

'When I get better I will do the test': Facilitators and barriers to HIV testing in Northwest Region of Cameroon with implications for TB and HIV/AIDS control programmes

Nwarbèbé Barnabas Njosing, Kerstin E Edin, Anna-Karin Hurtig

Abstract

The World Health Organization has recommended collaborative activities between TB and HIV programmes with routine counselling and testing for HIV among TB patients in order to improve the uptake of HIV services. We carried out qualitative research interviews with 21 TB patients in four selected TB and HIV/AIDS treatment centres in the Northwest Region of Cameroon to explore the facilitators and barriers to HIV testing. The desire to be healthy and live longer from knowing one's status inspired by the anticipated support from loved ones, faith in a supreme being, influence and trust in the medical authority, encouraged HIV testing. Men also demonstrated their masculinity by testing, thus portraying themselves as positive role models for other men. Meanwhile, the overwhelming burden of facing both TB and HIV simultaneously, influenced by the fear of disclosure of results, harmful gender norms and practices, fear of stigma and discrimination, and misconceptions surrounding HIV/AIDS deterred HIV testing. However, as a result of conflicting emotional experiences regarding to test or not to test, the decision-making process was not straightforward and this complex process needs to be acknowledged by health care providers when advocating for routine HIV testing among TB patients.

Keywords: tuberculosis, HIV, counselling and testing, Northwest Region, Cameroon.

Résumé

L'Organisation mondiale de la santé a recommandé des activités collaboratives entre les programmes consacrés à la tuberculose et ceux sur le VIH, avec notamment la mise en place d'une assistance et d'un dépistage systématique du VIH pour les sujets atteints de tuberculose, l'objectif étant d'augmenter la fréquentation des services prenant en charge les patients atteints par le VIH. Afin d'étudier les facilitateurs et les obstacles au dépistage du VIH, nous avons mené dans quatre centres de traitement de la tuberculose et du VIH/SIDA de la région du Nord-Ouest du Cameroun, des entretiens qualitatifs avec 21 patients atteints de tuberculose. Les facteurs encourageant le dépistage du VIH étaient le désir d'être en bonne santé et celui de vivre plus longtemps, et le présupposé voulant qu'une fois que l'on connaît son statut, on bénéficie souvent du soutien de ses proches. Il y avait aussi la foi en un être suprême, et l'influence et la confiance dans l'autorité médicale. Les hommes ont aussi démontré leur masculinité en se faisant dépister car ils se présentaient ainsi comme des modèles positifs pour les autres hommes. En même temps, affronter simultanément la tuberculose et le VIH est un fardeau écrasant en raison de la crainte de la divulgation des résultats, des pratiques et des normes de genres néfastes, de la peur de la stigmatisation et de la discrimination, et des idées fausses qui entourent le VIH/SIDA. Tout ceci est un frein au dépistage du VIH. Cependant, en raison d'expériences émotionnelles conflictuelles sur le fait d'être dépisté ou non, le processus de prise de décision n'était pas simple, et sa complexité doit être reconnue par les prestataires de soins de santé lorsqu'ils préconisent le dépistage systématique du VIH chez les patients atteints de la tuberculose.

Mots clés: tuberculose, VIH, assistance et dépistage, région du Nord-Ouest, Cameroun.

Introduction

Tuberculosis (TB) was declared a global emergency in 1993 by the World Health Organization (WHO), but it still poses a threat especially in high human immunodeficiency virus (HIV) prevalent countries. In 2007, out of the 9.27 million incident TB cases reported globally, 1.37 million (15%) were HIV positive. Africa alone accounted for 79% of the co-infected cases. In

Cameroon, a total of 36 088 prevalent and 35 556 incident TB cases were recorded in 2007 (WHO, 2009a).

Because of the overlapping epidemiology of both infections, WHO in 2004 recommended collaborative activities between TB and HIV control programmes geared towards reducing the

Nwarbèbé Barnabas Njosing, MB BCh, MPH, is a doctoral student in Public Health at the Division of Epidemiology and Global Health, Umeå University Sweden and the Swedish Research School for Global Health. He was formerly the TB/HIV treatment officer at Bango Baptist Hospital and TB/HIV coordinator and medical officer at St. Mary Soledad Catholic Hospital, Cameroon. His research interests include TB and HIV collaborative activities and access to HIV treatment and care services using a health systems approach.

Kerstin E Edin, RN midwife, MPH, PhD, is a research fellow in the Unit for Epidemiology and Global Health, Department of Public Health and Clinical Medicine, and is also affiliated to Umeå Centre of Gender Studies, University. She attempts to apply qualitative methods and is involved in varying research projects while the main interests are in gender and intimate partner violence with a special focus on sexual and reproductive health.

Anna-Karin Hurtig, MD, DrPH is an Associate Professor in Public Health at the Division of Epidemiology and Global Health, Umeå University, Sweden. Her research interests include infectious disease policies and primary health care strengthening in low-income countries.

Correspondence to: njosing.barnabas@epiph.umu.se

burden of both HIV and TB among these patients (WHO, 2004). Subsequently, there has been scale-up of HIV services including antiretroviral (ART) and co-trimoxazole preventive therapies (CPT) to TB patients. However, to be able to access these services it is essential that the patients' HIV status is known. Therefore, providing routine counselling and testing to all TB patients in health care services has been recommended to facilitate access to the much-needed HIV services (UNAIDS/WHO, 2004).

In 2007, WHO advocated that governments should adopt provider-initiated testing and counselling, which is counselling recommended by service providers to individuals seeking medical treatment with an 'opt-out' approach. This means that individuals, after receiving the pre-test information, can expressly decline the HIV test if they do not want it to be performed, (WHO/UNAIDS, 2007). However, uptake of testing is influenced by health policies, health care system factors including infrastructure, human resources and patient factors. Globally, HIV testing among TB patients has been impressive with the number of notified TB cases with a known HIV status increasing from 0.5% in 2002 to 16% in 2007. In Africa, testing increased from 22% in 2006 to 37% in 2007 among notified TB cases and the highest testing rates among countries with high HIV prevalence were found in Rwanda, Malawi, Lesotho, Swaziland and Kenya (WHO, 2009a). In Cameroon, the number of TB patients tested for HIV has increased since 2006 from 8 637 to 11 825 in 2007 and to 16 144 in 2008 with corresponding co-infection rates of 38.9%, 43.8% and 40.4% respectively in the adult population (CNLS, 2008).

