Nepalese trekking guides: A quantitative study of sexual health knowledge and sexual behaviour

Abstract

Tourism, a global industry, brings with it a number of public health problems, one of which is the spread of sexually transmitted infections transmitted between travellers and hosts. Previous studies have largely focused on sex workers and sex tourists. This study assesses sexual behaviour, knowledge and condom use among male trekking guides in Nepal. A self-administered questionnaire survey (n=324) was conducted using snowball sampling amongst men working as mountain trekking guides in Nepal. Most respondents (59%) had initiated sex before the age of 18. Most (84 %) reported sexual relations with a woman other than their partner, 46% reported foreign partners, 43% had Nepalese partners, and 28% had concurrent foreign and Nepalese partners. Most (70 %) reported ever having sex with a foreign woman and two-thirds had had sexual intercourse with foreign women in the previous 12 months. Participants' age, education status, age of first sex, smoking and drinking habits and English proficiency were significant predictors of having sex with foreign women. About 60% reported condom use during their most recent occasion of extra-martial sex. A similar proportion had used a condom during last sexual intercourse with a foreign woman. The likelihood of condom use was associated with a guide's age, educational level, ethnicity, age of first sex and work experience. Most trekking guides reported sexual relations with foreign women as well as irregular use of condoms. Although sexual health knowledge about among trekking guides is high, some misconceptions still result in unsafe sex. Hence there is an urgent need to revise the existing training for trekking guides and implement appropriate health promotion programmes.

Key words: Reproductive health, condoms, lifestyle, tourism, Himalayas

Background

Tourism constitutes one of the world's largest industries, and travellers can transfer and acquire STIs (sexually transmitted infections) and HIV/AIDS, mainly due to (in)voluntary sexual behaviour [1-6]. Tourists are more likely to engage in risky sexual behaviours whilst travelling than in their own community, [4,7] making it an important area for health promotion [8].

People working in the tourist industry have frequent contact with both tourists and locals [9,10] and the nature of trekking holidays may increase the chances of both trekkers and their guides participating in (risky) sexual practices. Trekkers are exposed to new travel companions, long stays with their travel guides often in remote places (away from prying eyes) and may be

separated from their regular sexual partners [11]. In other words, creating an ideal context for (casual) sexual relationships between the travel partners on a trek.

Tourism is a crucial part of the economy as it provides employment to thousands and the tourism earnings were nearly US\$ 360 million in 2012, when 803,092 tourists visited Nepal [12]. Just over half (52%) of such visitors to Nepal are aged between 16-45 years and some 45 % are women [12].

There is a small, but growing literature on young people and sexual health in Nepal, [13-20] and one recurrent theme appears to be that sex and sexual health are not openly talked about [18-22].

Medical problems and health risks of trekkers or tourists are documented to some extent, [22] but little is known about the Simkhada P*, van Teijlingen E, ** Regmi P*** Bhatta P, *** Ingham R, **** Stone N *****

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sexual behaviour of trekking guides [11]. A small study showed that 76 % of male trekking guides had had sexual intercourse with one or more foreign female tourists [23]. Among them, over two-thirds (71 %) were married, whilst 53 percent had visited commercial sex workers within the previous year. Furthermore, many had inaccurate information and misconceptions about STIs and HIV/AIDS [23]. It is not clear what proportion of Nepali trekking guides use condoms, how and why they get involved in risky sexual behaviour, and what are the barriers to, and opportunities for, adopting safer sex. Hence, this epidemiological study aimed to assess the extent of risky sexual behaviours among trekking guides in Nepal.

Methods

Study design and participants

In 2004, a self-administered questionnaire survey was distributed amongst a sample of registered trekking guides in Nepal. Illiterate respondents were interviewed by a member of the research team using the same questionnaire. The questionnaire design was partly based on an MSc study carried out by the fourth author and was printed in both Nepali and English (copies available from first author). It is recognised that respondents are more likely to give complete information on sensitive topics in a self-administered questionnaire, [24,25] although this method has been criticised for using retrospective questioning and recall bias [24]. A pilot study was carried out to improve the content and order of the questions [26].

Data collection

The overall population included 3,461 registered trekking guides, of whom 25 were female [27]. Unfortunately, a complete list of registered guides could not be obtained, so no random (or stratified) sample to be drawn. Instead, a convenience sampling method using a snowball technique was used to select male respondents; females were omitted due to their low numbers. Convenience sampling is generally recognised as legitimate due to its relatively straightforward recruitment approach and the increased level of active participation by respondents [24]. Furthermore, since the respondents are highly mobile due to their nature of work, it is very difficult to use a random sampling or stratified sampling method.

