SEXUAL AND REPRODUCTIVE HEALTH NEEDS OF VULNERABLE YOUTH IN MYANMAR

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Abstract. A cross-sectional survey of 56 youth, using participatory research methods, was conducted with the objective to identify the sexual and reproductive health needs among vulnerable youth in Pyin Oo Lwin town in terms of their livelihoods, perceptions about health and health risks, sex practices, perceived health information needs and preferred channels for health information, and visions for their future generation. The results indicated that a majority of young people of both sexes were deficient in knowledge of the locations and functions of reproductive organs. The majority of respondents of both sexes said that their main health concern was AIDS. Pre-marital sex among youth, 16-20 years of age, was identified in our study. Malaria and AIDS were mentioned as information needed by young people. TV and magazines/journals were prioritized as preferred channels of disseminating health messages. Almost all reported that education was the one thing that they wanted for their own children.

INTRODUCTION

According to WHO, "adolescence" refers to the age period between 10-19 years, "youth" is defined by the United Nations as those between 15-24 years, and the age group of 10-24 years is referred to as "young people" (WHO, 1999). It is estimated that young people aged 10-24 constitute 30% of world's total population, which corresponds to that for Myanmar, also 30% (Population Reference Bureau, 2006). Despite the understanding that the sexual and reproductive health needs of youth differ from those of adults, these needs remain poorly understood and inadequately served in many parts of the world. It is undoubtedly a challenge for many countries to address the needs of youth and to promote healthy sexual and reproductive development, maturation, and behavior.

Early marriage, before the age of 18, is still widespread in most parts of the developing world (Population Reference Bureau, 2006); only a minority of young people have correct knowledge about HIV/AIDS, and young women aged 15-19-years old are less likely to use modern contraceptives than women aged 20 to 24 are. Earlier age at first intercourse is likely to lead to an increased likelihood of multiple and concurrent partners (Brown *et al*, 2001), a lower probability of using modern contraceptive methods (Meekers *et al*, 2003; Juarez and LeGrand, 2005), and an increased chance of infection with HIV or other sexually transmitted infections (STIs) (Singh, 2000; Kaestle *et al*, 2005).

A review of female youth suggest that 2-11% of Latin American women have had sexual intercourse by age 18; 12-14% of Latin American women by age 16; and 45-52% of

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sub-Saharan African women by age 19 (Brown *et al*, 2001). In developed countries, most young women have had sex before the age of 20: 67% in France, 79% in Great Britain, and 71% in the United States (Darroch *et al*, 2001). Among male youth, the same study suggests that 24-75% of Asian men have had sex by age 18, 44-66% of Latin American men by age 16, and 45-73% of sub-Saharan African men by the age of 17. In developed countries, most young men have had sex before the age of 20: 83% in France, 85% in Great Britain, and 81% in the United States (Darroch *et al*, 2001).

In a study on sexual health experiences of adolescents in three Ghanaian towns, nearly all respondents (99%) knew of condoms, but less than half (48%) could identify any of four elements of correct usage; females and sexually inexperienced males were the least well-informed (Glover *et al*, 2003). Two-thirds of respondents considered it unacceptable for males to carry condoms, and three-quarters considered it unacceptable for females to do so. The incorrect usage of condoms also seems to be associated with school attendance, that is, to vulnerable youth (Bankole *et al*, 2007).

Young people are vulnerable to STIs for both biological and behavioral reasons. According to international data (Cowan, 2002; Dehne and Gabriele, 2005), the highest reported rates of STIs are found among young people aged 15-19 and 20-24; in developing countries, the proportion is even higher. Adolescents and youths were found to account for 30% of the total number of patients attending the STD clinic in Nigeria (Olasode, 2007). The male-to-female ratio was 1:0.95. Also in Africa, out-of-school youth were found to be less likely to have safe-sex practices (Ndyanabangi *et al*, 2004).

