggestion of preventive behaviours; this was the responsibility of the health attendants.

Secondly, prenatal care seems to provide an interesting opportunity to introduce sexual prevention issues in the conjugal relationship. Indeed, by asking men to get tested during their partner's pregnancy, it is their paternal responsibility that is alluded to and not their possible extramarital sex life. In addition, pregnancy is in some ways a special time in the life of women. Accessing the status of mother gives them a new authority (20, 32), women are also more supported during their pregnancy, and one can think that it is easier for them to voice a request, such as that of partner HIV testing. The child can enable both partners to unite around a health issue, without having to focus on their conjugal relationship. While men are often seen as obstacles to the implementation of maternal and child health advice discussed during counselling, they may yet be receptive to these prevention messages and willing to improve the health of the family (33). It thus may be relevant to mobilise men around HIV prevention practices by considering them in their role as a father rather than as a partner.

Third, men's presence in the sphere of reproductive health, in order to be tested for HIV during their partner's pregnancy, is not self-evident. All around the world, giving birth and caring for the well-being of children and more largely the health of the family are traditionally responsibilities assigned to women and mothers (34). Logistically, health centres are places much more frequented by women than by men. During COC, it is women who are encouraged to inform their partner about the availability of HIV counselling and testing and to bring their partner to the clinic. In certain contexts this may preserve women's traditional role of being responsible for the health of the couple and the family. And in our study indeed we observed that, with this approach, some men were very willing to accompany their wife to ANC and very supportive, as documented elsewhere (35). However in other contexts, such women's initiative may interfere with the power distribution within the couple – some men may feel threatened in their masculinity if giving in to women's requests to access a non-masculine space, such as ANC establishments, and might be questioned by their peers for doing so. Efforts to gradually improve the male-friendliness of ANC settings as well as the mobilization of male health-care promoters or other male role-models would likely contribute to facilitating men's involvement in the prenatal HIV counselling and testing process.

In conclusion, couple-oriented post-test HIV counselling delivered to pregnant women is an innovative intervention, which shows that it is possible to bring men to prenatal HIV testing through the involvement of their pregnant partner. It appears easier to reach men by appealing to their role as father than as a spouse, as it can, on the one hand, set aside the possible threat that may constitute HIV testing for the conjugal relationship and on the other hand, defuse the reluctance of men to attend the health care centre for themselves.

It seems now necessary to focus research on men themselves, in order to better take into account their perceptions and behaviours in developing public health policies. Few data exist regarding the relationship of men to their health and that of their children. We need the words of men to improve prevention strategies adapted to both gender norms and cultural contexts.

Acknowledgements

We thank all team members involved in the trial for their efforts and the counsellors dedicated to providing women with the best service possible. We are indebted to the women who participated to this qualitative study. Special thanks to Brigitte Bazin, Claire Rekecewicz and Laurence Quinty (ANRS) and Catherine Wilfert (EGPAF) for encouraging the study team throughout the trial and to France Lert for her suggestions on this paper.

References

1. Farquhar C, Kiarie JN, Richardson BA, et al. Antenatal couple counseling increases uptake of interventions to prevent HIV-1 transmission. *J Acquir Immune Defic Syndr*. 2004;37(5):1620-6.
2. Msuya SE, Mbizvo EM, Hussain A, et al. Low male partner participation in antenatal HIV counselling and testing in northern Tanzania: implications for preventive programs. *AIDS Care*. 2008 Jul;20(6):700-9.
3. Kakimoto K, Kanal K, Mukoyama Y, et al. Influence of the involvement of partners in the mother class with voluntary confidential counselling and testing acceptance for prevention of mother to child transmission of HIV programme (PMTCT programme) in Cambodia. *AIDS Care*. 2007 Mar;19(3):381-4.
4. Kiarie JN, Kreiss JK, Richardson BA, et al. Compliance with antiretroviral regimens to prevent perinatal HIV-1 transmission in Kenya. *AIDS*. 2003;17(1):65-71.

