Luba-Kasai Men and the Prevention of Mother to Child Transmission (PMTCT) of HIV program in Lusaka

JAANA AUVINEN1*, JARI KYLMÄ1, MARITTA VÄLIMÄKI2, MAX BWEUPE3 and TARJA SUOMINEN1

1 School of Health Sciences, Nursing Science, University of Tampere, Tampere, Finland, 2 Department of Nursing Science and, Hospital District of Southwest Finland, University of Turku, Turku, Finland and 3 Directorate of Public Health and Research, Ministry of Health, Zambia

*Corresponding author. E-mail: jaana.auvinen@uta.fi

SUMMARY
Male participation in the prevention of mother-to-child transmission (PMTCT) of HIV has been determined as one of the key factors in sub-Saharan African countries, but its realization is challenging because of male-related and institutional factors. The purpose of this study is two-fold: first, we explored the views of Luba-Kasai men, living in Zambia in the Lusaka Province, on the factors that encourage, inconvenience or inhibit them in accompanying their wives to the antenatal clinic and their ideas to improve their experience. Secondly, the study considered their knowledge of the PMTCT program and how such knowledge conformed to the Zambian National Protocol Guidelines Integrated PMTCT of HIV/AIDS. Twenty-one interviews were analyzed using qualitative inductive content analysis. The National Protocol Guidelines were analyzed using the deductive content analysis. The encouraging factors that emerged were involvement in the program, the time of delivery, love and care, and also the suspicion of corruption. The inconveniencing factors were the arrangements and working culture of the clinic, together with stigma and guilt. A lack of motivation, fear of death, socioeconomic circumstances and again the arrangements and working culture at the clinic were held as inhibiting factors. The ideas to remove inconvenient factors were maintaining a spiritual outlook on life, education, interaction, a good mood and a sense of meaningfulness. Considering such male views and paying attention to minorities in the development of national PMTCT of HIV Programs may enhance male participation in the process.

Key words: male participation; PMTCT; HIV; refugee

INTRODUCTION
In 2009, of 125 million pregnant women in low- and middle-income countries, an estimated 1.4 million were living with human immunodeficiency virus (HIV) infection (WHO, 2010). Without intervention, HIV can infect 25–45% of births from HIV-positive mothers during pregnancy, delivery and/or breastfeeding in developing countries. The efficacy of antiretroviral (ARV) drugs has been shown (Chigwedere et al., 2008; Horvath et al., 2010). Approximately 53% of 1.4 million pregnant women in low- and middle-income countries received antiretroviral treatment (ART) to reduce the risk of mother-to-child transmission (MTCT) of HIV. In Zambia, with a population of 12.9 million people, the estimated number of pregnant women in 2009 needing ART was 68 000 (WHO, 2010). Annually, more than 90% of ~500 000 pregnant women in
Zambia utilize antenatal care (ANC) services, thus the Prevention of Mother-to-Child Transmission (PMTCT) program is available to those women who test HIV positive.

Male participation has been found to be an important factor for the mothers, in the overall use of PMTCT of HIV programs (Msuya et al., 2008; Kasenga et al., 2010). In many African countries, by way of their national PMTCT of HIV programs, male partners are invited to attend antenatal HIV counseling and testing at the beginning of the mothers’ ANC visits (Bolu et al., 2007a). Male participation as partners of pregnant mothers has been <28% (Kizito et al., 2008; Msuya et al., 2008; Desgrées-Du-Louë et al., 2009). However, even if the rate of male partners tested for HIV was higher, it would not necessarily solve the problem of postnatal transmissions, and Torpey et al. (Torpey et al., 2010) reported higher transmission rates through the feeding practice among children aged 6–12 months compared with younger ones. Male participation in the program of PMTCT of HIV is needed to increase couples’ awareness of their own HIV status, to support maintaining HIV-negative status and to encourage HIV-positive mothers to commit to the program throughout the whole maternal process.

The implementations of national PMTCT of HIV programs have been studied in several sub-Saharan countries. Women’s program attendance has been studied in Kenya and Ethiopia (Bolu et al., 2007b), Zimbabwe (Perez et al., 2004; Bolu et al., 2007b), Malawi (Chinkonde et al., 2009) and South Africa (Doherty et al., 2005). A program’s efficacy to decrease the number of HIV-infected infants has been studied in Botswana (Creek et al., 2008; Stover et al., 2008), and the professional activity of health workers in antenatal clinics has been studied in Cameroon (Labhardt et al., 2009) and in Botswana, Kenya, Malawi and Uganda (Chopra and Rollins, 2008).