Studies in Myanmar show similar situations where youth were vulnerable to reproductive health problems, which included unwanted pregnancies, abortions, and STIs, including HIV/AIDS (Thein-Thein-Htay and Khin-Thet-Wai, 1997; Than-Nu-Shwe and Maung-Maung-Toe, 1999; Thein-Thein-Htay *et al*, 1999). Reproductive health and HIV/AIDS/STD information among youth were found to be deficient (Thein-Thein-Htay and Khin-Thet-Wai, 1997; Thein-Thein-Htay *et al*, 1999; Than-Tun-Sein *et al*, 2003). The accurate incidence of sexual activity among unmarried youth is not known; however, a few qualitative studies have indicated that many male youths are engaging in sexual activity before marriage (Thein-Thein-Htay *et al*, 1999; Than-Tun-Sein *et al*, 2003; Ministry of Health, 2007).

Approximately 10% of young people in urban areas and 35% in rural areas of Myanmar are out of school, and socio-economic reasons were the chief causes for leaving school early (Ministry of Health, 2007). It can be reasoned that out-of-school youth from lower social group families are more likely to have risky behaviors, because reproductive health programs for youth are usually school-based. Because reproductive health services are targeted to married women of reproductive age group, unmarried youth are especially vulnerable to reproductive health problems, such as unwanted pregnancies and STIs/HIV/AIDS (UNFPA, 2005).

Studies on the sexual and reproductive health needs of the youth in Myanmar are scarce. To gain a deeper insight into these needs among youths and to enable the youth to express their stories from their own perspectives, rapid assessment methods using participatory learning and action (PLA) approaches were considered appropriate. These methods, using primarily qualitative and graphic techniques, produce findings that can be translated into action in a specific community.

Myanmar lacks studies using PLA approaches among youths, especially those who are vulnerable, to elicit their perceptions of sexual and reproductive health needs. The

findings could contribute towards an information base for the national strategic plan on adolescent health and development that is to be implemented by the Department of Health, Ministry of Health, Myanmar during 2008-2012.

The study was conducted with a general objective to describe the sexual and reproductive health needs of vulnerable 15-24 years-olds who could provide inputs for the formulation of health programs for youth. "Vulnerable" was characterized as youth who were never-married, out-of-school, and from the lower social class.

The specific objectives were to describe the characteristics among 15-24 year-old vulnerable youth regarding their livelihoods; knowledge of reproductive organs; perceptions of health and health risks; sex practices; perceived health information needs and preferred channels for health information; and visions for the next generation.

MATERIALS AND METHODS

Study site

Data for the study was collected during November 2007 in Pyin Oo Lwin, Mandalay Division. Pyin Oo Lwin is a hilly tourist resort located on the trading route between Myanmar and Yunnan Province of China. The town is about 914 meters above sea level and has a population of 60,956, comprised of Bamar, Danu, Shan, and Gurkha (Nepalese) ethnic groups residing in 12 wards. Youth (aged 15-24) constitute 14.9% of the population of Pyin Oo Lwin (Township Health Department, 2007).

Study design

A cross-sectional survey using PLA approaches was done in two wards of Pyin Oo Lwin town in November 2007. The research team considered that the application of qualitative research methods would provide richer information to be used as baseline inputs in formulating appropriate adolescent reproductive health programs in Myanmar (Rietbergen-McCracken and Narayan, 1998; Office of Behavioral and Social Sciences Research, 2002). Qualitative information provides insights into attitudes, beliefs, motives, and behaviors of target populations, including in-depth understanding about what people think and how they feel, using the actual words of the people being interviewed or observed. The complexities of a given situation could thus be better understood through qualitative research (Mack *et al*, 2005).

General population surveys are usually less suitable for obtaining detailed information on population subgroups at highest risk (McGarrigle *et al*, 2002). These groups tend to be small, more clustered, and difficult to access; small subgroups of individuals with relatively rare risk behaviors may not be captured in sufficient numbers. This problem can be overcome through participatory research approaches using qualitative methods. Through these approaches, young people could express their feelings and opinions openly and thereby becoming active partners of researchers in identifying and exploring their concerns.