5. Orne-Gliemann J, Desgrees-Du-Lou A. The involvement of men within prenatal HIV counselling and testing. Facts, constraints and hopes. *Aids*. 2008 Nov 30;22(18):2555-7.
6. Aluisio A, Richardson BA, Bosire R, et al. Male antenatal attendance and HIV testing are associated with decreased infant HIV infection and increased HIV-free survival. *J Acquir Immune Defic Syndr*. 2011 Jan 1;56(1):76-82.
7. World Health Organisation. Towards universal access. Scaling up priority HIV/AIDS interventions in the health sector. Progress report 2010. Geneva: World Health Organisation; 2010.
8. Jean K, Anglaret X, Moh R, et al. Barriers to HIV testing in Côte d'Ivoire: the role of individual characteristics and testing modalities. *PLoS ONE*. In press.
9. Byamugisha R, Astrom AN, Ndeezi G, et al. Male partner antenatal attendance and HIV testing in eastern Uganda: a randomized facility-based intervention trial. *J Int AIDS Soc*. 2011 Sep 13;14(1):43.
10. Chomba E, Allen S, Kanweka W, et al. Evolution of Couples' Voluntary Counseling and Testing for HIV in Lusaka, Zambia. *J Acquir Immune Defic Syndr*. 2008;47(1):108-15.
11. Karita E, Chomba E, Roth DL, et al. Promotion of couples voluntary counselling and testing for HIV through influential networks in two African capital cities. *BMC Public Health*. 2007 Dec 11;7(1):349 [Epub ahead of print].
12. Orne Gliemann J, For the Prenatest ANRS 12127 Study Group. Couple-oriented post-test HIV counselling. Manual for conducting the intervention; 2009.
13. Orne Gliemann J, Balestre E, Tchendjou P, et al. Efficacy of a prenatal counselling intervention in increasing HIV testing among male partners. The Prenatest ANRS 12127 multi-country randomised trial. *Bull World Health Organ*. Under review.
14. UNAIDS. UNAIDS Report on the Global AIDS Epidemic. Geneva: UNAIDS; 2010.
15. De Moya EA. Power Games and the Totalitarian Masculinity in the Dominican Republic. In: Reddock R, editor. *Interrogating Caribbean Masculinities: Theoretical and Empirical Analysis*. Kingston: University of the West Indies Press; 2004. p. 68-102.
16. Desgrees-du-Lou A, Brou H, Traore AT, et al. From prenatal HIV testing of the mother to prevention of sexual HIV transmission within the couple. *Soc Sci Med*. 2009 Sep;69(6):892-9.
17. Desgrées-du-Loû A. The couple and HIV/AIDS in Sub-Saharan Africa: telling the partner, sexual activity and childbearing. *Population-E*. 2005;60(3):179-98.
18. Pilon M, Vignikin K. *Ménages et familles en Afrique subsaharienne*. Paris: Editions des Archives Contemporaines (Savoirs Francophones); 2006.
19. Desgrées-du-Loû A, Brou H. Resumption of sexual relations following childbirth: norms, practices and reproductive health issues in Abidjan, Cote d'Ivoire. *Reprod Health Matters*. 2005 May;13(25):155-63.
20. Sandhya S. The social context of marital happiness in urban Indian couples: interplay of intimacy and conflict. *J Marital Fam Ther*. 2009 Jan;35(1):74-96.
21. Larsson EC, Thorson A, Nsabagasani X, et al. Mistrust in marriage--reasons why men do not accept couple HIV testing during antenatal care- a qualitative study in eastern Uganda. *BMC Public Health*. 2010;10:769.
22. Go VF, Sethulakshmi CJ, Bentley ME, et al. When HIV-prevention messages and gender norms clash: the impact of domestic violence on women's HIV risk in slums of Chennai, India. *AIDS Behav*. 2003 Sep;7(3):263-72.
23. Heritier F. *Masculin/féminin : la pensée de la différence*. Paris: Odile Jacob; 1996.
24. Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Soc Sci Med*. 2000 May;50(10):1385-401.
25. Bila B, Egrot M. Gender asymmetry in healthcare-facility attendance of people living with HIV/AIDS in Burkina Faso. *Soc Sci Med*. 2009 Sep;69(6):854-61.
26. Byamugisha R, Tumwine JK, Semiyaga N, et al. Determinants of male involvement in the prevention of mother-to-child transmission of HIV programme in Eastern Uganda: a cross-sectional survey. *Reprod Health*. 2010 Jun 23;7(1):12.

27. Falnes EF, Moland KM, Tylleskar T, et al. "It is her responsibility": partner involvement in prevention of mother to child transmission of HIV programmes, northern Tanzania. *J Int AIDS Soc.* 2011;14(1):21.
28. Gadgil M, Darak S, Kulkarni M, et al. Couple-oriented prenatal HIV counseling improves HIV-related communication among married couples in India- preliminary results from the ANRS 12127 Prenahtest intervention trial. XVIII International AIDS Conference; 2010; Vienna (Austria), 18-23 July 2010; 2010.
29. Miric M, Pérez-Then E, Núñez L, et al. Impact of a couple-oriented prenatal HIV counseling session on condom use and communication among stable couples in the Dominican Republic: Preliminary results from Prenahtest ANRS 12127 randomized trial. XVIII International AIDS Conference; 2010; Vienna (Austria), 18-23 July 2010; 2010.
30. Orne-Gliemann J, Balestre E, Darak S, et al. Couple communication about the prevention of sexual risks. The role of a prenatal HIV counselling intervention. Prenahtest ANRS 12127 trial. XIX International AIDS Conference; 2012; Washington (USA), 22-27 August; 2012. TUPE0387.
31. Aarnio P, Olsson P, Chimbiri A, et al. Male involvement in antenatal HIV counseling and testing: exploring men's perceptions in rural Malawi. *AIDS Care.* 2009 Dec;21(12):1537-46.
32. Santosh S. Process of couple communication in reproductive health among rural married couples. Basel: University of Basel; 2009.
33. Tijou Traoré A. Conjoint et père à l'égard de la prévention du VIH (Abidjan, Côte d'Ivoire). *Autrepart.* 2009;52(4):95-112.
34. Desclaux A. De la mère responsable et coupable de la maladie de son enfant. In: Benoist J, editor. *Soigner au Pluriel Essais sur le pluralisme médical.* Paris: Karthala; 1996. p. 252-79.
35. Tijou Traore A, Querre M, Brou H, et al. Couples, PMTCT programs and infant feeding decision-making in Ivory Coast. *Soc Sci Med.* 2009 Sep;69(6):830-7.