In Cameroon, collaborative activities between the National TB Control Programme and National AIDS Control Programme began in 2004 and counselling for HIV is routinely offered free to all TB patients. There are 95 sites providing counselling and antiretroviral services nationwide and 10 in the Northwest Region (NACC, 2007). Since May 2007, ART and CPT are provided free of charge to all TB patients.

Studies in Africa and Asia have demonstrated several barriers to HIV testing among TB patients. They included fear of testing and stigma (Daftary, Padayatchi, & Padilla, 2007 and Mahendradhata, Ahmad, Lefèvre, Boelaert, & Van der Stuyft, 2008), lack of confidentiality and privacy (Corneli, Jarret, Sabue, Duvall, Bahati, Behets *et al.*, 2008), timing of testing and waiting time to do the test (Daftary, Padayatchi, & Padilla, 2007), females needing to seek partners' consent (Daftary, Padayatchi, & Padilla, 2007). Although much can be learned from these studies it is important to ascertain these factors from a local perspective. This initial study was conducted to explore the facilitators and barriers to HIV testing among TB patients in four selected HIV/AIDS and TB treatment facilities in the Northwest Region of Cameroon. Such knowledge and understanding are important information to improve access to HIV services and enhance TB/HIV collaborative activities. It was also intended to gather information to plan for future studies among health care professionals about the counselling and testing processes in the region.

Methods

Study setting

Cameroon, located in central Africa, has a total population of over 18 million (WHO, 2009b) and is divided into 10 regions. This study was performed in the Northwest Region with a population estimate of 1.8 million. Bamenda, its capital, has a population of over 300 000. In the region there are 13 health districts in the public sector, 1 regional hospital, 19 district hospitals and 106 assimilated district hospitals and health centres. There are also private, faith-based hospitals and health centres. In 2004 the region had the country's highest HIV prevalence estimate of 8.7% - 11.9% in females and 5.2% in males (INS, 2004).

Currently there are 10 hospitals offering comprehensive HIV care/support activities and TB control within the region and four were selected for this study: Bamenda Regional Hospital (public), Bansa Baptist Hospital, Mbingo Baptist Hospital and Njinikom Catholic Hospital (all faith-based). The selection was made because of their accessibility, similar patient load, and a similarity in the services provided because they act as referral centres in the region, but also to get a variation of patients since they serve both rural and urban populations. Moreover, both faith-based and public hospitals were included because of perceived differences among the population with regards to the quality of patient care and user-friendliness between these settings.

Counselling and testing services

All newly diagnosed TB patients in the TB units including referrals from other services are routinely offered counselling and testing for HIV using the 'opt-out' approach by trained counsellors. Their training usually lasts for 1 - 2 weeks with frequent refresher courses and in-service training thereafter. However, there are a few nurses/social workers who have undergone 9 months' intensive training courses in counselling to improve the quality of counselling within these settings. Basic information given about HIV includes its transmission, progression, manifestation, link with TB and the benefits of testing, including free ART/CPT. HIV test results are available the same day and post-test counselling including support services for HIV-positive cases are also provided the same day and as the need arises.

Study design and data collection

The study design was informed by a grounded theory approach and the first author conducted the qualitative research interviews (Dahlgren, Emmelin, & Winkvist, 2004). A pilot study was initially conducted with 4 patients to test the interview guide, and after preliminary analysis and debriefing sessions with the research team emerging topics were added to the final interview guide. The final interview guide included open-ended questions regarding treatment-seeking trajectory and choice of hospital, reactions to TB diagnosis and relationship with providers, counselling and testing history, reasons for accepting/refusing HIV test, reactions to outcome of test, disclosure history, impressions about barriers and suggestions for improvement of services.

Hospital heads, TB coordinators, nurses and counsellors were informed about the study. Participants were purposively selected for the study based on the HIV testing history obtained from the TB registers. A total of 26 patients were approached with

the assistance of either the TB coordinators or the head nurses in the TB units and asked about their willingness to participate. Five declined to participate for fear of later broadcasting of the interviews, needed partners' consent, or were just not interested. A total of 21 participants, approximately 5 in each study site, 11 who accepted (6 males and 5 females) and 10 who refused (4 males and 6 females) HIV testing, were interviewed. Their ages ranged from 17 to 49 years with a mean age of 31.7 years. Among those self-employed, their activities included farming, petty trading, carpentry, butchery, hairdressing, motor mechanic and contract work. Employed occupations included teaching, nursing, taxi driving, baking and, civil service. Demographic information of the participants was based on self-reports, and details of the participants' characteristics are presented in Table 1.

After a total of 21 interviews had been conducted and not much new information was emerging in the preliminary comparative analyses, it was decided that further interviews would probably not yield much more additional knowledge in relation to the research question (Kvale, 1996). The interviews were conducted from December 2007 to April 2008 in either English or Pidgin English (locally adapted English that everybody including the illiterate speaks in this region) and lasted between 60 and 90 minutes. All interviews were tape-recorded and transcribed verbatim and the Pidgin English interviews were later translated into English by the first author.