The fourth author, who had been a trekking guide, did all the recruitment. Questionnaires were distributed in the trekking areas of Annapurna, Langtang and Everest, and through trekking agencies in Kathmandu and Pokhara. Questionnaires were checked and data were entered into SPSS and analysed using descriptive statistics to assess the degree of association between variables. Ethical approval was obtained from the Nepal Health Research Council and relevant local authorities.

Results

Socio-economic characteristics

Valid questionnaires were collected from 324 male guides (approximately 10% of all registered guides). The majority (60%) was between 25 and 34 years, 95% were literate and half (51%) had completed secondary level (School Leaving Certificate) education. All respondents were familiar with the English language and 86% could speak Hindi. The majority (68%) identified themselves as Hindu and about 40% were Brahmin. About onequarter, had been working as a guide for more than a decade and nearly a fifth had between five and seven years' trekking guide experience. Three-quarters had received some trekking guide training, 62% first aid training, and about one third had received eco-tourism training. Most (89%) considered this to be their main job, and around one third (34%) had spent six to ten days on their latest trek (Table 1).

Table 1: Socio-economic characteristics of respondent

Domographic	Characteristics	N	%
Demographic	Under 25	91	28
Age Structure (n=320)	25-29	123	38
	30-34	68	21
	30-34 35+ above	38	12
	Illiterate	აი 15	5
Educational Status (n=323)			Ů
(II=323)	Primary/read and write	98	30
	Secondary (SLC Passed)	166	51
3.5 to 1.00 to (.00.4)	University	44	14
Marital Status (n=324)	Married	199	61
	Unmarried	122	38
	Divorced/separated	3	1
Ethnicity (n=324)	Brahmin	131	40
	Chhetri	53	16
	Gurung	29	9
	Sherpa	37	11
	Tamang	31	10
	Magar	11	3
	Other	32	10
Religion (n=324)	Hindu	219	68
	Buddhist	85	26
	Christian	6	2
	Other (e.g. Islam)	5	2
	Don't want to share	9	3
Work experience (n=322)	1 to 5 years	129	40
	6 to 9 years	115	36
	10 years and above	78	24
Ever smoked a cigarette	Yes	174	54
(N=324)	No	150	46

English proficiency (n=324)	Basic	36	11
	Standard	119	37
	Advanced	169	52
Training obtained (more than one answer possible)	Trekking guide	243	75
	First aid	201	62
	Eco-tourism	88	27
	Other	53	16
	No training at all	54	17

Sources of information about HIV/ AIDS

Books, newspapers, magazines and posters were the main sources of information about HIV/AIDS. Electronic media, including internet, were a second major source of information about HIV/AIDS from such sources (Figure 1).

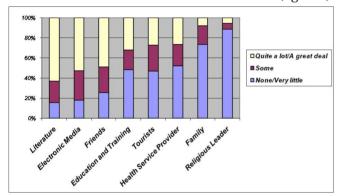


Figure 1: Sources of information about HIV and AIDS

Friends of the respondent were another source of information about HIV/AIDS, with about half of all respondents reporting having received quite a lot or a great deal of information from their friends. Interestingly, nearly three quarters (74%) had received none or very little information from family members. Few respondents reported having received information from religious leaders. Information about HIV/AIDS was also obtained from health service providers, but only one quarter (26%) of the respondents reported having received a great deal or quite a lot of information from them. Just over one quarter reported having received quite a lot or a great deal of information from tourists.

Knowledge about STI, HIV/AIDS and risk perceptions

Overall knowledge about HIV/AIDS was high. The overwhelming majority believed that HIV can be transferred through sexual intercourse and 61% did not

believe that HIV could be transmitted through mosquito bites and kissing. Similarly, 91% believed that having multiple partners is a risk factor for the transmission of HIV. Only 25% and 22% believed that HIV can be transferred through fellatio and cunnilingus respectively, and 79% believed that most STIs can be cured.

Table 2: Responses of trekking guides to items concerning perceived risk

Questions	Not at all/ A little (%)	Quite (%)	Very/ Extremely (%)
How worried are you about becoming infected with STIs including HIV/AIDS? (N=324)	15.2	6.8	78.0
How likely do you think it is that your sexual activities will result in you being infected with HIV? (N=323)	91.1	2.2	5.9
How likely is it that your sexual activities will result in you being infected with STIs other than HIV? (N=324)	90.1	3.4	6.5
How likely is it that your sexual activities will result in you unintentionally falling pregnant / making someone pregnant?(N=324)	85.1	5.6	9.3

Table 2 shows the risk perceptions among trekking guides. Many (78%) were very or extremely worried about becoming infected with an STI or HIV/AIDS, and over 90% believed that their sexual behaviour would not cause HIV. Furthermore, 85% of the respondents were confident that their current behaviour would be unlikely to result in an unplanned pregnancy.