Such methods could facilitate the collection of sensitive data on reproductive behavior, and findings could provide valuable contribution to the development of an information base for the national strategic plan for adolescent reproductive health (Busza, 2004). These data collection approaches that involve listening to the voices of young people enhance involvement, promote empowerment, address equity issues and thus are more applicable for community development.

Data collection methods

Community meetings. The first community meeting was held with township level authorities, schoolteachers, health staff, NGO representatives, and key informants. A modified

approach of identifying social group differences in Pyin Oo Lwin Town was applied. The representatives were asked how many categories of social groups they could identify in Pyin Oo Lwin, according to their socio-economic status, and what the job categories of each social group were. This approach had been found to be very useful in the rural community settings of Myanmar (Nilar-Tin *et al*, 2005; Le-Le-Win *et al*, 2006). Next, identification was made of the wards where the majority of people of the lower social group resided. The second community meeting was held with community representatives from Wards 7 and 8, which were identified as those wards. As in the previous meeting, these representatives were asked to identify social group differences in their wards and the job categories of each social group.

Ten-seed technique. The Ten-seed technique (Jayakaran, 2002) was applied to identify the relative distribution (as perceived by the participants) of community members within the different social groups in their wards. Participants of the community meeting used ten seeds to rank how people were distributed in each social group in relation to each other.

Social mapping. This technique (Shah *et al*, 1999) was used in the two wards with the meeting participants who, using the maps, identified residents who were of the lower social group and in the 15-24 years old age group. The respective community representatives were requested to invite the identified youths to join Focus Group Discussions (FGDs) held the next day.

Key Informant Interviews (KIIs). Twelve KIIs were conducted with two community leaders, two local NGO members, and two youth leaders, respectively, from the two selected wards. The three key selection criteria used for identifying who should be interviewed were socially active in the area, knowledgeable about local youth, and possessing good communication skills. Questions were asked about their livelihoods, and their opinions on sexual activities and health risks of the vulnerable youth in their wards.

Focus Group Discussions (FGDs). A FGD is a group discussion of 6-12 persons that is guided by a facilitator using a topic guide (Varkevisser *et al*, 1989). Eight FGD sessions were conducted with 15-24 years old out-of-school youth (those who did not complete their secondary education) from the lower social group in each of the wards selected for the study. Gender (male and female) and age group (15-19 and 20-24) were the dimensions considered when selecting participants for respective groups. Two FGDs were conducted for each combination of the dimensions (Table 1); there were eight FGDs. Seven interviewees participated in each FGD session, and they were selected from the households indicated on the social map. Selection of the youth was purposive to ensure that residents located in different parts of the wards would be included in the study. They were all unmarried. The key themes of the FGDs included their livelihood, knowledge on reproductive organs, perceptions on health and health risks, sex practices, perceived health information needs and preferred channels for health information, and visions for the next generation.

Other participatory methods (Shah *et al*, 1999), relevant for eliciting the required information of our study, were incorporated in the FGD session and involved body mapping, participatory sex census, free listing, and pairwise ranking. Body mapping is a diagramming method that involves the participants drawing maps of the female and male bodies, emphasizing details of the respective reproductive systems and how they function.

The paper slip method was used to conduct a participatory sex census. Each participant was given slips of papers and a pencil. The number of paper slips given to each

Table 1
Dimensions for selecting youth for FGD.

Dimension 1: Gender	Male		Female	
Dimension 2: Age group, years	15-19	20-24	15-19	20-24
FGD sessions	FGD 1-2	FGD 3-4	FGD 5-6	FGD 7-8

participant depended on the number of questions to be asked in our study (11 paper slips to males and 12 paper slips to females). Before start of the participatory sex census, the participants were told that they would be asked a series of personal questions; they should write their answers on one slip of paper for each question; they should not write their names, and the answers would be kept anonymous; and there was no need to write the answers in letters, but simply to write down either a tally mark (|), a "correct" mark (√), a cross mark (X), a zero (0), or numbers; they should not show their answers to others in the group; and they should not look at answers written by others in the group. The participants were requested to drop each paper slip, after folding it, into the plastic bag placed near the facilitator. The facilitator counted the responses, and each paper slip was torn in front of the group. The results were recorded on a data sheet.