Data analysis

The audio tapes and transcripts were de-identified to protect the confidentiality of the participants. All the transcripts were then coded manually to form categories (theoretically generated concepts according to a 'grounded theory' approach) including properties and dimensions in constant comparison with other categories and the interview transcripts in its entirety (Dahlgren *et al.*, 2004). Matrices were developed to group together and

Table 1. Characteristics of interview participants

Participant characteristics	Total N (%)	Male N (%)	Female N (%)
All	21 (100)	10 (47.6)	11 (52.4)
Mean age (years)	31.7	32.2	31.2
TB status			
Smear-positive	19 (90.5)	8 (42.1)	11 (57.9)
Smear-negative	2 (9.5)	2 (100)	0 (0)
HIV status			
HIV-positive	7 (33.3)	3 (30.0)	4 (36.4)
HIV-negative	4 (19.1)	3 (30.0)	1 (9.1)
Refused	10 (47.6)	4 (40.0)	6 (54.5)
Marital status			
Married	13 (61.9)	5 (38.5)	8 (61.5)
Single	8 (38.1)	5 (62.5)	3 (37.5)
Profession			
Student	2 (9.5)	1 (50.0)	1 (50.0)
Housewife	3 (14.3)	0 (0)	3 (100)
Self-employed	9 (42.9)	5 (55.6)	4 (44.4)
Employed	7 (33.3)	4 (57.1)	3 (42.9)

compare categories to discover recurring ideas and finally to form eight main categories (four related to facilitators and four to the barriers). From the analysis, a core category was finally chosen, one which related to all the other categories and represented the most salient point in the participants' decision-making process regarding testing. Finally, a visual representation of the findings was developed describing how each of the categories were acting as facilitators and barriers to testing and were related to the two main categories – 'The desire to be healthy and live longer' and 'Overwhelming burden of TB and HIV' and to the core category 'Complexity of choices' (Fig. 1).

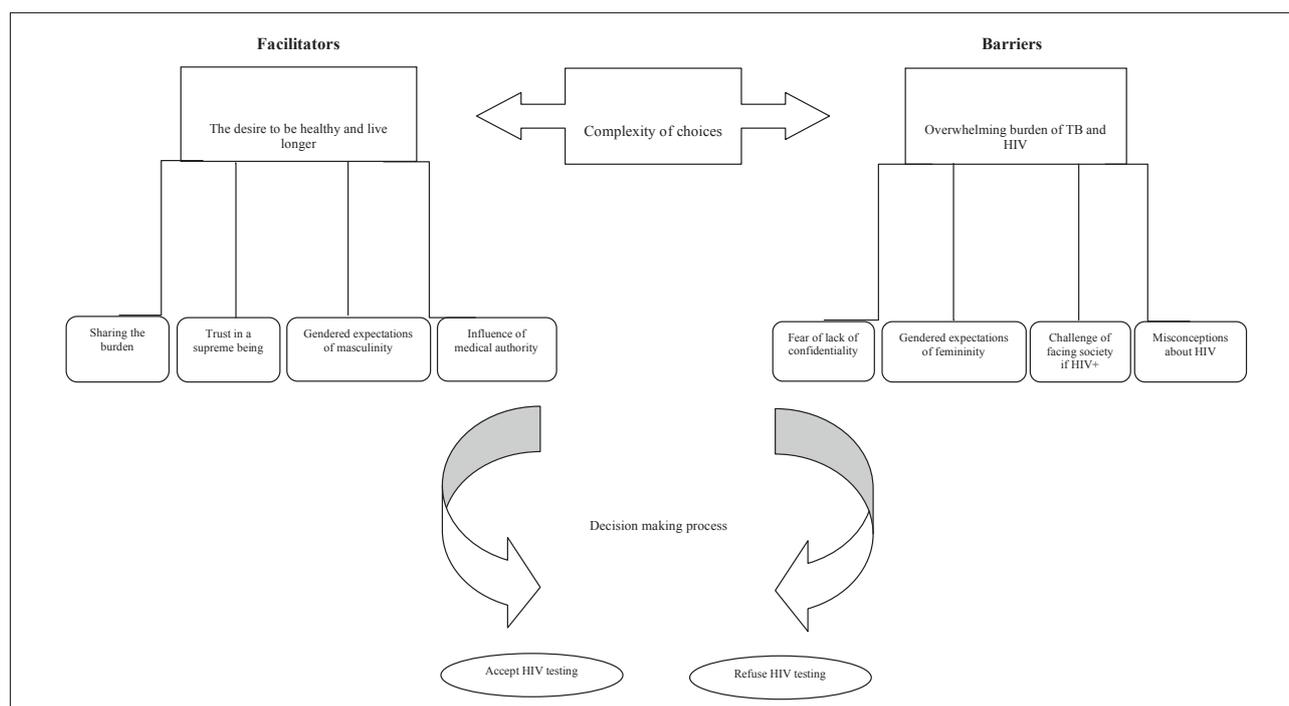


Fig. 1. A visual representation of facilitators and barriers to HIV testing.

Trustworthiness of the study

The first author's pre-understanding of the local context having been professionally involved in TB/HIV management might have affected his judgement and influenced the responses from the participants. However, in order to explore new ideas and discover new knowledge, an open-minded approach and a well-prepared interview guide was used as a means of keeping the pre-understanding 'within brackets' (Dahlgren *et al.*, 2004) – a technique 'borrowed' from phenomenological researchers in order to reduce biases. In order to build trust in the participants and to encourage free flow of discussions, the first author spent almost a week in the study settings as preliminary visits to observe the activities in the units and interact with the participants. This was to gain the participants' confidence prior to the interviews. During the analysis phase, several joint briefing and analysis sessions were held with members of the research team to ensure credibility of the findings and the transcripts and analysis were presented to senior colleagues for peer review.

Ethical approval

Approval for the study was obtained from the Delegation of Public Health for the Northwest Region (N°401/NWP/PDPH/08), the Internal Review Board of the Regional Hospital in Bamenda and the Cameroon Baptist Convention Health Board Institutional Review Board (IRB 2007-09). Verbal consent was also obtained from all study participants and they were assured confidentiality and made to understand that the interviews were not meant to disclose or to blame them for their HIV status.

Results

From the interviews, four categories surfaced as facilitators for testing from which a main category, 'The desire to be healthy and live longer', emerged. This was linked to the categories and was the central motive for testing. Another four categories also surfaced as barriers to testing from which a main category, 'Overwhelming burden of TB and HIV', emerged because it was linked to the four categories and interpreted as the most important factor which deterred testing. Finally, a core category, 'Complexity of choices', was selected, being the link between the two main categories and because it mirrors the complexity in the final individual decision-making process regarding testing. The different categories are presented below and the participants' quotations are presented in italics and used as examples of the interpreted results described in the text.