Sexual behaviour

The majority of respondents (95%) had sexual experience, 59% had initiated sex before the age of 18 and about 13% had their first sexual intercourse before the age of 16. Only 5% had their first sexual intercourse after the age of 25. Most (84%) had had a sexual relation with a woman other than their wife. Although this study did not ask for the total number of partners it was found that 69% of the married respondents (131 out of 191) had had foreign sex partners. Moreover, about half of respondents (46%) had foreign partners and 43% had Nepalese partners, whilst 91 (28%) respondents reported concurrent foreign and Nepalese partners.

Sexual behaviour with foreign women

Most respondents (70%) had ever had sex with a foreign woman and two-thirds had had sexual intercourse with foreign women in the previous 12 months. The majority of sexual intercourse took place in travel accommodation, with 58% having used trekking area tea-houses and fewer used hotels and lodges (26%). Five percent had used their own home/room and 2% had had sex in a car, park or forest. Nearly two thirds (64%) had used some kind of protection or contraception during their most recent intercourse with a foreign woman.

The majority (80%) agreed that it is acceptable to propose, ask for or suggest sexual relations with foreign women. Two thirds (65%) believed that it is acceptable to have sex with foreign women if they invite the guide. The majority (73%) had had sexual intercourse only for the purpose of pleasure, whilst a few reported (5%) to have received financial rewards from foreign women. Eleven percent of respondents received (false) marriage commitments from their foreign sexual partner. The nationalities of the foreign women with whom the trekking guides had had sexual intercourse in the previous 12 months included Japanese (17%), American (13%), British (12%), Dutch (11%) and Australian (10%). Table 3 shows the proportions of guides who ever had sexual intercourse with a foreign woman by selected characteristics. Trekking guides' age, education status, age of first sex, smoking and drinking habits, English language proficiency, first-aid training and trekking guides training were all found to be significantly associated with having sex with foreign women. For instance, trekking guides aged between 25 and 34 were more likely to report having had sex with foreign women than those under 25 years or over 35 (p=0.008), as were those with higher education (p=0.008), advanced English proficiency (p= 0.002), those who were younger at first sex (p=0.001), those who reported having been drunk in the previous month (p=0.02), had ever smoked cigarettes (p=0.003) and those who had received first aid (p=0.004) or trekking guide training (p<0.001).

Table 3: Proportion of trekking guides who ever had sexual intercourse with foreign women and condom use in last sexual intercourse other than wife (all women including foreign women)

Demographic Characteristics	Proportion of trekking guides who ever had sexual intercourse with foreign women (%)	P value	Proportion of trekking guides who used condom in the last sexual intercourse other than wife (%)	P value
Age				
Under 25 25-9 30-34 35+ above	53/87(61) 94/120 (78) 49/64 (77) 21/37 (57)	0.008	50/75 (67) 70/111(63) 29/54 (54)	0.037
	21/37 (37)		12/31 (39)	
Educational Status Illiterate Primary/read and write	1/7 (14) 27/36 (75)	0.008	2/5 (40) 15/34(44)	0.013
Secondary University	159/228 (70) 31/40 (78)		118/199(59) 29/36 (81)	
Ethnicity Brahmin/ Chhetri Sherpa/ Tamang/Gurung	118/174(68) 74/96 (77)	0.187	101/151 (67) 42/87 (48)	0.018
Other	27/42(64)		21/37 (57)	
Age of first sex below 15 years 16-18 years	37/43 (86) 110/143 (77)	0.001	20/43 (47) 74/134 (55)	0.005
19+ years	71/118 (60)		70/97(72)	
Been drunk in past month Yes				
No	115/150 (77) 104/171 (65)	0.02	68/137 (57) 86/137 (63)	0.324
Ever smoked a cigarette		0.002		0.050
Yes No	132/171 (77) 87/141 (62)	0.003	86/157 (55) 78/118 (66)	0.058
Work experience 1 to 5 years 6 to 10 years over 10 years	75/123 (61) 61/62 (82) 93/127 (73)	0.002	65/106(61) 42/59 (71) 57/110 (52)	0.045
English proficiency Basic Standard Advance	17/35 (49) 77/115 (67) 125/162 (77)		14/28 (50) 57/102 (56) 93/145 (64)	0.235
Trekking guide Training Yes No	181/233 (78) 38/79 (48)	0.000	130/207 (62) 34/68 (50)	0.062
First aid training obtained Yes	146/192 (76)	0.004	108/170 (64)	0.094
No	73/120 (61)	0.004	56/105 (53)	0.034

