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# Readiness of youth in rural Ethiopia to seek health services for sexually transmitted infections

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**Studies pertaining to sexually transmitted infections (STIs) among rural young adults in Ethiopia are limited. This study provides information on knowledge about common STIs, and the perceptions, preferences and use of health services for STIs, among youths and healthcare providers in predominately rural Butajira, a town in south-central Ethiopia. We performed mixed-method research, using a cross-sectional survey among 3 743 randomly selected youths aged 15–24 years, in 2004, and in-depth interviews with ten healthcare providers, in 2006. Less than 38% of the youths knew the common STIs. Among the sexually active youths (*n* = 802), 3.9% reported having at least one STI symptom in the past 12 months, and one-half of those who had had an STI symptom did not seek care from any source. The healthcare providers reported that the stigma associated with premarital sexual activity, the shamefulness of having an STI, and a perceived lack of confidentiality and uneasiness with the public health services were impediments to treatment-seeking in the study area. The youths in this study preferred to consult with healthcare providers of the same gender who were young, friendly and had a reputation for being empathetic. Embarrassment about having an STI and fear of being noticed by a familiar individual were perceived barriers to healthcare-seeking among the youths. The results suggest that young people are vulnerable to HIV exposure due to lack of knowledge about STIs and especially as a result of having an untreated STI. Health services that are uncoordinated and unable to handle youths' sexual and reproductive health problems, as well as judgemental health professionals and prevailing sexual taboos, were also reported as impediments to youths seeking healthcare. Reorientation of the public health services and healthcare providers could improve youths' healthcare-seeking for STIs.**

**Keywords:** Africa, health behaviour, health beliefs, health education, health personnel, HIV/AIDS, interviews, research methodology, youth

## Background

Worldwide, the highest reported rates of sexually transmitted infections (STIs) are found among people younger than age 25 years (World Health Organization [WHO], 2006). Globally, up to 45% of new HIV infections and one-half of all people living with HIV are in this age group (UNAIDS, 2008). The prevalence of STIs among young adults is a proxy incidence indicator of a long duration of STIs in the general population because of the short period of their sexual activity (WHO, 2002).

STIs have achieved greater significance in relation to the health of young people than in the past because they facilitate HIV infection (Kefene, Desta, Mengesha, Zewde & Kebede, 1991; Aseffa, Ishak, Stevens, Fergussen, Giles, Yohannes & Kidan, 1998). In developing countries, many people have STIs and relatively more females and underprivileged people suffer the health, social and economic consequences of these (WHO, 2002). The true magnitude of STIs in developing countries is not known; data on the prevalence and incidence of STIs and their complications are limited, and STIs are often underreported. Epidemiologic surveys also underreport STIs because of failure to identify asymptomatic cases or because infected individuals do not disclose symptoms due to the social stigma associated with having an STI. Thus, the need for combining epidemiological and microbiological studies is high, albeit difficult, in obtaining more accurate information about STIs (WHO, 2002).

In Ethiopia, studies conducted among clients at antenatal clinics in Addis Ababa reported 27–43% prevalence of STIs (Duncan, Tibaus, Pelzer, Mehari, Perine, Peutherer & Young, 1995a; Duncan, Tibaus, Pelzer, Mehari, Peutherer, Young *et al*., 1995b). Studies conducted among high school and university students in north-western Ethiopia reported 8–12% prevalence of STIs (Ismail & Bitsueamlak, 1997; Fitaw & Worku, 2002). Community-based studies have reported a lower prevalence of STIs, however. A study in Adametulu

District reported 2.6% prevalence of STI symptoms among young people aged 12–24 years (Tesfaye, Kassaye & Kebede, 2000). Another study conducted in Addis Ababa showed 4.8% prevalence for *Chlamydia* and gonorrhoea combined, and 2.7% for each agent alone, among sexually active youths (Taffa, Bjune, Sundby, Gaustad & Alestrøm, 2002). Passive sentinel surveillance among primary healthcare sites showed that STIs are common reasons for consultations at public healthcare sites in the country (Matteelli, Kassa, Gerbase, Farina, Ghidinelli, Chatel *et al*., 2000). The link between STIs and HIV was shown in a study from Gondar, Ethiopia, where HIV infection was positively associated with females' young age (mean 24.6 years, ±6.6) and having an ulcerative STI (Aseffa *et al*., 1998).

People who have STIs are often ashamed to utilise healthcare services for evaluation and treatment. Health workers are said to be judgemental and may even mistreat people with symptoms of STIs (Mugrditchian, 1995; Berhane, Berhane & Fantahun, 2005). Healthcare-seeking for an STI is often determined by awareness and recognition of the signs and symptoms, the perceived potential complications of the health problem, access to health services, the perceived efficacy of treatment, and social norms that either support or discourage utilisation of the health service (Mugrditchian, 1995).