In free listing and pair-wise ranking, the participants were asked to indicate the means/channels they preferred for disseminating health messages. These were written on a flip chart by the facilitator. The facilitator also prepared a grid on another flip chart. The participants were asked to consider the options two at a time and select the preferred one that they considered could reach most of the young people in their area. Scores were based on the number of participants who voted for each option. The higher the score achieved by an option, the higher the priority of the option became.

Ethical considerations

The proposal for conducting this research was approved by the Ethical Review Committee of the Department of Medical Research (Upper Myanmar) on 25 September 2007 (No 3/Ethics/DMRUM/2007). A written informed consent for participation in interviews was received from each participant involved in the study. The participants were told about the purpose of the research; the type of interview to be performed; that their participation in the research was entirely voluntary, and they could choose to participate or not; that there would be a slight risk that the participants might have to share some personal or confidential information, and that they could refuse if they considered questions uncomfortable for them to answer; and that the information collected would be kept confidential. They were given the telephone number and address of the person (the principle investigator) whom they could contact in case they wanted further information (related to the study), or involving any subsequent assistance for their personal health care.

The participatory sex census was conducted in a strictly confidential way, and the findings, including symptoms suggestive of STI, were not revealed. The findings could not identify whoever was revealing their confidential information. Moreover, the indication of available assistance for any health-related problem was already made when taking informed consent. All the participants in the study could read and write, and their signatures of agreement for participation were taken

after letting them read the written consent forms. There were no refusals for either KIIs or FGDs.

Data analysis

Matrix analysis was done manually on findings according to key themes and key dimensions for the findings of the KIIs. Atlas-ti© software (ver 5.0, Scientific Software Development GmbH, Germany) was used for analyzing FGD findings. Triangulation was used between the findings elicited from different data collection methods, including comments and opinions expressed at community meetings.

RESULTS

The livelihoods of the lower social group youth

According to the information received from community meetings and key informant interviews, there are three social groups in the study area: high, middle, and low classes. Job categories in the high social group include storeowners, rice sellers, small-scale purified water factory owners, pimps, poultry farm owners, and sunflower seed packing industry owners. Job categories in the middle social group include wool knitting business owners, teashop owners, taxi owners, and liquor shop owners. The low social group constituted the majority in the study area, about half the population. Job categories for those in the lower social group are workers who are employed in businesses owned by those in high and middle social groups; workers at car workshops; carpenters; masons; grass cutters; firewood collectors; wild mushrooms collectors; leaf collectors (for selling back to the market for use in wrapping food); launderers; hawkers (selling plain tea, water, fried food, sticky rice, etc) at the railway station; manual laborers at the railway station or at markets; and motorcycle drivers (*carries*).

There are residences where commercial sex workers are kept; but, according to informants, most of the sex workers are migrants from other areas. Motorcycle drivers are referred to as *phar-kaung-pauk-sa* (young man taking care of sex workers). The reason for making this reference is that some of the young motor cycle drivers act as go-betweens for clients and sex workers.

Children of the lower social group had to participate in their family economic activities, and their interest in education diminished as they reached the age of approximately 10 years. For these children, earning outside was more important than learning at school. Most of the young people from lower social group had to leave school before completing middle school due to financial difficulties of their families. A family had too many children and could not afford to continue schooling for older children. Older children had to leave school to let their younger siblings enroll.

The proportions of male to female school dropouts were reported to be the same, although some informants reported that more males were dropouts. The most common reason given was that males had more opportunities to get occasional jobs. Some families could not afford to send their children to school at all.

To solve their family financial problems, most of the school dropouts had to work on a daily basis. Some have to walk at least 14 miles to the forests each day to collect firewood to be sold at market with an “unfair” price of less than MMK 1,500/day. Others collect wild mushrooms, also walking the same distance, which fetched approximately MMK 2,500/day. Some male youths worked as bouncers at brothels. Youth motorcycle drivers, who transported sex workers to their clients, sometimes became acquainted with the sex workers, with whom they had sex.