Attitudes towards condom use

Table 4 displays the attitudes towards condoms and the use of condoms during sexual intercourse through the use of 12 true/false statements. Nearly all (95%) believed that condoms are an effective contraception. The majority believed that condoms are only necessary if they are not using any other form of contraception. It is worth noting that about 60% of the respondents believed that condoms reduce sexual pleasure and 43% believed that sexual pleasure is more important then condom use. About 57% kept condoms while they were away from their family.

Table 4: Myths and attitudes towards condom use

smokers, 171 (98%) reported having experienced sexual intercourse in contrast to the 138 (92%) out of the 150 non smokers. Similarly, of the 273 respondents who ever drank, 262 (96%) respondents had experienced sexual intercourse.

Condom use

Nearly all (91%) respondents ever used a condom during their sexual encounters with women other than their wife, although only about 60% had done so during their most recent sexual encounter. About 42% reported consistently use of condoms and 6% reported never having used condoms during sex with a partner other than their wife. The main reported reasons for using

Statements	True (%)	False (%)	Don't know (%)
Condoms are an effective method of contraception (N=324)	95.4	2.5	2.2
Condoms are not necessary if you're having sex with someone you trust and know well (N=324) $$	43.2	54.3	2.5
Condoms reduce sexual pleasure during intercourse (N=324)	59.6	28.4	12.0
Condoms are difficult to get hold of when you need them (N=324)	52.2	42.9	4.9
Sexual pleasure is more important than condoms use (N=324)	43.8	44.1	12.0
Condoms are not necessary for oral sex (N=324)	60.2	15.4	24.4
You should always keep condoms while you are away from your family(N=324)	56.8	33.6	9.6
Condoms are available in every trekking area (N=324)	19.8	69.8	10.5
Most of the foreign women give you condoms at the time of intercourse (of those who have had sex with foreign women, $N=219$)	58.9	18.7	22.4
Trekking areas local girls/women do not care about using condoms(of those who have had sexual experience, N=308)	50.0	27.3	22.7
The men usually determine whether a condom is used or not (N=324)	54.9	30.9	14.2
If use properly condoms can protect against HIV transmission (N=324)	96.0	1.5	2.5

About one-fifth of the respondents reported that condoms are not available in every trekking area and, among the respondents who have had sex with foreign women; around 59% agreed with the statement that "foreign women give you condoms at the time of intercourse". A majority believed that men normally determine if a condom is used or not, and nearly all (96%) believed that condoms can prevent HIV and AIDS if properly used.

Our study also was found that there was a small but significant association (p<0.01) between smoking cigarettes and having had sexual relations. Of the 174

condoms were to avoid pregnancies and STIs/HIV/AIDS (96%), and reasons for not using them were unavailability (28%) and partners being unwilling to use condoms (24%). Other reasons included: being too drunk (9%), having forced sex (3%), there being no risk of pregnancy (7%) and no risk of STIs (3%).

Table 3 (right-hand column) shows the proportion of trekking guides who used a condom during the most recent sexual intercourse with women other than their wife. There were significant associations between condom use and age, education, ethnicity, age of first

sex, and work experience. Younger guides were more likely to use condoms (p=0.03), as were those with higher education (p=0.01), Bramin/Chhetri ethnicity (p=0.02) and those who were older at their first sexual encounter (p=0.00). However, factors such as having been drunk in past month, smoking, training and English proficiency were not significantly associated with condom use.

Discussion

Awareness regarding HIV and other STIs was high among trekking guides, but they were likely to be involved in unsafe sexual practices with foreign women, which was consistent with a previous study among the general male population in Nepal [28]. It is likely that exposure to media, friends and tourists has contributed to their adequate knowledge about HIV and AIDS. However, the awareness and knowledge about other STIs is lower compared to HIV/AIDS. One possible explanation is that Nepalese media and intervention programmes have focused largely on HIV/AIDS.