There is little information on health-seeking behaviour for STIs, the perceptions about health services for treating STIs, and the barriers to health-service utilisation among rural youths in Ethiopia, where culture may play a major role. This study aimed to assess youths' use, perceptions of, and preferences for healthcare services with respect to STI symptoms, and thus the perceived barriers to health-service use, from both a client's and provider's perspective, in Butajira, a predominately rural town in south-central Ethiopia.

## Methods

### *Study design*

We used a mixed-method approach by combining a cross-sectional survey among a relatively large sample of young adults with qualitative interviews among a small selection of healthcare providers in predominantly rural Butajira. The survey was conducted among youths aged 15–24 years, between July and September 2004. Complementary qualitative interviews were conducted among ten health professionals, between January and June 2006, after a preliminary analysis of the survey data. The interviews were conducted to increase our understanding of the survey results by exploring the healthcare professionals' views about the observed prevalence of STIs among young people, as well as youths' perceived barriers to health-service utilisation and their preferences for different types of health units. In addition, we wanted to capture the health professionals' own attitudes and perceptions about their role in addressing the sexual and reproductive health of adolescents and young adults.

### *Settings*

The study was conducted in the Meskan and Mareko District, within the jurisdiction of the Butajira Rural Health Programme (BRHP). This programme was launched in 1986 among nine rural villages and one urban village, which were randomly selected for continuous demographic surveillance. The surveillance system was updated by monthly registration of vital and migratory events. Each individual in the database was accessed using individual identifiers. The data were collected quarterly by trained interviewers living in the respective villages. The surveillance site of the BRHP has been described in detail by Berhane, Wall, Kebede, Emmelin, Enquselassie, Byass *et al.* (1999).

At the time of the study, the district had the following types of healthcare units: two hospitals, two health centres, 12 private clinics, one non-governmental organisation (NGO) clinic, ten health posts, two pharmacies, one rural drug-seller and one rural drug store; of these, one hospital, one health centre, four private clinics, and all of the pharmacies were in the administrative town of Butajira (Meskan Woreda, 2006).

### *Cross-sectional survey among young people in Butajira*

#### *Sampling*

The participants in the cross-sectional survey were adolescents and young adults, aged 15–24 years, living in villages in the area under surveillance. In 2004 there were 10 475 adolescents and young adults in that age group living in the study area. We randomly selected 4 399 individuals, in proportion to the size of the ten villages, using the BRHP database, where individuals were traced using their personal identifiers at the household level. The sampling was performed to obtain a representative number of sexually active individuals as part of a larger study on the sexual health of adolescents and young adults (see Molla, Åstrøm & Berhane, 2007).

#### *Data collection*

The survey used a pre-tested structured questionnaire written in Amharic (the official language of Ethiopia) to collect relevant data. Nine local youths (4 males and 5 females), who had completed their high school education, were specifically trained for four days and then collected the data in face-to-face interviews. We did a minimum of two revisits to individuals who were absent during the first visit.

#### *Variables and measurement*

The survey instrument was adopted from ones used in similar studies (e.g. Molla, Ismail, Kumie & Kebede, 2002; Berhane *et al*., 2005) and from questions prepared by the investigators.

Knowledge of STIs was measured among those who reported they had heard about STIs (including HIV), using three items: 1) knowledge of common STIs; 2) signs and symptoms of STIs; and 3) modes of prevention and transmission of STIs.

Knowledge about common STIs was measured by checking against each one listed on the questionnaire (i.e. gonorrhoea, syphilis, chancroid, genital warts, inguinal bubo [swelling] and HIV/AIDS), which used the Amharic term for each STI. Each correct response earned one point, and thus the sum score of knowledge about STIs was calculated.

Among those who reported to know an STI, youths' knowledge of the signs and symptoms of common STIs was measured by referring to nine symptoms of STIs listed on the questionnaire; the response categories consisted of 'yes' and 'no.' Each correct answer was given one point, resulting in a total possible score of 9.

Youths' knowledge of the modes of prevention and transmission of STIs were measured using two sets of questions, with 11 items concerning transmission and seven about prevention. Each question had three mutually exclusive response alternatives: 'yes,' 'no,' and 'I do not know.' Each correct answer earned one point. Knowledge about modes of prevention and transmission of STIs was estimated by adding the sum scores.

Prevalence of reported symptoms of STIs among the sexually active youths surveyed was measured at two levels, 'ever having STI symptoms' and 'having STI symptoms in the past 12 months.' Those who reported ever having had an STI symptom were asked if they had had a symptom in the past 12 months.

Attitudes towards healthcare services were measured using six Likert-scale-type statements about the possible perceptions of adolescents and young adults regarding health services in Butajira. Two statements about perceptions towards health professionals were stated as: 'Health professionals have good reception for young adults' and 'Health professionals keep the health-related secrets of young adults.' Two statements about the available health services were stated as: 'The timing of health services is convenient' and 'Existing health services are suitable for confidential use by young people with STIs.' Two statements about barriers to the utilisation of health services were: 'Youth of your age are shy to seek health services for STIs' and 'Youth refrain from using services for fear of being noticed by a familiar individual.' The response categories were ranked from 1 for 'extremely agree' to 5 for 'extremely disagree.' The scores were reversed for the positive items. The sum score of the four statements about health services and health professionals were computed to determine the youths' attitudes about the health services in Butajira. The sum score of the two statements about barriers were computed to measure youths' barriers to using the health services for STIs. The scores for the responses about barriers were not reversed, therefore a higher mean on the scale indicates less of a barrier. The results are presented using the mean, standard deviation (SD) and range.