The Zambian National Program of PMTCT of HIV has been studied from different aspects, i.e. the sufficiency of health labor for the increasing HIV workload (Walsh et al., 2010), the efficacy of PMTCT of HIV in different age bands among perinatally exposed children (Torpey et al., 2010), sufficiency of funds and human resources to implement a more effective ARV regimen (Nakakeeto and Kumaranayake, 2009), the implementation of an efficacious ARV regimen among HIV-positive pregnant women and associated factors (Mandala et al., 2009) and the infant feeding components of a PMTCT of HIV program (Chopra et al., 2009). No studies have focused on male partners’ knowledge of the program of PMTCT of HIV and whether this knowledge conforms to the content of the National Protocol Guidelines of Zambia (National Protocol Guidelines of Zambia, 2008), PMTCT of HIV/AIDS.

The purpose of the study is to examine Luba-Kasai men’s views on the factors encouraging, inconveniencing or inhibiting them in accompanying their wives to the antenatal clinic and their ideas to remove the factors that present an inconvenience to them. In addition, the study looks to describe the men’s knowledge of the PMTCT of HIV program and examine its conformity to the National Protocol Guidelines Integrated PMTCT of HIV/AIDS. By choosing informants who share common language, beliefs, myths and a similar life situation, it enabled the study to reveal a more representative level of data, than would otherwise have been derived from subjects having a variety of tribal backgrounds and languages (Leininger, 1985). Considering male views, their experiences, barriers and expectations in developing PMTCT of HIV programs may lead to enhanced male participation. This study presents a male perspective on the program of PMTCT of HIV in Zambia and ideas with which to further develop the program’s guidelines. The consolidated criteria (COREQ) proposed by Tong et al. (Tong et al., 2007) were used in reporting.

METHODS

The study has two datasets: participant interviews and data from the National Protocol Guidelines of Zambia (2008), PMTCT of HIV/AIDS.

Study setting and recruitment of participants

Zambia is located in Eastern Africa. It is divided into nine provinces, which are further divided into 72 districts. The qualitative dataset for this study was collected during March–June 2009 in the suburban areas of the capital town Lusaka.

The study participants were Luba-Kasai men who were either refugees from the Democratic Republic of the Congo or descendants of Congolese refugees. This served as an inclusion...
criterion. Another criterion was that participant’s wife was pregnant or had a suckling baby. In this study, purposive non-probability sampling was used, a method typically used in qualitative research (Polit and Beck, 2008). The participants were recruited by a local contact—a Luba-Kasai man. He contacted possible participants who met the inclusion criteria in advance, explained the key ideas of the research and set up an appointment with the first author. The contact person translated the informed consent forms into Luba (the mother tongue of the Luba people) and Nyanja (the local main language) and also worked as an interpreter in the interviews. He was initiated into the concept of qualitative interviews and into the ethical requirements of research by the first author. A pilot study was then conducted to practice the interview and interpretation techniques.

**Interviews**

The participants chose the interview locations. The interviews were performed predominantly in their homes, some in the back seat of a vehicle and one in a bar. Field notes were recorded by the researcher. There were four different documents or forms in the ‘interview package’. The informed consent form was explained and filled out, indicating voluntary participation. For further questions, the contact details of the Biomedical Research Ethics Committee and the researcher were given (Burns and Grove, 2005). To protect participant confidentiality, a background variable sheet was filled out and coded (Burns and Grove, 2005). At the end of each interview, the key ideas of the National PMTCT of HIV were presented and discussed with the participant. He was encouraged to be tested for HIV by the researcher and encouraged to inform other men in the community. During the process, the participants used the language that they found most comfortable.

The interviews were guided by the following questions:

1) Have you ever visited the antenatal clinic with your wife?
2) What do you know about the PMTCT of HIV program?

After the opening questions, the interviews continued with additional questions aiming to discuss the factors that participants considered to influence their participation in antenatal visits.

Data saturation was reached after 15–18 interviews. Twenty-one interviews were recorded and later transcribed verbatim.

The National Protocol Guidelines of Zambia (National Protocol Guidelines of Zambia, 2008), PMTCT of HIV/AIDS was obtained from the Ministry of Health of Zambia. It has been prepared in co-operation with partners such as the National PMTCT and Pediatric HIV Technical Working Group, UN Agencies, USG Partners, Global Fund and UNICEF. The guidelines contained 60 pages and were intended mainly for use by health care providers and district PMTCT program managers.