A large proportion of the sample had had sexual intercourse with a foreign woman, as reported in other countries [29-30]. Nearly all (95%) trekking guides had had sexual intercourse and risky sexual behaviour was high compared to the general population of Nepal, [28,31] but generally confirms a smaller study with a similar population [23]. Although the majority was married, 84% had had sexual intercourse with women other than their wives. Having multiple partners is considered to be a risky sexual behaviour [13,30]. Although premarital sex and intercourse with women other than their wives is not acceptable in Nepalese society, both appear to be much more likely among trekking guides than in the general population. Results indicate that condom use between female tourists and trekking guides is high compared to the general population [28] but not yet consistent. There were some misconceptions about condoms, which may contribute to discouraging their regular use. About 60% of trekking guides believed that condoms could reduce sexual pleasure and about 44% admitted that sexual pleasure was more important than condom use. Unavailability of condoms and partners refusing to use them were other reasons for not using condoms. The former could be improved through providing condoms at local health services, tea shops, hotels and general stores along with local awareness raising and information provision. Nearly half (47%) responded that foreign women had provided condoms, suggesting that many of them are serious about the issues of HIV/AIDS and pregnancy prevention, and that they were not unprepared for the possibility of sexual encounters during their visits.

Moreover, guides' exposure to commercial sex workers and other local girls who engage in sex with trekking guides increases their risk. The probability of extramarital sexual relationships is high and significantly associated with length of time someone has been a trekking guide. Respondents who had worked for longer in the occupation had, of course, more time and opportunities to gain sexual experience compared to those who worked for fewer years.

In order to work as a trekking guide and register with an officially recognised trekking organisation, training related to trekking must be undertaken before enrolment. However, about one seventh of respondents had not received any kind of training. The reason could be that they had entered into trekking guide profession after some years of work experience as a porter. Alternatively, not all trekking organisations are strict about the prerequisites for trekking guides.

Use of alcohol and drugs may facilitate people in some risky sexual behaviour because of the influence of these substances on risk perception and the decision-making process. Several studies [5, 8, 30] found an association between alcohol consumption, smoking and drug use and risky sexual behaviour, although no significant result was found for alcohol use and unsafe sexual practices in this study. The study found a significant association between smoking and sexual intercourse. Taking alcohol before and during sexual intercourse may result in unsafe sexual practice and considerable research has shown that alcohol use is correlated with early sexual activity [32].

This study contains a number of limitations: (1) it was conducted in a limited range of major trekking areas, making it difficult to generalise to all trekking and tourist areas, (2) the study did not include female trekking guides since these were insufficient in number, (3) as a retrospective study, some of the research questions enquired about behaviour based, in some cases, on events that occurred more than 10 years previously

which might have made it difficult for the respondents to accurately recall their (risky) sexual behaviours, and (4) this study only sampled guides and not the female tourists.

Our study incorporated sexual issues, which are considered as culturally more sensitive in Nepal; despite this most guides answered almost all questions except some questions about drugs use and some sexual issues. Despite our assurances of confidentiality there was a reluctance to answer questions on drugs as drug use is both illegal and socially unacceptable in Nepal [27]. However, general participation rates were high and respondents seemed to be happy to answer many other relatively sensitive questions in the questionnaire.

Conclusion

A substantial proportion of trekking guides has had sexual intercourse with foreign women. Early sexual experimentation, multiple partners and irregular use of condoms were common among the respondents. Although condom use was relatively high among respondents, poor availability and some myths still contributed to inconsistent condom use. This suggests a need to implement awareness-raising programmes to the trekking guides and make condoms more readily available locally in the trekking areas. The media could also play a significant role in delivering sex education. Despite the relatively high proportion of female tourists having condoms available, this percentage can still be improved. There is clearly a continual need to provide sexual health education to the trekkers; through, for example, placing billboards in tourist areas and distributing leaflets at arrival and at tourist information centres.

Having multiple sex partners, including foreign tourists and commercial sex workers may put all involved including guides' regular partners (wives) at risk of STIs (including HIV/AIDS). Although guides received some training about first aid, cookery and trekking, some components regarding sexual and reproductive health could be incorporated into the packages and existing training packages should be upgraded. The outcomes of such enhanced training should be properly and regularly evaluated.

As most trekking guides visited local girls (for sex), massage centres and commercial sex workers, implementing an awareness-raising programme for commercial sex workers and local girls in the trekking areas would help to encourage the adoption of safer sexual practices. Condoms should be easily available in those areas.

Further longitudinal research with an adequate sample size should be conducted to see the trends and patterns of (risky) sexual practices over time. Similarly, research with other guides (for example rafting guides and female trekking guides) would help provide a more comprehensive understanding of risk perceptions and activities.

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