Finally, youths' health-seeking behaviour and preferences for health services were measured using a 15-item questionnaire with multiple-choice questions.

### *Qualitative research interviews with health professionals in Butajira*

To capture the range and variation of healthcare professionals' opinions about the sexual and reproductive health problems of adolescents and young adults, we purposively approached all the health units in Butajira. These facilities catered to both rural and urban youths. We conducted ten in-depth interviews: four with healthcare professionals at public health units and six at private facilities (Table 1).

Participants from the public health units were selected in consultation with directors at the health institutions with an aim to including both men and women with professional experience with sexual and reproductive health issues. The public health units were represented by one female nurse and one male general practitioner from the hospital, and two nurses (one male and one female) from the public health centre. The private clinics and the pharmacies did not have any women healthcare providers and thus we interviewed only men: three male nurses/health assistants and three male pharmacy professionals.

The interview guide focused on health professionals' knowledge about the concept of health-seeking behaviour for STIs among adolescents and young adults, and their perceptions about the sexual health needs of young people. However, the focus of the individual interviews varied, especially between the professionals at the public and private facilities, depending on their specific experiences. During the interviews, the health professionals were also asked to narrate cases of STIs among adolescents or young adults and describe how they had handled the situation. All interviews were conducted by the first author. The interviews were conducted in Amharic at the premises of the given health unit and lasted approximately 45 minutes. All interviews were tape-recorded and then transcribed verbatim. They were later translated into English to facilitate joint analysis by the research team.

### *Analysis of the quantitative data*

The quantitative data were stored and cleaned using Epi-Info Version 6 and analysed using SPSS Version 13. Descriptive statistics were used to represent socio-demographic factors, the youths' knowledge about STIs and modes of transmission, and their perceptions and preferences regarding health services and healthcare providers. Mean scores were calculated for normal distributions and median scores for distributions that were skewed. (The results for youths' knowledge of modes of STI transmission are presented using median and range, as the distribution was skewed.)

### *Analysis of the qualitative data*

The qualitative data from the interviews with health professionals were analysed using content analysis (Graneheim & Lundman, 2003). We started the analysis by importing the transcribed text into the OpenCode programme to facilitate the coding process (Umeå University, 1997). Units of relevant meaning were examined line-by-line and coded by the first author. The coding results were discussed by the research team and discrepancies in the interpretations were negotiated. As part of the analysis we developed seven categories that illustrated the manifest meaning of the findings, while the single theme represents our overall joint interpretation of the qualitative and quantitative information and reflects the latent meaning of the data (Table 2).

### *Ethical clearance*

The study obtained ethical approval from the Regional Committee for Medical Research Ethics in Norway and from the Ethiopian National Ethical Review Committee of the

**Table 1:** Socio-demographic profile of the healthcare professionals interviewed in Butajira, 2006

| Respondent | Respondent's health facility | Respondent's health profession | Sex | Age |
|---|---|---|---|---|
| 1 | Public hospital | General practitioner | Male | 32 |
| 2 | Public hospital | Midwife nurse | Female | 34 |
| 3 | Public healthcare centre | Nurse | Male | 28 |
| 4 | Public healthcare centre | Nurse | Female | 35 |
| 5 | Private clinic | Nurse | Male | 29 |
| 6 | Private clinic | Nurse | Male | 45 |
| 7 | Private clinic | Healthcare assistant | Male | 58 |
| 8 | Private pharmacy | Pharmacist | Male | 47 |
| 9 | Private, rural drug-seller | Druggist | Male | 30 |
| 10 | Private pharmacy | Pharmacy technician | Male | 50 |

Science and Technology Agency in Addis Ababa. Informed consent was obtained from respondents who were age 18 years or older. For those who were younger than age 18, parental consent was obtained. Privacy and confidentiality of the interviews and information gathered was assured for all participants. The names of the informants were not included in the questionnaire.

## Results

In this article, the results of the survey are complemented with the interpretations of the interviews under the numbered headings of the seven categories representing the meaning of the findings (see Table 2). The findings pertaining to the health professionals' perceptions about the sexual and reproductive health services for adolescents and young adults in Butajira were based only on the interviews (qualitative data) and are thus presented separately. In addition, quotes are included to illustrate how the interpretation is grounded in the interview data. The overall theme is elaborated in the discussion section.

### *Socio-demographic characteristics of the youths*

There was an 86% response rate, resulting in 3 743 youths participating in the study. The non-response rate was related either to absentees (427; 9.7%), emigration from the study site (143; 3.3%), or refusal to participate (50; 1.1%). A small number of youths (36; 0.81%) were untraceable due to incorrect names, ages or gender data due to errors in the BRHP database.

