

Factors influencing women's use of health services for Sexually Transmitted Infections in eastern Nepal

KALPANA POUDEL-TANDUKAR, KRISHNA C POUDEL AND
COLIN MACDOUGALL

Kalpana Poudel-Tandukar is a postgraduate student in the Department of Public Health at Flinders University, Adelaide. At the time of the study she was District AIDS Liaison Officer with UNDP Nepal.

Krishna C Poudel is a postgraduate student in the Department of International Community Health at University of Tokyo. At the time of the study he was Senior District AIDS Liaison Officer with UNDP Nepal.

Colin MacDougall is a senior lecturer in the Department of Public Health at Flinders University, Adelaide.

Abstract

This paper explores low levels of women's health service utilization for Sexually Transmitted Infections (STIs) in Nepal. We interviewed 120 women individually and 53 in focus groups. Predictors of lower utilisation were self-medication, consultation with faith healers, inadequate knowledge of STIs, beliefs about causes, fear, social taboos and stigmatisation, women's secondary status, and presence of male health professionals. Results indicate the importance of people's beliefs in their decisions about health care. Strategies to improve access to health services in Nepal should systematically investigate the role of all these factors to improve access to and utilisation of health services for STIs.

Utilisation of services for sexually transmitted infections in Nepal

Nepal is one of the poorest countries in the world. The level of human development index (HDI) of Nepal was 0.480 in 1999, which is among the lowest in South Asia (UNDP 2001). The population of Nepal in 2000 was estimated to be 24 million (WHO 2001). Nepal has at least 75 ethnic groups and some 50 languages (Hannum 1997).

As in other developing countries, STIs are common in Nepal. STIs are among the top five diseases for which adults seek health care in developing countries where the HIV epidemic is in the progressive stage (WHO 2001). The prevalence rates of STIs are estimated to be high, but there is very little data in Nepal (Chin et al. 1994). It is estimated that about 200,000 (9.60 per 1000) STIs occur every year in Nepal (National Centre for AIDS and STD Control 1997).

The professional community believes that STIs are a serious problem in Nepal. Several studies have found that 10% (or more) of the general adult population in some parts of Nepal have histories of STI infection (Baker et al. 1993). A survey conducted in 1993 reported higher numbers of STI cases in the plain (terai) region (along the border of India in eastern Nepal) and in urban areas than in other parts of the country (Burathoki 1993). In addition, the survey reported high-risk behaviours and high prevalence of STIs in the plain region of eastern Nepal, which has a high population density with many industries and urban centres, and is closely linked to India, where prostitution is openly practised. Furthermore, 25 to 27% of young men from border towns reported multiple partners (Brown et al. 2000).

The infection rates of STIs have been increasing among the women of reproductive age in many developing countries (Siriwasin et al. 1998; Wilkinson et al. 1999). Women's STIs risk results primarily from their husband's sexual behaviour (Allen et al. 1991; Hunter 1993). Nepal has a male-dominant society where women have low status. Men have pre- and extra- marital sexual relationships with multiple partners, including sex workers (Shrestha et al. 1998). This is considered normal and rarely admitted at home. Furthermore, women have little knowledge of their husband's behaviour (Hannum 1997). It means women are likely to be infected from their partners and husbands who may be engaged in high-risk sexual encounters (Cox and Suvedi 1994).

Compared to women, men are more likely to seek treatment for their STIs in Nepal (Chin et al. 1994). One hospital-based retrospective study conducted in Kathmandu reported the ratio of males to females presenting with STIs as 12:1 (O'Dea 1993). More than 80% of reported patients were male out of total STIs cases registered in two hospitals of Nepal (John 1991). However, little is known about the health-seeking behaviour of women in Nepal. While the prevalence of STIs is high, the number of cases of STIs reported by women to government health institutions is very low; only 0.40 per 1000 and 0.15 per 1000 in the Sunsari district (Department of Health Service 2001).