The desire to be healthy and live longer – *'It is better to know and treat and live longer'*

'The desire to be healthy and live longer' was a strong motivator and emerged as the main category regarding encouragement for testing. According to 82% (9/11) of the respondents who accepted testing, the decision was influenced by the support they required from their loved ones to assist them to face both infections and also by their faith in God to cope during difficult times. Others wanted to display their 'manly' courage while some were convinced by the service providers. However, these factors were guided by the determination to find the true cause of their chronic illness so that they could be treated. Some declared to have spent money foolishly consulting faith-healers/traditional doctors believing it was a spell without relief. Equally, some female participants

thought it was necessary to test and confirm their status after discovering their partners were HIV-positive. Others felt it was vital to know their status because of suspicion or after confirming their partners' infidelity so that they could seek treatment. A driving force therefore to test was the knowledge that HIV is now recognised as a 'normal' disease with free treatment.

'No, I was serious about doing the test because if my result were positive then I already knew the next step to take because I was aware that the antiretrovirals were available that I could begin taking if the test came up positive. With the drugs, I will maybe get completely better or live longer...Normally, I know there is a treatment for AIDS now, it is a normal illness...' (37-year-old HIV-positive male).

'Well I just decided that she (the counsellor) should do it because when you have been sick to this kind of stage when you were close to death, you don't have to fear anything. It is better you know your status and if you have it (HIV) better you start taking medicines than to just to live blind and die carelessly' (25-year-old male, HIV-).

Sharing the burden – *'It is good to tell so that they will support you'*

Sixty-four per cent (7/11) of the respondents who accepted testing stated that they could not shoulder the burden of their illness alone. Having been chronically ill and unable to work, they had become dependent on their families for support. They were initially psychologically traumatised by the TB diagnosis, followed by the possibility of being HIV-infected. It was therefore imperative to know their status so that they could disclose to their significant others for psychological/financial support, since it would have been difficult to offer assistance without their relatives knowing the real cause of their illness.

They expressed that the support received from their loved ones was amazing and unexpected because they were initially apprehensive that they had become a burden to them and their diagnosis would be regarded by the family as disgraceful or disappointing.

'..He (brother) really took his time and talked to me that I should eat well as I am taking these drugs...I should even thank God that my TB has made them to discover another illness (HIV)' (32-year-old female, HIV+).

However, it was difficult for partners to discuss HIV issues and this was more common with men because they were ashamed of having been unfaithful to their spouses. Most female participants (8/11) commented that it is important for partners to disclose their illness to each other so that they seek solutions early together rather than blaming one another.

Trust in a supreme being – *'I surrendered everything to God'*

Fifty-five per cent (6/11) of the participants who accepted testing were of the impression that life occurrences were willed by God and therefore convinced there was nothing they could do about it if they had already been infected with HIV before seeking treatment. They had a strong belief that God performs miracles

in people's lives, so it was better to test and know their status because they could be cured someday. This strong religious belief brought less apprehension about testing and enabled them not only to share their burden with God, but also with relatives for psychological support and assistance.

'... when you have accepted that God is your God and He is taking care of you, and He is guiding you, why will I be afraid to walk in the shadow of darkness' (32-year-old female, HIV+).

Gendered expectations of masculinity – 'I just behaved like a man'

According to fifty per cent (3/6) of the male participants who accepted testing, their decision rested on their resolve to prove their manliness because a man is supposed to be courageous and must display strength at all times no matter the type of challenges faced. Thus, this 'manly' courage inspired them to find out the cause and also to share the burden of their illness with close relatives, especially their partners, in order to get psychological and nutritional support but most importantly so that they get tested and treated together. They declared that the health care workers were startled by the courage they displayed when asked to test and also when their result was revealed to them.

'When the doctor told me I had AIDS, he did not even say I had HIV... I think the doctor was really surprised by the way I took the news ... very normal' (37-year-old male, HIV+).

One participant's motivation for testing was to guarantee his future marital life and prove his virility to the community because a 'real man' is supposed to get married and have children.

'I just thought that if I had it (HIV) then that will be the end about getting married and having children. You know if a man doesn't have children then you are not a man because they will laugh at you in the village that you are infertile' (25-year-old male, HIV-).

Nevertheless, they acknowledged uneasiness during the decision-making process because of their past sexual life and the undesirable reactions they anticipated from their partners if they were positive because of their infidelity.

When the male participants were challenged for making unilateral decisions regarding testing, 3/10 declared that traditionally the man is the head of the family and decisions are taken solely by him. Therefore, discussing HIV issues with their partners was unimportant. Others refused to test when requested by their partners because they claimed they were apparently in good health.

'My wife actually forced but I was very reluctant. You know when you feel very healthy, you tend not to believe what people tell you. It's just when I got sick that I realised I should have really taken her advice' (37-year-old male, HIV+).

Influence of medical authority – 'It was the doctor who said I should do it'

Three participants (27%) who tested declared that the health care staff simply asked them to test when they sought treatment.

It was their belief that the providers were more knowledgeable about their illness and any decision taken was to assist in better diagnosis and treatment of their condition. They were therefore inclined to test because a refusal would have been conceived as a challenge to the medical authorities.

'It was the doctor who said that I should do it ... They just wrote it down and said I should do the test' (20-year-old female, HIV+).

Other participants stated that the desire to test was strengthened by the empathetic nature of the counsellors and TB staff whose actions were perceived more as gestures of love and concern rather than them performing their routine duties.

The overwhelming burden of TB and HIV – 'It was too much for me to handle'

The overwhelming burden of TB and HIV emerged as the main category regarding barriers to testing. Eighty per cent (8/10) of the respondents who refused testing stated that awareness of the link between TB and HIV and the associated stigma in society brought anxiety and despair. Besides, they affirmed the misconceptions surrounding the aetiology and treatment of HIV and the fear of disclosure of their results to third parties brought apprehension. The female participants acknowledged they hesitated to test because of the repercussions (blame, physical assault, abandonment or divorce) a positive result might bring on them. Furthermore, most of the participants confessed that TB diagnosis was a major setback to them because it was not only difficult to cure but still stigmatised. They declared that recommending HIV testing at that early stage was very devastating to them.