There were more female respondents (55%) than males. Seventy-six percent (2 835) of the participants were in the age group 15–19 years old, with a mean age of 17.5 years (SD ±2.7 years). The majority (81%) had never been married; 73.2% were Muslims; 73% were rural residents; and 47% had completed a primary education. About three-quarters of the participants (76%) earned their living from farming and about half (53%) lived with both parents.

### *Youths' knowledge about STIs*

Most of the young people (97%) had heard about STIs, including HIV. However, less than 38% were able to name a common STI: gonorrhoea (37.5%), syphilis (36.5%), and chancroid (18.4%). Our measure also showed that their knowledge about the signs and symptoms of STIs was limited to the signs and symptoms related to HIV and AIDS (see Table 3). On a scale of 0 to 18, the respondents displayed above-average knowledge of modes of transmission and prevention of STIs, with a median score of 16. However, more than 30% of the respondents had misconceptions about the topic; for example, the following misconceptions were mentioned as modes of transmission: sharing clothes (40%), sitting on a hot stone (35%), urinating on a hot stone (32%), and urinating facing the moon (33%) (Table 3).

### *Reported symptoms of STIs*

Among the sexually active youths ($n$ = 802), only 31 (3.9%) reported they had had at least one symptom of a STI in the past 12 months. Of these respondents, 52% reported a burning sensation during urination, 38% reported discharge from the genitalia, 29% had itching around the genitalia, 13% had genital ulcers, 13% reported inguinal swelling, and 6% reported genital warts, with some of the 31 reporting multiple symptoms. Most of those who reported having an STI symptom were females (74%), rural youths (54%), or married 90% (73% females; 27% males). More males (37%) reported genital ulcers than did females (5%).

*1 – Feeling a problem is too shameful to be reported (see Table 2: categories)*

Young informants from the hospital and private pharmacy suggested that at least one STI case was reported every other day among adolescent or young adult patients/clients. In lower-level public health facilities, relatively few STI cases were reported and those attending for consultation were said to prefer the duty hours of younger health professionals. The reason for low attendance was explained as the result of the STI problem being hidden or shameful:

> *'Few cases are coming to lower-level facilities, but this does not imply that the magnitude has decreased or there are no cases. When I treat one STI case in the health centre, I often think of the ten hidden cases that are either treated by village injection providers, are self-treated or untreated'* (Respondent 3) (see Table 1).

A few of the private health-services providers (Respondents 6, 5 and 10) mentioned that youths often seek care from informal providers who treat STIs with a single dose of an antibiotic (such as rifampicin); one said:

**Table 2:** The theme, categories and codes as identified from the qualitative and quantitative data

| Theme: 'Care-seeking is hampered by sexual taboos, shame and limited uncoordinated services' | | | | | | | |
|---|---|---|---|---|---|---|---|
| Categories: | 1–Feeling a problem is too shameful to be reported | 2–A fear of being dishonoured | 3–A reflection of the subordination of women | 4–A search for acceptance | 5–Limited scope of facilities/services | 6–Recognition of limited access to services | 7–Balancing openness and harm-reduction |
| Codes: | • Fear of being seen by a familiar individual<br>• Taboo health problem<br>• Untreated cases<br>• Preference for young professionals<br>• Illegal treatment providers | • Infidelity<br>• Extramarital affairs<br>• STI in marriage<br>• Shame<br>• Avoidance of being noticed | • Special arrangements for females<br>• Delay in seeking treatment<br>• Pressing needs for treatment<br>• Taboo health problem<br>• Secret use of health services | • Preference for safe healthcare services<br>• Friendly care preferred<br>• Compassionate professionals preferred<br>• Young professionals preferred | • Uncoordinated services<br>• Respondent's lack of knowledge<br>• Misconceptions about reproductive health services | • Unpreparedness of health services<br>• Skills gap<br>• Information gap<br>• Unorganised services<br>• Absence or shortage of counsellors for youths<br>• Unintegrated health services | • Lack of openness about STIs<br>• Judgemental health professionals<br>• Tracing partners<br>• Saving relationships<br>• Wining patient compliance<br>• Blaming the patient<br>• Missed opportunities for treatment. |

**Table 3:** Knowledge of STIs among youths, aged 15–24 years, in the Meskan and Mareko District of Butajira, Ethiopia, 2004 (*n* = 3 743)