This paper addresses the dilemma that, while there is an escalation of STIs in women in Nepal, little is known about what makes women decide to seek professional attention for a suspected STI. Services for women with STIs will be improved if we know more about why they do not use formal health services, and what services they do use.

Materials and Methods

Study setting and population

Sunsari is one of the plain districts (area of 1257 square km) of eastern Nepal bordered by India in the south. It is approximately 539 km from Kathmandu, the capital of Nepal. It consists of three municipalities and 49 Village Development Committees (VDCs). A VDC refers to a local government unit of Nepal consisting of 2000 to 5000 people.

Sunsari has 461,481 people (1991 census) with a female population of 229,264. Manual labour and agriculture are the most common forms of work in this district. There are several industries in Sunsari and a mixture of commerce and trade, offices and shops. It has a multi-ethnic and multi-lingual society. Muslim, Tharu and Jhangad are the predominant religious and ethnic groups.

Study design

This was an exploratory study using a structured questionnaire delivered by face-to-face interview and focus group discussions. The study was conducted from February to April 2000. To qualify for inclusion, the study participants had to be female, married, aged between 15 to 44 years and belonged to one of the religious/ethnic groups of Muslim, Tharu and Jhangad. Purposive sampling was used because of the difficulties of recruiting women in such sensitive issues as STIs. The participants were selected from six VDCs (two VDCs for each religious/ethnic groups). The two VDCs were selected according to the first and second highest number of population of each religious/ethnic group. One hundred and twenty married women (Muslim-40, Tharu-40 and Jhangad-40) were interviewed. The interviews involved a pre-tested structured questionnaire, conducted in Nepali language. The study team consisted of a principal investigator and three trained local female interviewers who conducted face-to-face interviews of 20 to 30 minutes. Questionnaires asked about: demographic characteristics, knowledge of STIs, history of signs and symptoms of STIs, mode of transmission, perception of reasons for STIs, home medication, sources of first consultation and treatment and treatment history of the partner.

Six focus groups, with 54 participants, each with 8-10 participants were conducted in six different VDCs. The participants, selected by the snowballing method, were divided into three age groups of 15-24 years, 25-34 years and 35-44 years. The focus group discussions aimed to collect in-depth information about health seeking practices. The principal investigator facilitated focus groups and trained local females made detailed notes, recorded the focus group conversations. The study team summarised all the information on the day of each focus group.

Data from the questionnaire were analysed by using the Epi-Info Version 6 statistical package to prepare descriptive statistics. For focus groups, common statements reflecting health seeking practices and beliefs were coded and compared with information from the questionnaires. The principal investigator translated the focus group information directly into English to minimize data loss, keeping the original phrases and key words used by the participants. An independent person checked the translation. The analysis involved open coding, grouping of findings from these codes and constant comparison of open codes and the categories within the various subgroups.

We obtained verbal consent from all participants before conducting the interviews and focus groups. The study objectives were described to the interview and focus group participants before the interviews and focus groups took place and they were assured of the anonymity of their response.

Results

Knowledge of STIs

Of the 120 women interviewed, 60.0% (72) agreed that sexual relations can cause STIs, 12.5% (15) disagreed, while 27.5% (33) did not know.

The focus group participants described both sexual and non-sexual modes of transmission, such as touching an infected person, polluted food, water and air, sitting and sleeping together and sharing of towels, cloths and bed linen. They also thought that witches and evil spirits could also transmit the disease to people through the air and by magic spells.

STIs among women

Of the 120 participants, 37.5% (45) had experienced signs and symptoms of STIs in the last five years.

All focus group participants expressed that STIs were common but invisible in their community, especially among women. They said women with STIs did not want to identify themselves because of shyness and fear of stigmatisation. As a result, STIs were not as visible as other health problems. One participant said that "Maybe the problem is serious in our community, but we do not know. Those who have a problem, they do not want to expose because of shyness and fear of stigmatisation."

Participants were worried about STIs among females because it was so common in their community. One member of the focus group, with signs and symptoms of STIs, said "... I have the problem of smelly discharge and ulcer in my genital organ. My family member doesn't care about my problem. What should I do for this problem?"