'It was too much for me. Just in a matter of two weeks everything was going wrong in my life. First I came here thinking it was a simple cough and was told it was TB. The next thing was doing an HIV test. I just couldn't handle it all at once' (38-year-old female, HIV status unknown).

They rather preferred to treat their TB and become physically/mentally strong before facing the challenges of testing for HIV. Some even blamed the providers for their overzealousness in testing every patient for HIV rather than paying attention to TB, which was life-threatening.

Fear of lack of confidentiality – 'They are humble but with diarrhoea of the mouth'

Although the participants commended the health care staff, especially those in the TB units for being supportive and sympathetic, 30% (3/10) disclosed that they were afraid their result would be disclosed to third parties which would result in them being despised in the community.

'... right back at home I sit and I hear people who work in the lab or some people who work in the counselling room discussing about people ... How he (patient) was looking like this and they did this and that. I mean they discuss patients' diagnosis elsewhere' (26-year-old male, HIV status unknown).

When the subject of disclosure of patients' result was posed to other participants, some alleged it was a common practice based

on complaints from fellow patients although they personally had not been victims. Others claimed to have overheard nurses discussing other hospitalised patients. Some male participants affirmed that such practices were commoner with female staff they said are fond of meddling into people's privacy. However, they responded unanimously that they could do nothing about it because of possible reprisals they could experience if they reported to the authorities and sanctions were taken against these staff.

'You might say it (complain) and they look at you badly, so I just kept it to myself. Maybe you can point this out in your study because it is not good' (33-year-old female, HIV status unknown).

They rather preferred to test in a more confidential environment after their TB treatment. Others acknowledged that the authorities were aware of the problem but were unwilling to take appropriate sanctions.

Gendered expectations of femininity – 'I need to discuss with my husband'

Some female participants (3/6) declined testing because they needed to discuss with or obtain consent from their partners. They mentioned that the man is the head of the family and therefore takes decisions regarding family matters. They stated that they were unable to challenge their partners' decisions since they were financially dependent on them to get treatment. They were also afraid they could be accused of cheating, assaulted, rejected or even divorced if their partners discovered they were HIV-positive. To them it was a dilemma because women were to blame for every mishap in the family because they were the 'weaker' sex.

'You know that women are not strong, so when we are infected it manifests quickly and when we get to the hospital and it is diagnosed, men will accuse us of having brought it from outside when maybe they are the ones who have brought it and infected us' (41-year-old female, HIV status unknown).

Two women were discouraged from testing by their partners, the excuse being that TB treatment and not HIV testing was paramount since TB was life-threatening. Women who insisted on testing together with their partners and co-wives for fear of accusation later on encountered stiff resistance and were threatened to take full responsibility in the event of a positive outcome. A few women declared that since the onset of their illness they had received minimal financial support from their partners and were bound to fend for themselves and their children. A participant from a polygamous home had also suffered rejection from her co-wives because her husband had told them that she was probably sick of HIV. Another acknowledged she personally knew a woman who was sent away from her marital home because she tested HIV-positive.

Nevertheless, the female participants declared that women were compassionate and supportive of their HIV-positive partners despite their infidelity and were even expected to go to bed with them. An HIV-positive participant revealed that she concealed her status from her family in order to protect her partner because

her family would have assaulted him for infecting her since they had cautioned him against infidelity.

'If I tell them (family) they will hate my husband because they always used to advise him against his women but he never listened and now he has infected me. They might even attack and beat him' (26-year-old female, HIV+).

However, when these women were challenged for not using condoms to protect themselves despite the knowledge that they had unfaithful partners, some declared using condoms with their partners was not only a taboo in marriage but they will also be accused of cheating.

Challenge of facing society if HIV-positive – 'What will people say when they notice that I am sick and losing weight?'

Fifty per cent (5/10) of the participants revealed that they were conversant with the possible association between having TB and HIV. Hence, their TB diagnosis brought anxiety due to suspicion that their immunity had been compromised, probably by HIV. They became concerned about society's reaction since it was common knowledge that people with TB have HIV. Some were apprehensive about testing because HIV was considered disgraceful by society. A participant claimed she would be uncomfortable facing her close friends if she knew her status, especially as she had lost weight since that was a telltale sign of HIV.

'You cannot be among people who know you are HIV-positive and live freely. They will talk about you and even behave funny towards you. It happens all the time and I know my colleagues, they talk a lot and I will not interact freely with them' (33-year-old female, HIV status unknown).

These concerns were corroborated by many participants who stated that HIV-positive people are regarded as promiscuous or having been careless with their lives, therefore HIV is a reward for deviancy.

Moreover, because of the shame attached to weight loss and for fear of ridicule, some participants preferred to stay at home until they regained weight before resuming their normal activities. The issue of body image was even emphasised by some counsellors who advised their patients to eat well in order to appear healthy in the community.

'She (counsellor) said I should eat fruits ... they will make me look healthy and that I should eat well so that when people look at me they wouldn't know' (30-year-old male, HIV+).

Misconceptions about HIV – 'You will die no matter what you do'

Sixty-seven per cent (14/21) of the participants declared that there were misunderstandings surrounding the aetiology and treatment of HIV in society. According to them, many people still do not believe in the existence of HIV/AIDS unless they personally or a relative/friend became infected. To others, HIV is regarded as a spell and treated only by faith or traditional healers.

'Some don't even believe that the illness (AIDS) exists. People are just careless with their lives ... some will say it is witchcraft, there is nothing like AIDS' (41-year-old female, HIV status unknown).