**Composition of the National Protocol Guidelines to the Program of PMTCT of HIV/AIDS**

The cover of the National Protocol Guidelines to the Program of PMTCT of HIV/AIDS portrays two women and a suckling baby. The foreword section offers epidemiological data on HIV infection in Zambia and the status and efficacy of the PMTCT of HIV program. It enumerates the partners and explains the guideline’s intended use. The goal of PMTCT of HIV program is ‘to eliminate HIV infection in children’. The introduction section provides information on HIV prevalence in the country, describes the three goals of the National PMTCT of HIV Strategic Framework and the four approaches used to reach these goals. The expected outcomes are given at the end of the section.

The main content has been divided into eight chapters and eight annexes. The chapters are ‘Testing and Counseling’, ‘Antenatal Care’, ‘Intrapartum Care’, ‘Immediate Post Natal Care and Neonatal Care’, ‘Prenatal Check-up’, ‘Follow-Up Pediatric HIV Care and Long Term support to Mothers’, ‘Care for Health Workers and Community Health Providers’ and ‘Monitoring and Evaluation’. The annexes deal with medication, antenatal care, nutrition, living with HIV and the WHO Staging System for HIV Infection and Disease. The terms ‘spouse’, ‘him’, ‘men’ and ‘partners or husbands’ are found once; the terms ‘he’, ‘male’ and ‘husband/partner’ are found twice; the term ‘male partner’ is found three times. The gender-neutral term ‘partner/s’ is found seven times; however, male-gendered terms appear in total 20 times in the text, excluding the annexes.
Data analysis

The quality of interpretation in interviews was confirmed using a second interpreter who was a native speaker of the Luba language. Content analysis (as presented by Miles and Huberman, 1994a) was used in analyzing the qualitative data collected through interviews. This made it possible to analyze the participant’s views on the issues discussed and their knowledge of the program of PMTCT of HIV.

The approach of this study was to use a meaningful element of text as the unit of analysis. The transcribed data were read through several times and reduced. This reduction (or coding) allowed original data to be condensed without losing important information. The outcome codes of the reduction process were compared. Codes with similar contents were grouped together to create lower categories. These were then compared with each other to create upper categories. The validity of the analysis was confirmed by discussing the findings within the research team. The veracity of the results was confirmed by two Luba-Kasai men in their capacity as members of the tribe and as family fathers.

The National PMTCT of HIV/AIDS Guidelines were analyzed deductively (Miles and Huberman, 1994b) by using the upper and lower categories created from the interview data of Luba-Kasai men, as a frame of analysis. The chosen unit of analysis was a sentence or a word. The Guidelines were read through several times, looking for similarities with the male views, which had been coded as lower and upper categories. Thus, the results are composed of those passages that correspond with the male partners’ knowledge of the program of PMTCT of HIV. The validity of the analysis was discussed with senior researchers.

The research was carried out with the assistance of a local co-researcher, a co-author of this report. Approval to conduct the study was given by the Biomedical Research Ethics Committee of the University of Zambia. The local tribal leader was also informed of the study. This article presents the final two of eight questions which comprised the full study.

RESULTS

Characteristics of the interviewees

Twenty-one interviews were analyzed: 2 in English, 1 in Nyanja and 18 in the Luba language. One participant was a Muslim, whereas the remaining 20 were Christians. Eight men were over 50 years of age, four participants were aged 40–46 years, four aged 30–39 years and five participants were aged below 30 years. Thirteen men were monogamously and eight polygamously married. Seven men had 8–14 children, eight had 4–7 children and six had 1–3 children. Two participants had studied at college/university level, eight had studied in grades 10–12 and nine in grades 8–9. Two participants had studied in grades 5–7. Three participants had a permanent job, 15 a temporary job and 5 had no work.

Fourteen participants had been tested for HIV, but 16 told that they knew their own HIV status. Fifteen had previously accompanied their wife to an antenatal clinic and 12 had sought VCT (voluntary counseling and testing) during their wife’s pregnancy. Fourteen said they knew their wife’s HIV status and 16 told they had disclosed their own status to their wife.