This shows that many people have little information and few people to whom to turn.

Reasons for STIs

Table 1 shows the participants' opinions about the cause of their STIs. Of the 45 participants, only 6.7% (3) believed that sexual relations caused STIs. The most common reason given for their STIs was eating of hot foods like red meat, chicken, fish, lentils, spicy and oily food. The next most common reason was "physical weakness" as a result of hard manual agricultural and industrial work.

Table 1: participants' opinion about the reasons of their STIs (N= 45)

Reasons	N	%
Eating hot foods	20	44.4
Physical weakness	11	24.4
Sexual relations	3	6.7
Poor personal hygiene	2	4.4
Eating/drinking in same plate/glass	2	4.4
Gods or evil spirits	1	2.2
Don't know	12	26.7

Focus group participants strongly highlighted hot foods, supernatural reasons and other beliefs behind having STIs. Representative comments made by the participants were:

"STIs are due to the eating of hot foods."

"We are not sure. It may be due to poor personal hygiene, eating of hot foods and weakness in the body."

"It is because of the spirits of dead person, witches and evil spirits."

"Those persons who urinate nearby the natural water sources, temple areas and on the sand suffer from the problem of STIs."

"If the person walks through the rice cooked water, then they have the problem of genital organs."

(During the rice cooking process, first they boil the rice in the pot and drain the rice water in open space around their house. They commonly believe that if they walk through that rice cooked water then they will suffer from STIs.)

The only participant who had participated in a non-formal education class said that "Sexual relations with an unknown person are the cause of STIs."

Home medication

Of the 45 participants who experienced the signs and symptoms of STIs, 60.0% (27) reported a history of home medication. Participants used seeds, roots and leaves of different plants and trees. They took these herbal remedies with sugar, milk and water. Table 2 shows how home medication practices varied between ethnic groups.

Table 2: home medication practices used by participants having STIs

Common practices for Muslim, Tharu and Jhangad participants
Applying and eating different types of jadibuti (herbal remedies)
Apply mustard oil in the affected parts
Taking cold foods (fruits and green vegetables) and drink milk
Drinking rice washed water
Clean affected parts with antiseptic soap and water
Practices of Muslim participants
Clean the affected part with neem (name of tree) leaves infusion
Eating tuthamalanga (herbal remedy)
Drinking ash water
Eating flower of mehendi (name of plant), silawari (herbal remedy), methi (plant seeds), mishri (crystal form of sugar)
Eating the boil roots of tikur (name of tree)
Eating vajumkal and suwa (herbal remedies) with mishri (crystal form of sugar)
Eating the flower of tulashi (name of plant)
Practices of Tharu participants
Drinking shishau (name of tree) leaves infusion
Clean the affected parts with hot water mixed with milk
Practices of Jhangad participants
Applying grind paste of bamboo bark
Eating iwano and mungraelo (plant seeds)
Eating bark of chhatwan (name of tree)
<i>Note: Words in italics are transliteration of Nepali words</i>

The focus group participants stated that they used different herbal remedies for their medication of STIs. They took leaves, seeds, flower and roots of selected plants, but they did not know the names of all the plants. Experienced members of the community who were friends and local practitioners prescribed herbal remedies. Participants bought some herbal remedies from their local weekly market. Common home medication practices quoted by focus group participants were:

“We used to mix and grind products of plant seeds like ‘shoap’, ‘suwa’, ‘methi’ and ‘mishri’ in milk. Then, we offer this drink to the person having problem.”

“Mixing of ground product of simal (name of tree) tree’s bark and leaves of sishau (name of tree) in cows milk with mishri. This liquid remedy is also very effective for this problem.”

“Patients have to eat more cold foods and drink lots of chaulani pani (rice washed water) with sugar.”

“We are taking different herbal remedies like seeds of mehendi (name of herbal plant), jamun ko fal (fruit), mishri, tutamalanga (herbal remedy) and shoap (seeds) with milk and water.”