They also mentioned the perception in society that HIV is untreatable, which discourages people from testing since they believe the outcome of HIV is death. Hence they preferred to remain ignorant rather than test for a lethal infection. They revealed that this false impression is propagated by traditional healers who dissuade the public from seeking conventional treatment on grounds that they provide cures for every illness including HIV, which cannot be treated in the hospital. Some stated that poverty has compounded the situation since people are inclined to patronise these healers because their remedies are 'cheaper'. However, a participant blamed the media for promoting these healers through their adverts which are full of misleading messages, especially considering the level of illiteracy in the society. He accused the media authorities for being money-oriented with little regard for society's health. Much blame was also levelled at the health authorities and policy makers who fail to regulate traditional medical practices and the media.

'... all you hear over the radio is about quack traditional doctors who advertise cures for thousands of diseases with a single miracle drug ... How for Christ sake will someone allow such adverts to be aired for people to consume? People have stooped so low that they will do anything for money ... What are the Delegates of Public Health and Communication doing?... Don't tell me the authorities are not aware of this?' (45-year-old male, HIV-).

Complexity of choices – 'When I get better I will do the test'

'Complexity of choices' was chosen as the core category since it reflects the dilemma of making up the mind, being in the intersection between facilitators and barriers for testing. It is an illustration that the decision-making process to test can be seen as a tension between two opposing streams of thoughts, resulting in a process which is dynamic and where a decision not to test could change when realising that there is more to gain than to lose, by knowing the HIV status. Although it was the respondents' desire to know the cause of their illness, most were apprehensive about the outcome of testing and the stress of having both infections. Meanwhile others were disturbed about reactions from society if their result was disclosed considering the stigma associated with HIV. Some women were also worried about the undesirable reactions they could receive from their partners if HIV-positive. Others were encouraged to test by the health care providers, inspired by their faith and the anticipated support from loved ones, or to prove their masculinity. Among some women, testing was to confirm their status and take care of themselves and others. Eventually, the desire for good health overpowered all the hindrances among some participants while others yielded to the challenges of facing both TB and HIV infections and declined to test.

Discussion

This study highlights TB patients' perspectives on the challenges faced during testing for HIV. Based on the interviews, some main

issues were inferred that influenced testing, the participants' perceptions about HIV, gender positions, effect of stigma and the role of the providers.

Perceptions about HIV

Our study demonstrated that to many participants, HIV was regarded as a 'normal' and treatable infection. Coupled with this was the visible evidence of improvement in the health status of other patients on ART that motivated them to test for HIV. Perceived benefits of testing, including access to ART (Day, Miyamura, Grant, Leeuw, Munsamy, Baggaly *et al.*, 2003; Daftary *et al.*, 2007) and improvement in the physical condition of other patients on ART (Grant, Logie, Masura, Gorman, & Murray, 2008) were motivators for testing in previous studies in Africa.

The Northwest Region, being a high HIV-prevalent area in Cameroon, has had many HIV/AIDS sensitisation campaigns via different outlets and this awareness was evident among the participants. However, HIV awareness and its association with TB rather created apprehension and deterred testing among some participants. Also, misconceptions still existed regarding the aetiology and treatment of HIV in the society which negatively impacts HIV prevention and control. There was still non-belief in the existence of HIV and anxiety existed regarding testing because the infection was regarded as untreatable. This encouraged the utilisation of traditional medicine which was apparently cheaper, an issue promoted by the media. This is a strange finding considering the fact that the media is used customarily to educate the masses.

Future HIV/AIDS educational/sensitisation campaigns should incorporate proper information about its aetiology, treatment and prevention. The benefits of testing including the availability of free ART/CPT and support services should also be emphasised. Moreover, it would be valuable if people are given the opportunity to express themselves and clarify the many myths surrounding HIV. The society should also be educated that not all TB is associated with HIV, that TB is curable even in the presence of HIV, and that there is a better survival if both infections are treated concurrently (Varma, Nateniyom, Akksilp, Mankatittham, Sirinak, Sattayawuthipong, *et al.*, 2009; Velasco, Castilla, Sanz, Gasper, Condes, Barros, *et al.*, 2009). The media is used as a means of educating the public about HIV but if conflicting messages from traditional healers are also broadcast, this could be misleading with negative implications on HIV control. It is the responsibility of Ministries of Public Health and Telecommunication to properly educate and train the media on HIV/AIDS issues and the principles of responsible broadcasting without undermining the laws governing freedom of expression. Traditional healers should also be educated on HIV/AIDS and integrated into HIV control since their practice is a significant part of their livelihood.

Gender positions

Our study demonstrated that socially constructed gender positions and practices were present in our setting. Some women lacked autonomy in the decision to test, influenced partly by their financial dependency and most importantly because men were the decision-makers, especially regarding health and

sexual matters. These women desired to know their status but were apprehensive of reprisals from their partners if they were positive and, as has been documented in other studies, women are accountable for any wrongdoing in the family (Maman, Mbwapo, Hogan, Kilonzo, & Sweat, 2001; Van Dyk & Van Dyk, 2003; Grant *et al.*, 2008). However, these women were expected to be supportive and protective of their HIV-positive partners and even coerced into having unprotected sex because requesting condom use in marriage was regarded as a taboo or implied a woman's unfaithfulness. Our findings are consistent with research by Taegtmeier, Kilonzo, Mung'ala, Morgan, & Theobald (2006) and Feldman & Maposhere, (2003).

In contrast, most men in our study demonstrated autonomy in testing (see also Maman *et al.*, 2001; Daftary *et al.*, 2007). Testing for HIV to some men was to prove their masculinity and portray themselves as positive role models to other men, a finding which has not been documented before as a motivator for testing. On the contrary, some refused testing even after persuasion from their partners because of a lack of self-perceived risk and being in apparent good health. They only sought treatment when they became very ill and expressed regrets later. This behaviour has been documented whereby men generally tend to dismiss their health needs and take risks to legitimise themselves as the 'stronger' sex (Courtenay, 2000).

Encouraging women to negotiate their health and sexual matters and promoting shared responsibility in relationships would be mutually beneficial. However, men should be made to recognise that this is not an act of subversion but rather a means of fostering a healthy and successful relationship. Nonetheless, it is necessary to also address other factors that are inextricably linked to gender, such as women's educational level, income/poverty which contribute to maintaining these positions in society. Moreover, engaging men and community leaders in addressing the harmful gender norms that undermine HIV control and teaching men to take up their societal responsibilities and to portray themselves as role models will improve health-seeking behaviours.