Factors encouraging participation

Factors encouraging male partners to accompany their wives to the antenatal clinic are given in Table 1. This involvement in the program of PMTCT of HIV entailed four aspects. First, regarding testing, becoming aware of one’s HIV status was described by participants as ‘getting the truth of the body’, ‘testing of our life’ or ‘seeing how the body is’. They either went to the test together with their wives or were tested separately. They valued becoming treated and counseled regarding the symptoms of other sexually transmitted diseases, determining their HIV status and also receiving counseling as required. The participants also valued learning about HIV from a doctor (a person wearing a white lab coat seemed to be considered as a doctor) and from the information leaflets received. When telling the man his HIV status, the doctors were sometimes reported as asking him ‘to continue to pray’ and to be faithful.

The time of delivery/health concerns the perinatal phase and covered issues such as a fear of the wife’s death. This context provided a second aspect that encouraged participation. The participants described many worries about their wives—some were sick and pregnant, or there was disharmony in the home causing confusion. Together, these were seen as factors leading to the potential death of the wife when she gives
Sometimes people go there and they die, sometimes they come back alive, that is why I had that fear and I had to go there...

The health facility was, however, seen as a place where the wishes of getting a new baby and getting their wife back home alive may come true.

Love and care was a third aspect that encouraged male partners to accompany their wives to the clinic. The feature of mutual love may be described as unity—people who are together are one; and what happens to one, also happens to the other. One way to show love was to test their blood together with their wife. Love was seen to clarify values, so visits to the clinic were seen as important. ‘The fact that the doctor requested me to be there was not the only reason; I did it because of love. I said that as you are tired let us go step by step until we get to the antenatal clinic.’

Assisting their wife if she was sick, pregnant or if the delivery was imminent and she was in pain and weak was another feature that encouraged male partners to accompany their wives to the clinic. Following the delivery, the wife may also need assistance with the baby while waiting to see the nurses or the doctor.

A suspicion of corruption provided a fourth encouraging factor, with the male partner needing to go to the clinic to find out the real admission fees and avoid suspected overcharging.

### Inconveniencing factors

Factors inconveniencing male partners in accompanying their wives to the antenatal clinic are divided into three different aspects. The arrangements and working culture at the clinic included features such as men not being allowed to go into the doctor’s room which is considered a place for women. However, some participants would have been willing to accompany the wife into the

<table>
<thead>
<tr>
<th>Table 1: Male partners’ views on factors having an effect on male antenatal clinic visits and ideas to improve them</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors encouraging male partners to accompany their wives to antenatal clinic</strong></td>
</tr>
<tr>
<td>To be involved in the program of PMTCT of HIV</td>
</tr>
<tr>
<td>Becoming aware of their HIV status</td>
</tr>
<tr>
<td>Receiving treatment and counseling</td>
</tr>
<tr>
<td>To learn about HIV</td>
</tr>
<tr>
<td>Fear of wife’s death</td>
</tr>
<tr>
<td>Getting a new baby and their wife alive</td>
</tr>
<tr>
<td>Mutual love</td>
</tr>
<tr>
<td>Assisting the wife</td>
</tr>
<tr>
<td>To know the real fees for admission</td>
</tr>
<tr>
<td>The time of delivery</td>
</tr>
<tr>
<td>Love and care</td>
</tr>
<tr>
<td>Doubt of corruption</td>
</tr>
<tr>
<td>Factors inconveniencing male partners to accompany their wives to antenatal clinic</td>
</tr>
<tr>
<td>Arrangements and working culture at the clinic</td>
</tr>
<tr>
<td>Men are not allowed to go inside</td>
</tr>
<tr>
<td>Nurses’ unpleasant way of communicating</td>
</tr>
<tr>
<td>Unpredictable timing</td>
</tr>
<tr>
<td>Fear of HIV</td>
</tr>
<tr>
<td>Difficulty revealing test results to their wife</td>
</tr>
<tr>
<td>The man’s own risk behavior</td>
</tr>
<tr>
<td>Stigma</td>
</tr>
<tr>
<td>Guilt</td>
</tr>
<tr>
<td>Reasons for not accompanying the wife to antenatal clinic</td>
</tr>
<tr>
<td>Lack of motivation</td>
</tr>
<tr>
<td>Fear of death</td>
</tr>
<tr>
<td>Socioeconomic circumstances</td>
</tr>
<tr>
<td>Arrangements and working culture at the clinic</td>
</tr>
<tr>
<td>Lack of time</td>
</tr>
<tr>
<td>Poverty</td>
</tr>
<tr>
<td>Not invited</td>
</tr>
<tr>
<td>No place for men</td>
</tr>
<tr>
<td>Ideas to remove inconvenient factors</td>
</tr>
<tr>
<td>Having a spiritual outlook on life</td>
</tr>
<tr>
<td>Faith in God</td>
</tr>
<tr>
<td>Correct knowledge of HIV</td>
</tr>
<tr>
<td>Peer communication</td>
</tr>
<tr>
<td>Wife insistence</td>
</tr>
<tr>
<td>Rearing of children</td>
</tr>
<tr>
<td>Communication within the family</td>
</tr>
<tr>
<td>Being taught</td>
</tr>
<tr>
<td>Visits are part of life</td>
</tr>
<tr>
<td>Positive attitude</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Interaction</td>
</tr>
<tr>
<td>Good mood or meaningfulness</td>
</tr>
</tbody>
</table>