“We used to apply the paste of grind jadibuti (herbal remedies) in the genital organ.”

Some of these preparations were designed for application to the affected part of the body and others for drinking. Participants believed that the effectiveness of home medication depended on the type of disease, severity of disease, type and duration of herbal remedies taken.

First contact person

Table 3 depicts the health seeking behaviour of the 45 participants who had experienced STIs. Friends were most frequently consulted, followed by family members. Only one person contacted a health worker.

The focus group results showed that participants usually sought a first consultation with their female friends because they feared social stigma. They were reluctant to consult with male health care providers and scared they would be stigmatised if family members found out that they had STIs. One stated that “In our culture, most of the female do not want to share their problem with family members and husband because of the fear of stigmatisation. We prefer to consult friends.” Another said, in a very sad voice, “We don’t feel secure to share our problem with husband, too. When one of my friends shared her problem with her husband, he threatened her to leave the house.”

They were also reluctant to share their problem with male health care providers, for example “It is quite embarrassing to consult male health care providers for our problem. I feel hesitant to consult with them.”

Table 3: health seeking behaviours in relation to STI signs and symptoms (N = 45)

Characteristics	N	%
First contact person		
Friends	23	51.1
Family members	13	28.9
No one: used own knowledge	8	17.8
Health workers	1	2.2
Source of treatment		
Faith healers	23	51.1
Hospital/Health Post	14	31.1
Pharmacy	3	6.7
Ayurvedic clinic	1	2.2
No consultation	4	8.9
Partner treatment		
Yes	5	11.1
No	29	64.4
Don’t know	11	24.4

Source of treatment

Table 3, 51.1% (23) describes the way participants consulted faith healers for their STIs. Only 31.1% (14) participants sought treatment from health institutions and 8.9% (4) of them did not seek any treatment.

Some participants with STIs consulted faith healers when their problem was not improved by home medication. They only consulted health institutions when referred by healers:

"If the faith healer asks us to go to health post, then only we prefer to go to the health post."

"If our problem does not get cured by home medication and faith healing then only we used to visit either the health post or hospital."

In severe cases, a few participants consulted both a traditional healer and health institutions at the same time. However, participants said that most of the poor people could not afford the medicines prescribed by the health staff:

"The doctor asks us to buy different types of expensive white tablets. We don't think that those white tablets can cure the problem."

"We don't like to go to the health post. Health post staff ask us to buy expensive capsules. We do not have money to buy the medicine."

Participants felt comfortable to visit private medical shops to purchase medicine without examination, for example, "We females feel hesitation to consult male staff of health institutions for our problems related to the genital organ. We prefer to take medicine from medical shops. It is easy to share our problem with female staff of medical shops. They give us medicine without examination."

Partner treatment

Table 3 shows that 64.4% (29) of the participants knew their partner was not treated, and 24.4% (11) did not know whether their partner was treated or not. Focus group participants did not feel comfortable to talk with their husbands about STIs because of stigma and the male dominated society, for example, "If we talk about sexual issues with our husband and family members, then we are considered as bad women. We are scared and do not want to talk about it."

Discussion

The results of this study confirmed other findings that STIs are a serious, but virtually invisible problem because of shyness, unequal power relationships between men and women and fear of stigmatisation (Chin et al. 1994). Our study revealed that women are especially vulnerable to STIs because of their secondary status in their own family and in society.

Most participants had heard about STIs, but held a range of beliefs about transmission. Many believed that hot foods and supernatural powers could cause STIs. Many thought that STIs could be transmitted by both sexual and non-sexual modes of transmission like touching an infected person, eating from the same plate, drinking from the same glass, sitting and sleeping together and sharing of same cloths, bed linen and towel. Previous studies in Nepal showed that the general population had very little understanding of the epidemiology of STIs (Dixit 1991). Other studies found little and inaccurate information on the causes, consequences and treatment of STIs among women in developing countries (Bhatti and Fikree 2002).