| Variable | *n* | % |
|---|---|---|
| Respondents' awareness of STIs (*n* = 3 743): | | |
| 'Yes' | 3 650 | 97.5 |
| 'No' | 93 | 2.5 |
| Specific STIs known by the respondents: | | |
| HIV/AIDS | 3 610 | 98.9 |
| Gonorrhoea | 1 370 | 37.5 |
| Syphilis | 1 331 | 36.5 |
| Chancroid | 672 | 18.4 |
| Genital buboes | 261 | 7.2 |
| Genital warts | 274 | 7.5 |
| Signs and symptoms of STIs (including HIV) known by the respondents: | | |
| Diarrhoea | 1 980 | 52.9 |
| Body ulcers | 1 430 | 38.2 |
| Genital ulcers | 901 | 24.7 |
| Swelling around the genitalia | 560 | 15.3 |
| Discharge from the genitalia | 721 | 19.8 |
| Burning during urination | 1 023 | 27.3 |
| Itching around/on the genitalia | 691 | 18.5 |
| Genital warts | 347 | 9.3 |
| Mode of transmission of STIs (including HIV) correctly cited: | | |
| Sexual intercourse | 3 525 | 96.6 |
| Unsafe blood transfusion | 3 487 | 95.5 |
| Mother-to-child | 1 880 | 51.5 |
| Misconceptions about STI transmission: | | |
| Sharing clothes | 1 455 | 40 |
| Sitting on a hot stone | 1 264 | 34.8 |
| Urinating on a hot stone | 1 158 | 31.7 |
| Urinating facing the moon | 1 189 | 32.6 |

NB: Multiple responses were possible

> *'There are informal health providers in town…who treat only STIs, but no one talks about them…only the victims know them. They treat [STI cases] with a single dose of potent antibiotics, although they aren't legally entitled to administer such medication.'*

Some of the private healthcare providers claimed that the number of STI cases was decreasing due to increased use of condoms as a result of increased awareness about the risk of HIV infection. However, contrary to this, some mentioned unwanted pregnancy as a major concern among sexually active youth. For instance, a pharmacy technician said:

> *'The youth are not always ready to use condoms as needed. When they have an opportunity to have sex they just do it without any protection…thinking pregnancy will not occur. They think they can start using contraceptives the following day.'* (Respondent 10)

### *Health-services use*

According to the survey, 15 of the 31 sexually active respondents who also reported having had an STI symptom in the last 12 months had not sought treatment (Table 4). Nine of 13 rural females (69%) and four of ten urban females (40%) said they did not seek any care; of eight males, only one rural and one urban male said they had sought any help. Conversely, the other half (6 males and 10 females) had sought healthcare from some source as a result of an STI symptom. Of these, ten went to a public health institution, two used a private health unit (a pharmacy and a clinic), two self-treated, and two had visited traditional healers (Table 4). The main reason for seeking help from the reported providers was perceived effectiveness of the services. However, there was no significant association between seeking help and the respondent's gender ($\chi^2$ = 2.36, $p$ = 0.22), where more girls (13; 56.5%) than boys (2; 25%) had not sought care for an STI symptom.

**Table 4:** Healthcare-seeking for STIs among the sexually active youths surveyed who reported having at least one STI symptom during the past year, 2004 (*n* = 31)

| Variable | *n* | % |
|---|---|---|
| Did nothing | 15 | 48.3 |
| Self-treated | 2 | 6.5 |
| Used traditional medicine | 2 | 6.5 |
| Treated at a public health unit | 10 | 32.3 |
| Treated at a private health unit | 2 | 3.2 |

*2 – A fear of being dishonoured*

Interviews with health professionals indicated that young, married females tended to delay seeking care from any source, perhaps because of the late appearance of symptoms or a lack of knowledge about the symptoms of STIs; they also suggested that individuals are afraid

because STIs in marriage are associated with infidelity. Thus, young married females may hesitate to seek care or discuss their condition with their husbands, even if they believe he was the source of the infection. A male nurse related this story:

> *'On examination he had second-stage syphilis and said that he was actively engaged in sexual intercourse with his young wife. Then I advised him to bring his wife in. When his wife arrived, I asked her if she has the problem. She said* — Yes, I have. *Then I asked her why didn't she seek healthcare? She replied* — How can I seek healthcare for STIs while I am married and still living with my husband? It is a shame for me.' (Respondent 3)

***The youths' perceptions and attitudes about health services for STIs***

The youths surveyed perceived that the major health services providers for STIs in the area were public health facilities, namely hospitals (2 301 respondents; 63%) and health centres (1 236 respondents; 34%) (Table 5). Most of the youths perceived these services at public health facilities in Butajira as friendly (2 761; 76%) and accepted by youths (2 193; 60%), and about one-half (1 880; 52%) perceived the healthcare centres as the cheapest for STI treatment. But healthcare-seeking for an STI was reported to be embarrassing by 1 330 respondents (37%), and 1 799 (49%) feared being seen by a parent or another familiar individual when they sought healthcare (Table 5).

The youths' general attitude towards the available health services in Butajira was measured on a scale of 0 to 20. Overall, those surveyed had a favourable attitude towards the health services in the area, with a mean score of 14.4 (SD = 2.9). Measured on a scale of 0 to 10, their overall attitudes about the confidentiality and reception of health professionals and the convenience (timing and confidential use ) of the health services scored a mean of 7.6 (SD = 1.7) and 6.8 (SD = 1.8), respectively. Measured on a scale of 0 to 10, the youths perceived relatively few barriers to using the available health services, with a mean score of 6 (SD = 2.4) (a higher mean indicating less of a barrier).