All the young people, both males and females, had to start work from about 7:00 AM until about 7:00 PM. Some males continued

working until late at night because that was the time they got male passengers who wanted to go to sex workers or to bring sex workers to guest houses. In the evenings, common pastimes for male youth would be to go to a teashop, a video house, play billiards, or played *zare-tauk* (a game where circular wooden pieces of equal sizes are flicked with fingers on a board). For most of the males from the older age group, drinking alcohol in the evening was said to be the way they took leisure after a day of hard work. For females, most of them said they stayed at home, and some said they went to a teashop to watch TV.

> I mostly worked late at night … I took sex workers to guesthouses with my motorcycle (18-year-old male).
>
> Drinking alcohol is my recreation. I drink everyday (24-year-old male).

Knowledge on reproductive organs

Male interviewees could draw external genitalia for both male and female bodies. However, they were unable to identify internal sex organs, such as vas deferens in a male body, and uterus and ovaries in a female body. The majority of respondents were also unable to answer where or how pregnancy took place inside a woman's body. Only a few from the older age group could answer that menstruation took place every month; although they did not know why menstruation took place. The majority of male interviewees could describe the erogenous zones of a female body. They said that they got this information from their friends, particularly the older ones.

A similar situation was found among the female interviewees regarding knowledge of reproductive organs. They were unable to identify internal sex organs of both male and female bodies. They could not answer how pregnancy took place or why menstruation took place. Although a few female respondents could describe the erogenous zones of a male body, the majority of them were reluctant to give answers. Those who did answer said that they got this information from their friends.

Perceptions on health and health risks

According to a majority of the respondents, a healthy youth was described as one who could perform their work actively and one who had no worries. The most common health-risk behavior of young people of their age group was stated as drinking alcohol, and other risk behaviors mentioned included smoking, chewing beetle nuts, having sex with sex workers without using condoms, having many sex partners, and using stimulants. Most of the interviewees could mention various contraceptive methods including the use of condoms. The majority of them said that they had heard of STI/HIV/AIDS, and they could answer that a condom is to used to prevent the transmission of STI/HIV/AIDS.

Sex practices

Pre-marital sex was found to be common among the youth of poor families. The interviewees said that first sex experience of a youth in the study area took place between 16-20 years. Most male youth from poor families passed time by drinking alcohol, and some later went to visit a brothel. According to the male interviewees, most of the first sex took place not with girl friends but with a sex worker because they did not want their girl friends to get pregnant. There were also instances where sex took place between young lovers. Pagoda festivals in the area provided opportunities to them to have sex. Most of them knew how to use a condom. Instances of unwanted pregnancy among young people were also mentioned, but these issues were resolved mostly by eloping and marriage. There were instances where sex between an older woman and a young male, or between an older man and a young female, included an exchange of money or a gift.

I am sure all in this group above 17 years of age had had sex experiences. Whenever an opportunity to make sex arises, we have sex (18-year-old male).

When there is a pagoda festival, young people go to the festival at night with a good excuse to watch theater shows …this is the most opportune time for young people to meet freely and there are many places around these theaters where young people could have sex (21-year-old male).

Some well-off women who are not in good terms with their husbands give money or new clothes to young boys to have sex with them. Similarly, some well-to-do men seduced poor young girls to have sex with them after giving them make-ups or clothes or something that a girl would like to have. Homosexuals also wooed poor young boys to have sex with them after giving them money or new clothes (23-year-old male).

Some young men of poor families woo rich women of an older age to exchange sex for money (19-year-old female).

Table 2 shows the results of Participatory Sex Census conducted with male participants. The findings indicated the existence of pre-marital sex among the male youth, non-use of a condom when having sex, and suffering from symptoms suggestive of sexually transmitted diseases during the last three months. Sexual experiences were initiated as young as 10 years of age. Table 3 shows the Participatory Sex Census results of female participants. Here, none of the participants revealed experiences of pre-marital sex;

Table 2
Results of participatory sex census, male youth, aged 15-24 years (*n* = 26).