Focus group discussions showed that women preferred to consult friends rather than family members, husbands or male health care providers because of stigma, social taboos and gender relationships. Nepali culture considers it indecent for a woman to take the initiative in sexual encounters. If they do so, they risk being perceived as sexually active, with severe consequences, including expulsion from the home (UNAIDS 1998). Cultural norms prohibit or constrain public discussions about sexuality and sexual practices. Our study confirmed other findings that many societies view STIs as a shameful illness and, in many cases, dangerous to the stability of marriage (International Women's Health Coalition 1991). Our study showed that most women in Nepal, even after realizing the problem of STIs, continued to suffer in silence because of stigma and gender inequality.

Home medication practices were very common among study participants. They rarely contacted health institutions without first trying some treatment at home. Females were more likely to self-medicate or attend a traditional healer in Nepal (O'Dea 1993). Women seek treatment at home because of fear that information about their infection might be disclosed (Chin et al. 1994). Herbal remedies were common among our participants, as in other countries. A study in the Philippines concluded that women reported drinking cold water and avoiding salty fishy and sour foods for the treatment of STIs (Field 1996). In South Africa, men drink an herbal beverage before sex because they believe it protects from any attack of evil, including STIs (Flanagan

1996). Therefore, existing socio-cultural barriers and taboos associated with diseases are major hindrances to women seeking help for STIs (Luthra and Saxena 1991).

Women in our focus group discussions described how they consulted faith healers when STIs were not improved by self-medication. They visited health institutions only after consulting faith healers and if their problem had not improved. A study in Kenya also found that western medical practitioners were consulted for STIs only when herbalists and faith healers failed to provide relief (Mulder 1994). Our participants hesitated to share problems of the genital organs with male health care providers and preferred to take medicines directly from the pharmacy because they could avoid an examination. This is consistent with findings that women are reluctant to seek treatment because of cultural inhibitions and the shame of consulting male doctors for gynaecological problems (Bhatti and Fikree 2002). Our study showed that women's alternative health seeking behaviour depended on their economic status. Those who could afford their treatment consulted the hospitals for further medication. Some went to India for their treatment. People of low economic status visited the nearest health institutions. Some did not want to visit health institutions because they knew they would be asked them to buy medication that they could not afford and they did not believe in the effectiveness of allopathic medicines.

We conclude that women's use of health service is influenced by their knowledge, perceptions and beliefs about the causes and mode of transmission of STIs, their status in the society, and social taboos on discussion about sexual issues. Women are more likely to seek treatment at home. Women do not bring up the subject of sexual issues even with a regular partner for fear of a violent reaction or abandonment by a man on whom they are totally dependent for survival. STIs are a great social and economic burden on the health and well being of women. It is a broad social issue, not just a medical problem. This study shows the importance of understanding people's beliefs about health, illness and healing in order to make the health care decisions. The study also suggests the urgency of health education programme on STIs. We do not know the medical value of herbal remedies. Further studies are recommended to evaluate their effectiveness. Future national strategies and intervention programs designed to improve access to health services in Nepal should formally investigate the role of all those factors addressed above, both in relation to issues of access and the impact of utilising such services on the experience of STIs.

Acknowledgements

This study was conducted as part of activities of a UNDP project entitled "Participatory Planning and Management of HIV/AIDS Programme (NEP/97/003)." However, the views expressed in this paper are those of the authors and do not represent the official view of the UNDP.

We gratefully acknowledge Mr. Mahesh Sharma, National Project Manager (NEP/97/003) for his cooperation and support in conducting this study. The authors thank all people who participated in interviews and focus group discussions and shared their knowledge and experiences. We also thank all interviewers and reporters for their support in data collection and fieldwork.