Luba-Kasai men and the PMTCT of HIV program in Lusaka

Downloaded from https://academic.oup.com/heapro/article-abstract/30/3/637/623416 by guest on 11 March 2019
room had it been possible. Male partners are not allowed to be present during delivery and are made to sit outside. As such, they felt that there was no place for men. Nurses had an unpleasant way of communicating, including shouting and accusing male partners of irresponsibility and a lack of support if the male partner had not prepared things properly for the mother and the baby: ‘(nurses say) You are irresponsible, you have gotten the wife pregnant and you are not supportive’. Clinics are often overcrowded and this makes timing unpredictable. Participants felt it hard to sit for the whole day at the clinic without eating. It was also difficult to reconcile clinic visits and work.

Secondly, stigma associated with issues such as a fear of HIV may cause male partners to run away from the clinic and leave their wives alone, and also, the difficulty in revealing test results to their wife. Guilt, as an inconvenient factor, is composed of the male partner’s own risk behavior. From the interview data, if the wife, for some reason, had refused to have sex with him, he had taken to drinking and had sex with other women. ‘...I brought this on myself’.

The data showed that a lack of motivation, fear of death, socioeconomic circumstances and the arrangements and working culture at the clinic are reasons given by those men who had never accompanied their wives to the antenatal clinic. A lack of motivation included several features such as expressing no need to go, unless they are called by the nurses or the doctor: ‘Our wives, when they are pregnant, they go there. I am not pregnant, why should I go there?’ Also expressed was that there is no need to go if the mother is HIV negative and that the clinic is not a place for men. Some participants said that they were not invited, and they expected an invitation from the nurses or doctors. Some participants were just so troubled over HIV that even the thought of their own possible infection led them to fear death: ‘If I go they might find that I am positive and then I will die very early.’

Socioeconomic circumstances included features such as a lack of time and poverty. Participants had to travel for work or they had other activities to attend to while their wife visited the antenatal clinic. Participants living in deep poverty may primarily not be willing to know their status of HIV: ‘I do not want to go... I do not have a job, I do not have good food, I do not have a permanent place to live and other things.’

**Solutions to inconvenient factors**

Participants’ ideas to remove inconvenient factors are related to religion, learning, other people and their own mind. Having a spiritual outlook on life means faith in God by praying for God’s help: ‘...God is the one who has created everything and we have to pray... My faith gives me strength to abstain.’ On the other hand, a spiritual outlook on life means trusting an almighty God who determines the destiny of everyone.

Education in this context means a correct knowledge of HIV which in turn reduces fears of HIV tests. Interaction is proposed as an idea to remove inconvenient factors, and talking with peers attending VCT could help test acceptance. Also, the wife who has been asked by the antenatal clinic to invite the husband to come for testing may insist that the husband accompany her: ‘...at night she insisted, she cried, I said when she sleeps also I will come... They said your result is positive and they started to counsel us.’ Interaction also includes features such as the rearing of children and communication in the family, and in this context, the family was seen as a basic unit where the role of father is pivotal in teaching the wife and children to avoid sexual risk behavior.

Maintaining a good mood or sense of meaningfulness are proposed as ideas to remove inconvenient factors. These include features such as being taught, considering antenatal visits as part of life and having a positive attitude: ‘...when we went together with her I was very happy and encouraged to go there.’