*3 – A reflection of the subordination of women*

In interviews, the public healthcare professionals reflected on the possible barriers to youths seeking health services by claiming that they tended to seek help only once a health problem impaired their day-to-day activities. The health professionals associated this to the stigma of having sex before marriage and to the subordinate position of females. Females, for example, may have to make special arrangements to get medical care for an STI:

> *'Girls try to avoid going through the proper procedures at the public health facilities…. Youth who are courageous enough, pre-set appointments with young professionals and come for consultation after working hours.'* (Respondent 1)

***Youths' health-services preferences***

Youths in this study preferred services with friendly healthcare providers (2 840; 78%), existing public health units (1 746; 48%), ones near their residential area (2 834; 78%), and services provided free-of-charge (1 756; 48%) (Table 6). They also most preferred young, friendly providers of the same gender as themselves and with a reputation for being empathetic (Table 6).

*4 – A search for acceptance*

When the health professionals (both from public and private facilities) were asked about this, they indicated that youths in the area seemed to prefer private clinics to government facilities because they were likely to get a quick and friendly reception. They also believed that pharmacies were preferred by youths over clinics in order to avoid extra payment for a physician or laboratory fees; the private pharmacy professionals were likewise convinced that the youths mostly preferred young and friendly professionals:

> *'They have a belief that this pharmacy is helpful for youth…. They just drop in and consult me in any aspect of their sexual and reproductive life, and I help them.'* (Respondent 9)

***Health professionals' perceptions about youths' sexual and reproductive health***

*5 – A limited scope of facilities/services*

The health professionals largely associated sexual and reproductive health only with unwanted pregnancy, abortion, and contraceptive use; few of the professionals interviewed included STIs as a sexual and reproductive health problem. In this setting, treatment for STIs is not integrated with maternal and child healthcare services. For instance, a woman attending a health unit for the purpose of family planning or antenatal follow-up and who is also complaining about an STI or who has had symptoms, will typically be referred to an outpatient department.

*6 – Recognition of limited access to services*

Both higher-level and lower-level public healthcare providers mentioned that the public sectors were not ready to handle the sexual and reproductive health problems of adolescents and young adults, including treatment for STIs. In these settings, there were no professionals trained to specifically consult adolescents and young adults and thus there was no focal person for this group to approach. Lack of counselling services for sexual and reproductive health was mentioned as a major obstacle in the public health sector. The health professionals were also concerned that it is difficult for young people to pay service charges.

*7 – Balancing openness and harm-reduction*

During the interviews the professionals were asked about their actual experiences with consulting youths as part of their daily work. Many recounted stories that indicated that STIs and other sexual or reproductive health problems are seen as shameful, especially among rural youths; consequently, much probing by a healthcare professional is needed to uncover and treat the real problems:

> *'High school students are open and tell me about their STI status, but rural youth are shy and they*

**Table 5:** Youths' perceptions about the availability, accessibility, acceptability and quality of healthcare services for STIs in Butajira, 2004 (*n* = 3 650)

| Variable | *n* | % |
|---|---|---|
| Health-services provider perceived as the best available for STI treatment: | | |
| Hospital | 2 301 | 63.1 |
| Healthcare centre | 1 236 | 33.9 |
| Private clinic | 49 | 1.3 |
| Pharmacy | 22 | 0.6 |
| Other | 41 | 1.1 |
| Health-services provider perceived as the cheapest for STI treatment: | | |
| Health centre | 1 880 | 51.5 |
| Hospital | 1 626 | 44.5 |
| Private clinic | 62 | 1.7 |
| Pharmacy | 20 | 0.5 |
| Other source | 62 | 1.7 |
| Perceived accessibility of the available services: | | |
| Accessible | 1 841 | 50.6 |
| Not accessible | 1 741 | 47.7 |
| Don't know | 62 | 1.7 |
| Perceived convenience of the health units: | | |
| Convenient | 2 139 | 58.6 |
| Undecided | 820 | 22.5 |
| Not convenient | 691 | 18.9 |
| Perceived acceptability of the services: | | |
| Accepted by youth | 2 193 | 60.1 |
| Not accepted by youth | 601 | 24.7 |
| Don't know | 556 | 15.2 |
| Perceived satisfaction for the services: | | |
| Satisfactory | 1 899 | 52.0 |
| Unsatisfactory | 985 | 27.0 |
| Don't know | 766 | 21.0 |
| Perceived friendliness of the health units/professionals: | | |
| Friendly | 2 761 | 75.6 |
| Undecided | 442 | 12.1 |
| Unfriendly | 447 | 3.1 |
| Perceived confidentiality of the health services/providers: | | |
| Confidential | 1 733 | 47.5 |
| Not confidential | 1 171 | 32.1 |
| Undecided | 746 | 20.4 |
| Perceived embarrassment to seek care for an STI: | | |
| It is embarrassing | 1 330 | 36.5 |
| Undecided | 471 | 12.9 |
| It is not embarrassing | 1 849 | 50.6 |
| Perceived fear of being seen by a parent or familiar individual: | | |
| Scared of being seen | 1 799 | 49.3 |
| Undecided | 452 | 12.4 |
| Not scared of being seen | 1 399 | 38.3 |