References

- Allen S, Lindan C, Serufilira A, Van der Perre P, Rundle AC & Nsengumuremyi F et al.1991, 'Human immunodeficiency virus infection in urban Rwanda: demographic and behavioural correlates in a representative sample of childbearing women', *JAMA*, vol 266, pp 1657-63.
- Baker J, Devkota B & Gurubacharya VL 1993, 'The silent epidemic: HIV/AIDS in Nepal', *The Independent*, vol 3, no 39.
- Bhatti LS & Fikree FF 2002, 'Health-seeking behaviour of Karachi women with reproductive tract infections', *Social Science & Medicine*, vol 54, pp 105-117.
- Brown AD, Jejeeboy SJ, Shan IH & Yount KM 2000, *Sexual relations among youth in developing countries: evidence from WHO case studies*, WHO, Geneva.
- Burathoki K1993, *STD in Nepal*, a country report, WHO/SEARO, New Delhi.

- Chin J, Dunlop DW & Pyne HH 1994, *The HIV/AIDS situation in Nepal*, SAIPH Division, World Bank, Washington DC.
- Cox T & Suvedi BK 1994, *Sexual networking in five urban areas in the Nepal Terai*, Valley Research Group, Kathmandu.
- Department of Health Service 2001, *Annual Report: 1999/2000*, Nepalese Ministry of Health, Kathmandu.
- Dixit S 1991, *Socio-economic dimensions of HIV/AIDS* in Nepal, Kathmandu.
- Field ML1996, Listening to patients: targeted intervention research to improve STD programs, *AIDS captions*, vol 3, no 1, May.
- Flanagan D 1996, Targeted interventions research bridges the gap between research and practice, *AIDS captions*, vol 3, no 1, May.
- Hannum J 1997, *AIDS in Nepal, communities confronting an emerging epidemic*, Seven Stories Press, New York.
- Hunter DJ 1993, 'AIDS in sub-Saharan Africa: the epidemiology of heterosexual transmission and the prospects for prevention', *Epidemiology*, vol 4, pp 63-71.
- International Women's Health Coalition 1991, *Reproductive tract infections in women in the third world: national and international policy implications*, papers from Bellagio conference, Italy.
- John J 1991, *Report on strengthening of epidemiological surveillance for prevention and control of AIDS in Nepal*, WHO/GPA.
- Luthra UK & Saxena BN 1991, *Reproductive tract infections in India: the need for comprehensive reproductive health policy and programs*, papers presented at Bellagio conference, International Women's Health Coalition, Italy.
- Mulder DW 1994, 'Disease perception and health-seeking behaviour in sexually transmitted diseases', in compiled by Network of AIDS researchers of Eastern and Southern Africa (NARESA), *Prevention and management of sexually transmitted diseases in eastern and southern Africa: current approaches and future directions*, Nairobi, Kenya.
- National Centre for AIDS and STD Control 1997, *Report on mid term external review of NAP of Nepal*, Unpublished, Kathmandu.
- O'Dea P 1993, *Gender exploitation and violence: the market in women, girls and sex in Nepal*, UNICEF, Kathmandu, Nepal.
- Shrestha B, Burathoki K & Mugrditchian D 1998, 'Nepal', in T Brown, R Chan, D Mugrditchian, B Mulhall, D Plummer, R Sarda & W Sittitrai (eds) *Sexually Transmitted Diseases in Asia and the Pacific*, pp 195-214.
- Siriwasin W, Shaffer N, Roongpisuthipong R, Bhiraueus P, Chinayon P & Wasi C et al. 1998, 'HIV prevalence, risk, and partner serodiscordance among pregnant women in Bangkok,' *JAMA*, vol 280, pp.49-54.
- UNAIDS1998, *Gender and HIV/AIDS*: UNAIDS technical update, UNAIDS, September.
- UNDP 2001, *Human Development Report: making new technologies work for human development*, Oxford University Press, New York.
- WHO 2001, *Global prevalence and incidence of selected curable sexually transmitted infections: overview and estimates*, WHO, Geneva.
- Wilkinson D, Abdool Karim SS, Harrison A, Lurie M, Colvin M & Connolly C et al. 1999, 'Unrecognized sexually transmitted infections in rural South African women: a hidden epidemic', *Bulletin of the World Health Organization*, vol 77, pp 22-28.