Effect of stigma

The fear of stigma from the society was influential in the decision to test among some participants. From this study, two types of stigma were evident – felt and enacted. 'Felt' stigma refers to the fear of discrimination whereas 'enacted' stigma refers to actual discrimination (Scambler, 1998). Most of the participants perceived they would be stigmatised if their HIV status was known to friends and society and therefore preferred to remain ignorant. Because HIV is associated with decadence and emaciation, HIV-positive individuals actually experienced discrimination. This pushed some participants to withdraw into privacy until they regained their body image, consistent with findings by Bond and Nyblade (2006) and Grant *et al.* (2008).

To properly address stigma and discrimination it is necessary for society to be provided with correct information about HIV and the socio-cultural factors promoting stigma need to be confronted with the active participation of all stakeholders. The community must be made to realise that stigma is a problem that involves everyone and a lasting solution is dependent on the participation

of all. Health care providers should empower patients to make informed decisions regarding their health and social support networks created whereby positive patients can share their problems and seek solutions together.

Role of the provider

In this study health care providers were appreciated for their humanitarian gestures which influenced testing. A similar finding has been demonstrated by Maman *et al.* (2001), where counsellors' actions were considered influential in the decision to test. Nonetheless, some participants felt they were coerced into testing rather than them making voluntary and informed choices; this was consistent with findings by Daftary *et al.* (2007) and Corneli *et al.* (2008). Health care professionals were considered more knowledgeable about the participants' illness and a refusal would have been regarded as disrespectful.

TB diagnosis was devastating to some respondent and introducing HIV testing shortly after that was overwhelming and brought apprehension about the outcome of testing. Studies have demonstrated that fear of testing and unfavourable outcomes (Day *et al.*, 2003; Mahendradhata *et al.*, 2008), inappropriate timing in requesting for testing and preference to deal with the illnesses in succession (Daftary *et al.*, 2007) acted as barriers to testing among TB patients. Furthermore, some participants were afraid their results would be disclosed to third parties but due to the hierarchical nature of the health care system, they were unable to report their grievances for fear of retribution. The fear of breach in confidentiality as a barrier to testing HIV has been a concern in HIV control programmes, an issue which has been attributed to the fact that HIV/AIDS has been treated as an 'exceptional' disease, different from other sexually transmitted or lethal infectious diseases (De Cock, Mbori-Ngacha, & Marum, 2002). However, upholding confidentiality by providers should not be confused with concealing vital information from those who are likely to be adversely affected by such measures. Disclosure of a patient's HIV status to a partner for preventive or protective reasons is a dilemma to health care providers because it could be regarded as a breach of that individual's confidentiality and a violation of human rights. However, refusing to inform that individual's partner who later becomes infected also constitutes a violation of that person's own human rights. Therefore, upholding an absolutely human rights approach to HIV/AIDS control where an individual's rights are protected at all costs despite adverse effects on the public's health (Gruskin & Loff, 2002) hinders HIV/AIDS control. Public health prevention and social justice should therefore take precedence over protecting individual human rights in such circumstances. However, existing policies/laws and support services that promote/protect the rights of HIV-positive persons should be adequately enforced in genuine cases of breach of confidentiality and in those whom disclosure might result in adverse consequences. It has also been recognised that the quality of counselling plays an important role in the uptake of HIV testing services, a factor which has been found inadequate in Africa (De Paoli, Manongi, & Klepp, 2002; Chopra, Doherty, Jackson & Ashworth, 2005). It is therefore important that counsellors are properly trained and regularly supervised as they perform their daily activities in order to improve uptake of HIV services.

Study limitations

Some limitations exist in our study. The sample was hospital based and purposively selected and therefore the patients' perceptions do not reflect those of the entire TB population. Moreover, our sample size was small, non-homogenous and the number of participants divided across each study site limited generalisability of our findings to the entire region. The decision-making regarding testing among participants who declined the interviews might have been different from participants in the study, whose perspectives we might not have captured. Besides, participation in the interviews might not have been entirely voluntary but influenced by the power dynamics between health care provider and patient. This might have led to 'courtesy bias' (León, Lundgren, Huapaya, Sinai & Jennings, 2007) whereby the participants might have unintentionally responded favourably to please the interviewer. The participants were encouraged to respond freely to the questions without any fear of reprisals from the authorities in an attempt to reduce this bias. However, being a preliminary study to gather information about the counselling and testing processes in order to improve uptake of HIV care packages among TB patients in the region, we believe our study participants' perceptions were informative and will be used for hypothesis generation in designing future studies and by policy makers.

Conclusion

Our study highlighted many important factors that influenced testing for HIV among TB patients in the region which could be relevant to other regions similar to our setting. While advocating for increase uptake of HIV testing and care services, it is important that health care providers take into consideration the complex choices TB patients are faced with during the decision-making process to test for HIV during counselling. This will not only ensure the scale-up of HIV diagnosis and treatment in those eligible ART but it will also mitigate the transmission of TB and HIV through responsible behavioural change and early health-seeking from information gained during the counselling process. This in the long run will ensure sustainability in the control of TB and HIV co-infection in the population, which is the goal of TB/HIV collaborative activities.

Acknowledgements

The authors express their sincere appreciation to the authorities of the study hospitals for granting permission to perform the study. Many thanks go to the hospital TB coordinators and nurses; Kongnyu Emmanuel, Ndichia Amos, Keeng Belter, Chebe Lilian, Lum Queenta, Agwetang Rose for their assistance in contacting the participants and also to the participants in the study hospitals whose responses form the basis of this paper. Support for the study was obtained from the Västerbotten County Council Scholarship, Umeå Centre for Global Health Research and Swedish Council for Working Life and Social Research, FAS (grant no. 2006-1512). However, the findings and conclusions of the paper are solely the responsibility of the authors. The authors declare no conflicts of interest whatsoever.