*go around the problem before they tell the true complaint.'* (Respondent 1)

The health professionals were also aware that youths may be reluctant to talk because they question the confidentiality of the professionals. From the professionals' stories it also became clear that youths are sometimes not getting correct information about their problems. This could be due to a health professional trying to be considerate and wanting to help preserve a marriage, for instance:

*'I do not want to destroy the marriage; I told the woman that the disease can also result from poor hygiene, not necessarily from sexual intercourse, and then I could treat them both.'* (Respondent 3)

Insufficient knowledge about adolescents' sexual and reproductive health could also result in neglect to advise a patient with an STI or a post-abortion client to test for HIV:

*'Because I was happy the person brought his partner, advising them to test for HIV didn't come to my mind.'* (Respondent 3)

The comment by one professional illustrates how blaming the patient may influence the likelihood of follow-up and treatment:

*'After repeated visits for STIs I asked her to bring her husband, but she said it is difficult for her since she got it outside the marriage. Then I said* — You should have thought of that before the event. To get

**Table 6:** The youths' preferences for healthcare services for STIs, Butajira, 2004 (*n* = 3 650 respondents aged 15–24)

| | *n* | % |
|---|---|---|
| Required qualities to improve the services: | | |
| Friendly | 2 840 | 77.8 |
| Confidential | 2 291 | 62.8 |
| Easily accessible | 1 782 | 48.8 |
| Near | 1 329 | 36.4 |
| Preferred health services outlet: | | |
| In existing public health units, as is | 1 746 | 47.8 |
| At school | 696 | 19.1 |
| In special health units for youths | 612 | 16.8 |
| In youth centres | 596 | 16.3 |
| Type of health professional preferred: | | |
| Young, of same gender as client | 1 383 | 37.9 |
| Young, of any gender | 455 | 12.5 |
| Mature adult of same gender as client | 661 | 18.1 |
| Mature adult of any gender | 583 | 16 |
| Indifferent | 568 | 15.6 |
| Preferred location of health services: | | |
| Near the client's residence | 2 834 | 77.6 |
| Far from the client's residence | 469 | 12.8 |
| Indifferent | 329 | 9 |
| Other location | 18 | 0.5 |
| Need for free or subsidised services: | | |
| Free services | 1 756 | 48.1 |
| Special discounts | 1 622 | 44.4 |
| Current prices, as is | 249 | 6.8 |
| Others | 23 | 0.6 |

a complete cure both you and your husband should be treated. *I promised to keep her secret from the husband, but she never came back.'* (Respondent 2)

## Discussion

The youths in Butajira had a low level of knowledge about the common STIs, other than HIV, and they infrequently reported their STI symptoms. The quantitative data complemented by the qualitative interviews showed that the youths' healthcare-seeking for STIs was most hampered by sexual taboos, feelings of shame, and limited uncoordinated services. Healthcare-seeking for an STI was often perceived as embarrassing.

The use of face-to-face interviews for collecting questionnaire-based data can be regarded as a limitation of the study. However, the use of same-sex, trained interviewers likely lessened this shortcoming. The numbers of youths who had said they had experienced an STI symptom and who had sought treatment for it were small; thus, the measure of the youths' perceptions about the friendliness and confidentiality of healthcare professionals and their satisfaction with the services in their area was dominated by responses from youths who had not actually used these services.

The use of in-depth interviews to complement the survey data can be considered strength of the study. We feel that using information acquired from a relatively large sample of youths in the area, as well from in-depth interviews with a small selection of health professionals, provides a comprehensive depiction of the research problem. There is a chance that the health personnel may have presented or narrated what they thought was right rather than what they practiced. However, we believe that our efforts to probe and ask for specific accounts of their experiences helped to minimise this risk.

The reported prevalence of STIs in the population of rural youths surveyed was similar to the 2.9% STI prevalence reported for a nearby urban area (Tesfaye *et al*., 2000). The 2005 Demographic and Health Survey (DHS) for Ethiopia found an even lower prevalence for reported STIs (1.4%) among young people aged 15 to 24 (Federal Republic of Ethiopia Central Statistics Agency, 2006). The DHS report suggested that this health problem is underestimated due to prevailing sensitivity about the subject. The qualitative data from our study suggest that relatively few STI cases are reported at health facilities in Butajira. However, another study conducted in the area showed that delaying sex until marriage was the norm, and that most females had their first sex in marriage (Molla, Berhane & Lindtjørn, 2008). This norm could be one factor contributing to the seemingly low prevalence of STIs in the population.

Alternatively, the small number of STI cases presented at public health facilities, as indicated by the healthcare professionals interviewed, could be a result of a strict cultural expectation for girls to stay celibate until marriage (Molla *et al*., 2008). A study conducted among high school students in the area suggested that girls under-report their sexual activity (Versnel, Berhane & Wendte, 2002). Another study conducted in an urban area of Ethiopia showed that STIs are culturally stigmatising diseases and thus not talked about openly (Gebre, 2000).