Question	Response (*n*)	
	Yes	No
Do you have any girl friend?	10	16
Have you ever had a sexual relationship?	8	18
What was your age when you first had sex?[a]	10 years old (2) 15 years old (1) 16 years old (1) 17 years old (2) 18 years old (1) 21 years old (1)	
Did you give/receive any gifts or payment for this sex?[a]	6	8
How many partners have you had sex so far?[a]	1 partner (6) 4 partners (1) 6 partners(1)	
Did you ever have sex with the same sex?[a]	1	7
Have you or your partner ever used a condom?[a]	5	3
How many times have you had sex in the last month?[a]	1 time (1) 3 times (1) 5 times (1)	None(5)
Did you suffer from burning sensation on voiding during the last three months?	5	21
Did you suffer from genital ulcers during the last three months?	2	24

[a]Responses are calculated for only those participants who said that they had ever had a sexual relationship.

Table 3
Results of participatory sex census for female youth, age group 15-24.

Question	Response	
	Yes	No
Do you have any boy friend?	4	25
Have you ever had a sexual relationship?	0	29
What was your age when you first had sex?	0	29
Did you give/ receive any gifts or payment for this sex?	0	29
How many partners have you had sex so far?	0	29
Did you ever have sex with the same sex?	0	29
Have you or your partner ever used a condom?	0	29
How many times have you had sex in the last month?	0	29
Did you suffer from burning sensation on voiding during the last three months?	1	28
Did you suffer from genital ulcers during the last three months?	0	29

however, one participant reported symptoms that were suggestive of a sexually transmitted disease.

Perceived health information needs and preferred channels for health information

Various diseases were mentioned when the respondents were asked for their perceptions of health information needs. Malaria and AIDS were most frequently mentioned by both male and female participants. Malaria was said to be a great problem for most of them. Other health problems mentioned included hepatitis B, asthma, cancer (females mentioned breast and uterine cancers), bird flu, leprosy, diarrhea, and TB.

All the participants said they had not received any health information related to sexual organs and their functions, or reproductive health issues. Some of the participants said that they heard of such information being disseminated by some local NGOs of their town, but they never had a chance to attend any activity. Only a very few females in the older age group in one FGD session mentioned that they had encountered a small-group educational session conducted by an NGO at their work site. They said they found this kind of session very effective because of the two-way discussions that took place.

Television was identified as a preferred channel in all the groups, and female participants prioritized it as the first choice. Although majority of the interviewees did not own TVs at their homes, they could watch TV programs at neighbors' houses or at teashops. The next preferred channel was written educational articles in magazines and journals. This channel was indicated most by male participants, and some of them specifically indicated sports journals. Educational talks, either in large groups or in small groups, were indicated as the next preferred channel. Other channels prioritized included relaying educational messages through plays, movies, videos, pamphlets, and posters. Video was not identified by any of the female groups.

Visions for their future generation

When asked what they would like their future children, there were some participants whose eyes became swollen with tears. The vision nearly all the participants wished for was that they wanted their children to become educated persons:

> I want them to become educated persons, unlike us (17-year-old female).
>
> I want them to become doctors or teachers

working in rural areas (19-year-old female).

I do not want them to become persons like us who have to work very hard in tiring jobs for earning (21-year-old female).

I want my children to become persons who are well mannered and successful in their life (23-year-old female).

I want them to become educated persons so that they would not feel small (18-year-old male).

I do not want my children to go through hardships and encounter bitter experiences like me. I will tell them my experiences so that they could avoid all the bad situations I have come across (23-year-old male).

DISCUSSION

Among the families of the lower social group in Pyin Oo Lwin town, poverty with its inherent hardship in a family compelled children to become engaged in work and so become school dropouts. In this study, males had a greater chance of leaving school, because there are more opportunities for them to get occasional jobs.

The majority of the respondents of both sexes were deficient in their knowledge of the location and functions of reproductive organs. The majority of male participants could identify the erogenous zones of a female body. This finding indicates familiarity regarding sexual relationships. However, female respondents were reluctant to provide answers to the same question.