References

Bond, V., & Nyblade, L. (2006). The Importance of addressing the unfolding TB-HIV stigma in high HIV prevalence settings. *Journal of Community & Applied Social Psychology*, 16, 452-461.

Chopra, M., Doherty, T., Jackson, D., & Ashworth, A. (2005). Preventing HIV transmission to children: Quality of counselling of mothers in South Africa. *Acta Paediatrica*, 94: 357-363.

Comité National de Lutte contre le SIDA (CNLS, 2008). Rapport Annuel 2008 et Plan D'Action 2009 des Activités du Programme National de Lutte contre le SIDA, Cameroon (in French). Edition 2009.

Corneli, A., Jarrett, N.M., Sabue, M., Duvall, S., Bahati, E., Behets, F., et al. (2008). Patient and provider perspective on implementation models of HIV counselling and testing for patients with TB. *International Journal of Tuberculosis and Lung Disease*, 12(3), S79-S84.

Courtenay, W.H. (2000). Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Social Science & Medicine*, 50: 1385-1401.

Daftary, A., Padayatchi, N., & Padilla, M. (2007). HIV testing and disclosure: a qualitative analysis of TB patients in South Africa. *AIDS Care*, 19(4), 572-577.

Dahlgren, L., Emmelin, M., & Winkvist, A. (2004). Qualitative methodology for international public health. *Print and Media*, Umea University.

Day, J.H., Miyamura, K., Grant, A.D., Leeuw, A., Munsamy, J., & Baggaley, R., et al. (2003).

Attitudes to HIV voluntary counselling and testing among mineworkers in South Africa: will availability of antiretroviral therapy encourage testing? *AIDS CARE*, 15(5), 665-672.

De Cock, K.M., Mbori-Ngacha, D., & Marum, M. (2002). Shadow on the continent: public health and HIV/AIDS in Africa in the 21st century. *The Lancet*, 360, 67-72.

De Paoli, M.M., Manongi, R., & Klepp, K-I. (2002). Counsellors' perspectives on antenatal HIV testing and infant feeding dilemmas facing women with HIV in Northern Tanzania. *Reproductive Health Matters*, 10(20), 144-156.

Feldman, R., & Maposhere, C. (2003). Safer sex and reproductive choice: Findings from "Positive Women: Voices and Choices" in Zimbabwe. *Reproductive Health Matters*, 11(22), 162-173.

Grant, E., Logie, D., Masura, M., Gorman, D., & Murray, S.A. (2008). Factors facilitating and challenging access and adherence to antiretroviral therapy in a township in the Zambian Copperbelt: a qualitative study. *AIDS CARE*, 20(10), 1155-1160.

Gruskin, S., & Loff, B. (2002). Do human rights have a role in public health work? *The Lancet*, 360, 1880.

Institut National de la Statistique (INS), (2004). 3ième Enquête Démographique et de Santé au Cameroun (EDSCIII), 2004.

Kvale, S. (1996). *Interviews. An introduction to qualitative research interviewing*. Sage Publications.

León, F.R., Lundgren, R., Huapaya, A., Sinai, I., & Jennings, V. (2007). Challenging the courtesy bias interpretation of favourable clients' perception of family planning delivery. *Evaluation Review*, 31(1) 24-42.

Mahendradhata, Y., Ahmad, R.A., Lefèvre, P., Boelaert, M., & Van der Stuyft, P. (2008). Barriers to introducing HIV testing among tuberculosis patients in Jogjakarta, Indonesia: a qualitative study. *BMC Public Health*, 8, 385.

Maman, S., Mbwambo, J., Hogan, N.M., Kilonzo, G.P., & Sweat, M. (2001). Women's barriers to HIV-1 testing and disclosure: challenges for HIV-1 voluntary counselling and testing. *AIDS CARE*, 13(5), 595-603.

National AIDS Control Committee, NACC (2007). *Towards universal access to treatment and care for adults and children living with HIV/AIDS in Cameroon*. Progress Report No. 7.

Scambler, G. (1998). Stigma and disease: changing paradigms. *The Lancet*, 352(9133), 1054-1055.

Taegtmeier, M., Kilonzo, Mung'ala, L., Morgan, G., & Theobald, S. (2006). Using gender analysis to build voluntary counselling and testing responses in Kenya. *Transactions of the Royal Society of Medicine and Hygiene*, 100, 305-311.

UNAIDS/WHO, (2004). *UNAIDS/WHO Policy Statement on HIV Testing*. Retrieved from http://www.who.int/rpc/research_ethics/hivtestingpolicy_en.pdf

Van Dyk, A.C., & Van Dyk, P.J. (2003). "What is the point knowing?": Psychological barriers to HIV/AIDS voluntary counselling and testing programmes in South Africa. *South Africa Journal of Psychology*, 33(2), 118-125.

Varma, J.K., Nateniyom, S., Akksilp, S., Mankatittham, W., Sirinak, C., Sattayawuthipong, W., et al. (2009). HIV care and treatment factors associated with improved survival during TB treatment in Thailand: an observational study. *BMC Infectious disease*, 9:42 doi:10.1186/1471-2334-9-42.

Velasco, M., Castilla, V., Sanz, J., Gaspar, G., Condes, E., Barros, C., et al. (2009). Effect of simultaneous use of highly active antiretroviral therapy on survival of HIV patients with tuberculosis. *Journal of Acquired Immunodeficiency Syndrome*, 50(2): 148-152.

WHO. (2004). *Interim policy on collaborative TB/HIV activities*. Retrieved from http://libdoc.who.int/hq/2004/WHO_HTM_TB_2004.330.pdf

WHO/UNAIDS (2007). *Guidance on Provider-initiated HIV testing and counselling in Health facilities*. Retrieved from http://www.who.int/hiv/pub/guidelines/9789241595568_en.pdf

WHO (2009a). *Global Tuberculosis Control. Epidemiology, Strategy, Financing*. http://www.who.int/tb/publications/global_report/2009/pdf/full_report.pdf

WHO (2009b). *World Health Statistics 2009*. Retrieved from http://www.who.int/whosis/whostat/EN_WHS09_Full.pdf