In our study, health professionals who had observed a decrease in STIs at their facilities put forward the idea that this was due to increased condom use. Condoms can prevent STIs, including HIV, and unwanted pregnancy if used properly and consistently (Warner, Stone, Macaluso, Buehler & Austin, 2006; Stephen, 2008). However, the healthcare providers also suggested that condom use among youths in the area was inconsistent. In line with this, a recent study in the same population has indicated infrequent use of condoms (Molla *et al*., 2007), and a study in Malawi found that condom use did not influence the prevalence of STIs in populations with reported inconsistent use of condoms (Taha, Canner, Chiphangwi, Dallabetta, Yang, Mtimavalye & Miotti, 1996).

More married youths reported STI symptoms than the unmarried. Since condom use in marriage is unusual among rural Ethiopian youths (Molla *et al*., 2007; Negash, Gebre, Benti & Bejiga, 2003), one could see this as a potential risk for HIV infection in marriages characterised by extramarital relationships. A study focused on women's health from the same area found that women often incriminated their husbands as a vehicle of HIV transmission (Berhane, Gossaye, Emmeline & Hogberg, 2001).

Most of those who had reported an STI were females who had complained of abnormal vaginal discharge, and these women may have also suffered from other gynaecological problems. Studies in Ethiopia have shown that women with STIs are typically diagnosed when they attend family planning services or antenatal clinics (Duncan *et al*., 1995a; Duncan *et al*., 1995b). The health professionals participating in this study claimed that women's subordinate position hampers women from seeking healthcare. This is supported by a study conducted in developing countries showing that among women in lower socio-economic settings, vaginal discharge may be perceived as a normal part of being a woman (Mugrditchian, 1995, Bulatao & Ross, 2002). For many women in developing countries the signs and symptoms of a reproductive-tract infection do not warrant seeking care until one is unable to perform day-to-day activities (Duncan *et al*., 1995a; Duncan *et al*., 1995b; Mugrditchian, 1995; Bulatao & Ross, 2002). The general knowledge gap about common STIs in the study population could explain the tendency to delay seeking treatment.

According to the health professionals in our study, youths are often unable to pay public-sector health-service fees and so prefer to use private facilities, especially pharmacies, where they can get medication without paying a registration or physician's fee. However, this is contradictory to the actual healthcare-seeking behaviour and perceptions of the youths in the survey, where most of the youths with an STI symptom had sought care from a public health unit, and they perceived the public health sector as the primary healthcare provider. This indicates the gap in information collected only by surveys and suggests the benefit of using mixed-method research.

A multi-country study of 49 developing countries ranked Ethiopia relatively low, at 24, in terms of its sexual and reproductive health services (Bulatao & Ross, 2002). The young respondents in this study regarded the institutional readiness and capacity for handling their sexual and reproductive health needs as limited. A study among in-school adolescents in Ethiopia showed that the available health services were not ready to handle adolescents' sexual and reproductive health problems (Berhane *et al*., 2005). The youth in our study also preferred public health units that were free or had low fees. A study in Cambodia found an increase in patient attendance at public health facilities after introducing a health equity fund that covered fees charged to the poor (Hardeman, Van Damme, Van Pelt, Por Kimvan & Meessen, 2004)

Nonetheless, the youths' positive perception towards the public health sector as a potential service provider suggests hope for the future use of these services, especially if the services are further developed for a more youth-friendly approach. The youths in this study preferred being attended to by young professionals. Likewise, the health professionals suggested a need to change attitudes towards consulting young clients — especially to be less judgmental and more open about STIs, and to not breach confidentiality or blame patients.

Despite the low proportion of youths in the survey who said they sought care from an informal or private health sector, the health professionals indicated that those sectors provide a large part of STI care. For instance, pharmacies in Butajira were said to treat STI cases without doctor prescriptions. Studies from Ghana and Uganda suggested that pharmacists treat a large portion of STI cases (Mayhew, Nzambi, Pepin & Adjei, 2001) and patients sometimes prefer private facilities for their convenient location, long hours, and confidential services (Walker, Muyinda, Foster, Kengeya-Kayondo & Whitworth, 2001).

Although the youths surveyed considered public health units as a potential healthcare provider for STI treatment, and cited these as the most-used health unit, the health professionals' comments indicate a need for interventions to improve this sector. More research is needed to assess the contribution of the private and informal healthcare sectors in providing treatment for STIs in rural areas of Ethiopia.

## Conclusions

The results of the survey, complemented by the information gathered through interviews, suggest that despite the low prevalence of reported STIs among young people in this area of rural Ethiopia, cases of often untreated STIs will increase the risk of HIV among this population. The unpreparedness of the available health services to handle the sexual and reproductive health problems of youths, and facilities that are staffed by inadequately trained and sometimes judgmental health professionals is an impediment to seeking healthcare for STIs among youths in the study area. Making health services more youth-friendly and training health providers accordingly can improve the treatment and control of STIs, which in turn will importantly augment local HIV-prevention efforts.

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