Most of the poor young people were engaged in manual labor for their day-to-day living, and the majority of respondents referred to a healthy youth as a person who could perform their work actively. The majority also identified the mental component of a healthy youth: they said that such a person should have no worries. This could be linked to the finding in our study that most of the young males relaxed at the end of a day drinking alcohol. Possibly, drinking alcohol reduced the feelings of hardship and worries that they encountered during the day.

The results of KIIs and FGDs suggested that Pyin Oo Lwin is a town with many illegal brothel houses. The majority of respondents of both sexes said that their main health concern was AIDS, and that it could be prevented by using a condom when having sex. This could be considered an encouraging finding; however, the findings of the Participatory Sex Census suggested that condoms were not used in reality during sexual acts. For sexually active youth, using a condom is critically important because it would prevent unwanted pregnancy and sexually transmitted infections, including HIV. Studies in other diverse cultures found that there is a similar gap between awareness and practice of contraception (Prata *et al*, 2005; Mohamaddi *et al*, 2006).

Although a majority of the male interviewees drank alcohol, they were aware of the negative consequences. They identified alcohol drinking as a risk behavior. Other risk behaviors identified by the interviewees of both sexes included having sex with sex workers, having many sex partners, and taking stimulants.

Although not discussed in polite society in Myanmar, the reality of pre-marital sex among young people was found in our study, which supports the findings of another study conducted in a rural area of Myanmar (Than-Tun-Sein *et al*, 2003). Although in the interview, respondents said that pre-marital sex took place around 16-20 years of age, the results of participatory sex census suggested that sex took place as young as 10 years among the males. Males engaged in sex in exchange for a gift or money, although this information was not volunteered by the female respondents.

Malaria and AIDS were identified most

often as information needs by both male and female participants; this could be related to their perceived risk of acquiring these diseases. Our study suggested that reproductive health information that is disseminated by local NGOs was not reaching these vulnerable youths. Foreign soap operas shown on Myanmar television are highly popular among Myanmar people, and this could be the reason that TV was identified as the most preferred channel by young people for disseminating health messages. It was also unexpected that, although the respondents were school dropouts, they identified magazines and journals as the next preferred channel for delivering health messages. This suggests a wish to keep themselves in touch with reading and learning.

Health talks in large groups and small group educational activities followed as next two priorities for health communication. In a similar study with rural youth, health talks and small group educational activities were given the first priority as communication channels (Than-Tun-Sein *et al*, 2003). This was possibly because, in that particular rural area studied, the youth had been exposed to small group educational sessions and had noticed the effectiveness of this approach. In our study area, very few respondents had had experiences of such sessions.

All the youths involved in our study shared a vision that their children would not become like themselves, involved in hardship. Almost all of them mentioned education as the most important asset that they wanted their children to possess. These responses were often given with tears in their eyes.

Sexual and reproductive health (SRH) programs for youth aim to achieve behavioral change among youth to delay sexual initiation; prevent unwanted or coerced sex; prevent unprotected sexual intercourse; prevent violence; prevent STIs and HIV transmission; promote access to STIs treatment; promote gender sensitivity, respect, and positive attitudes; and reduce alcohol or drug use that can be correlated to unsafe sex. Our study was not able to cover comprehensively the area of sexual and reproductive health (SRH) needs of the youth in Myanmar. However, we were able to elicit authentic expressions of need, which suggest there are significantly different needs among the vulnerable youth, and these are not being met by current health promotion campaigns. The encouraging findings included the general awareness that condoms could prevent pregnancy and STIs. However, it was discouraging to find that there was an apparent lack of knowledge about sexuality. Moreover, there were indications of experiences with early pre-marital sex, unwanted pregnancy, and STIs. The "vulnerability" of these youth is related to a synergistic combination of their poverty, and their lack of access to promotional, preventive, and curative health services provided in public health service facilities and schools.

Another possible limitation might have been in the responses given by respondents where they were being less than open and frank. Other methodological techniques may have facilitated, in combination with our methods, the achievement of a deeper, more comprehensive understanding of the situation. The educational programs were not reaching the poor young people in our study area. Our study did reveal the need to enhance SRH programs targeting, specifically to the poor young people.

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