**Knowledge of the PMTCT of HIV program**

Participants who were familiar with the program had heard about it from various sources: the public sector (antenatal clinic, other clinic, VCT, school and non-governmental organization center); the third sector (church seminar); media (TV, radio) and from other people (wife, community and others). The program was known as a preventative program and as a resource for counseling which provided information on matters such as nutrition, human relations, avoiding blood contact in daily care and forbidden, limited or controlled breastfeeding of the baby by an HIV-infected mother (Table 2). Furthermore, the program is identified with testing for HIV, avoiding blood contact in birth and in medication and receiving ARVs. The National Protocol Guidelines to the Program of PMTCT of HIV/AIDS
Concerning breastfeeding, the men’s views differed from the Guidelines. Some participants felt that HIV-positive mothers should not breastfeed at all. The most important reasons given for accepting the program are to acquire information about prevention, having a good life, staying alive, having a future and being assisted: ‘We accept this program because when we go there after testing they find that you are positive or negative. If you are positive, they will provide counseling and give some medicine to you. But if you are negative, they will still offer counseling and show you how to stay negative.’

Participants who had accompanied their wives to the antenatal clinic did not find any reason to reject the program or they mentioned evil spirit or difference of opinion between spouses. For those participants who had not heard about the program, the interview was perhaps the first time they had heard about it or, as the information had been distributed in the English language, its message had not reached the French-speaking refugee: ‘I do not have any idea because they are always talking in English, I am not able to hear or understand English and it is very hard.’

**DISCUSSION**

This study describes Luba-Kasai men’s views on factors that encouraged or inconvenienced or inhibited them in accompanying their wives to the antenatal clinic, and their ideas to remove inconveniencing factors.

In this study, becoming aware of one’s HIV status, learning about HIV (Katz et al., 2009) and becoming treated and counseled were factors that encouraged male partners to accompany their wives to the antenatal clinic. Invitation through the pregnant spouse, HIV counseling and testing, information about PMTCT of HIV, the possibility to join the program, continued education for HIV positives, provision of ARVs if needed and the distribution of condoms are the Guidelines’ methods in which male partners are involved (National Protocol Guidelines of Zambia, 2008). However, the interview data produced some other details that seem to affect male participation, and ensuring a safe birth, human feelings and a suspicion of overcharging were other reasons given to visit the clinic.

Male partners had faced barriers such as HIV-related stigma (Reece et al., 2010) and guilt. While offering HIV testing and counseling, the National program also has a chance to help males with these obstacles. The program offers...
Guidelines PMTCT of HIV/AIDS, the issues surrounding the male partner’s responsibilities in birth preparedness, love and care in the intimate relationship, trust in antenatal care, a male-friendly working culture, religion, HIV-related discussions in the family and a positive attitude toward PMTCT of HIV might merit further consideration.

The study also describes Luba-Kasai men’s knowledge of the program of PMTCT of HIV and conformity to the National Protocol Guidelines Integrated PMTCT of HIV. Some study participants had detailed knowledge of the program, and it was congruent with the national program, despite some differing views on safe feeding practices. The men had a positive attitude toward the program and knew its goals and some methods. Similar findings were also found in Nkuoh et al.’s (Nkuoh et al., 2010) study in Cameroon. However, an alarming fact is that some participants had no knowledge of the program even though they were expectant fathers or already had a suckling baby.

This study acknowledges some limitations: the participants were from a small tribal minority; thus the results may not be applicable to the wider population or to other tribes. The Luba language was not known by the researchers, so it may be that some nuances were hidden although the interpreter was trained in the study context and interpretations were cross-checked. The printed booklet of the National Protocol Guidelines of Zambia (National Protocol Guidelines of Zambia, 2008), PMTCT of HIV/AIDS was analyzed in this study. Using the same frame of analysis (the upper and lower categories created from the interview data of Luba-Kasai men) in the context of clinical practice, the results would be different. On the other hand, the guidelines as the foundation of activities should be a document to which everyone should be able to refer in clinical reality. The strengths of this study are, first, that the participants could use their own mother tongue which helped them to express their ideas and secondly, this study is the first to compare male knowledge of the Zambian National program of PMTCT of HIV.

CONCLUSION

The Zambian National Program of PMTCT of HIV has resulted by way of an enormous effort, especially in the context of resource limitations and its results have been promising. To
strengthen the outcomes of the program, there is a need to develop its briefing and content to be more male-friendly in terms of the Luba-Kasai male population. Therefore, more comparative evidence needs to be acquired by studying other tribal groups and provinces.

ACKNOWLEDGMENTS

The authors thank all participants and the contact person of this study.

FUNDING

This work was supported by Finnish Paulo Foundation and the Foundation for Nurse Education and University of Tampere.

REFERENCES


