A cross sectional study on sexual practices and knowledge related to sexual health of youth in the tea plantation sector; Nuwara Eliya district, Sri Lanka

Jayasekara AAIN¹, Weerakoon P¹, Beneragama S², Rajapakshe RWKMD², Rizwan MSA², Wanninayake WMSK², Saranga TA³, Nawaratna WMSNK⁴, Dalugama DACL⁴

General objective: To estimate the sero – prevalence of HIV, hepatitis B and syphilis among remote tea estate youths.

Specific objectives: To explore the sexual health knowledge and their sexual behaviours

Methodology: A descriptive cross sectional survey of 400 remote tea estate workers, aged between 18-24 years were carried out in 5 tea estates in Kotagala - Thalawakele Health division. Systematically selected random sample of youth participated in; first self answered questionnaire, then an interview and finally serological testing of HIV, hepatitis B and syphilis.

Results: The sample consisted of 188 males (47%) and 212 females (53%). One hundred and forty six (36.5%) were married. The mean age of sexual debut for males was 12.56 (SD=1.88) and for females it was 16.21yrs (SD= 1.79). Eighty six percent of males had a homosexual experience and 63% had more than one same sex partner. Peers were their main source of knowledge (59%) and most reliable person to discuss sexuality (55%). The large majority of the participants (n=324, 81.25%) never heard of a disease called AIDS. Only 3.25% (n=13) of respondents had ever heard of diseases called sexually transmitted infections.

Conclusion: Irrespective of very low sero prevalence of HIV, hepatitis and syphilis sexual health services are not sufficient to meet the needs of youth in the plantations and available services are not being delivered appropriately. A comprehensive, integrated sexual health service is needed for the youth and adolescents in the estate sector.

Introduction

Sri Lanka is classified as a country with a very low level epidemic of HIV in the Southeast Asia region, with an estimated HIV prevalence of less than 0.1% among adults (15-49 years) [5,6]. Adolescents and youth represent 22% of the total population [1, 3, 4] and school participation of adolescents in 14–19 age groups is around 55% [3, 4].

Issues related to sexual health among youth has gained a high priority in Sri Lanka because of the expansion of media, information technology, education, urbanization and opportunities for social mixing. Discussing matters related to sexuality and sexual health has been taboo in the social and cultural context in Sri Lanka and matters related to sex are kept as secrets even today.

There is a necessity to explore the diversity of sexual health needs among rural remote communities such as the plantation workers/youth before implementing any health or educational programmes. Sexual health needs are more complex and it is not easy to address those needs within the existing cultural setting. Therefore sexual health needs of the estate youth need to be addressed in an appropriate manner in which they must be compatible with socio cultural norms.

With the introduction of an open market economy in the early 1980's, the rapid changes in the economy adversely affected the social and cultural norms within Sri Lanka. Once youth and adolescents are exposed to these rapid changes in their socio economic background, they tend to be more vulnerable in terms of sexual and reproductive health.

¹Faculty of Medicine, University of Sydney, Australia, ² National STD/AIDS Control Programme, Sri Lanka,

³Ministry of Health Sri Lanka, ⁴Faculty of Medicine, University of Peradeniya, Sri Lanka

Low level of life skills and experience, limited sources of information, lack of family and social support and security further intensifies this vulnerability. This vulnerability is more prominent in the tea estate sector. Compared to the rest of the youth in Sri Lanka, youth in estates are in a significantly different environment. Their socio-economic status, cultural values and norms, beliefs, social networks, language and behavioural patterns are different from rest of the Island [8-9].

The negative outcome of these sexual health related vulnerabilities include infections like HIV/AIDS and other sexually transmitted infections, unwanted pregnancies and induced abortions, their adverse medical complications, associated stigma and psychological trauma.

Objectives

General objective of this study to describe the knowledge and practices related to sexual health of youth in plantation sector.

There were few specific objectives which includes to explore the educational needs and risk taking behaviours in a selected sample of estate youth and to test the sero-prevalence of HIV, Hepatitis B and Syphilis among estate youth.

Methodology

The study was carried out in 5 tea estates within the Nuwara-Eliya district. The study was conducted in 3 steps, a descriptive cross sectional survey using self administered questionnaire, interviews and serological testing of HIV, syphilis and hepatitis B.

Inclusion criteria were those youth who are living and working in the tea estates as labourer, age between 18-24 years and able to grant informed consent. Youth, those who were unable to give informed consent and students who belong to this age group and work as part time workers were excluded.

Sample collection and study procedure

A cross sectional household survey of 400 tea estate workers age between 18-24 years were carried out in 5 tea estates in kotagala MOH division from 15th of May to 10th of August 2010. All participants were randomly selected by using population house hold registry maintained by the Public Health Midwife of the study area.

Each tea estate was divided into 4 divisions; based on estate administration divisions. Within each block, 20 youths were selected through systematic random sampling. To meet the sample size, refusals, incomplete data sets, absentees and locked premises were systematically replaced. The Estate Medical Assistant of each estate was involved in the random sampling by using household register and he/ she was blind to the aims, objectives and outcome of the study at this point.

Detailed pre test counselling was conducted before testing for HIV. Validated rapid test kits were used to test for HIV, hep B and syphilis and the process took a maximum of 15 minutes and results issued verbally followed by post test counselling session regardless of their sero status. Universal precautions were carried out at each step of this phase till the waste disposal.

Data analysis

Chi squared test was used to compare the independent proportions. Differences in population characteristics were examined using the χ^2 test for categorical variables. Prevalence estimates and 95% Wilson confidence intervals (CI) computed for both groups; males and females. Data analysis was done by using SPSS software-Version 18.

Ethical consideration

Ethics approval was received from The Human Ethics Committee, The University of Sydney and The Human Ethics Committee, Faculty of Medicine, University of Kelaniya, Sri Lanka to conduct this study.

Results

Demographic Characteristics

The sample consisted of 188 males (47%) and 212 females (53%), with a mean age 21.23 years. Mean age of the male participants were 20 years and for females it was 20.83 years. One hundred and forty six (36.5%) were married, 2 male respondents (0.5%) were separated from their marital partners.

It is encouraging to note that in this study cohort a total of 362 (90.5%) were literate. 7% of participants (n=28) reported that they never attended any kind of educational institute.

Knowledge on sexual health

Most of the participants got to know about sexuality and related information through friends and peers for the first time (59%) The second commonest source of information was the school (17.75%).

Electronic and printed materials played a minor role when considering the initial sources of information, with a percentage of 7% and 5 % respectively.

When considering the whole study population, participants were in more comfortable position to discuss sexual health and sexuality related issues as they arose in day to day life with their friends (55% , 95% CI of 50-59%). School teachers were the least reliable to discuss sexuality related topics.

Sexual behaviours

Of the total 400 participants, 167 males (89%) and 179(84%) females had previous sexual experiences. Five percent (n=18) of them were sexually exposed before the age of 10 years. The mean age of sexual debut for males was 13.59 years (SD= 2.45) and for females it was 18.59 yrs (SD=2.75). Out of those who had sexual experiences, 144 male participants (86%) and 4 (2%) of girls mentioned that they had same sex exposures. One third of the sexually active male respondents confined to a single partner (n=62, 37%). Thirty five percent of males had 2-5 life time

sexual partners and another 28% had more than five sexual partners.

Seventeen percent of the participants accepted that either they or their sexual partner had at least one illegal abortion following an unwanted pregnancy. 72 male respondents (18%) were not aware whether their sexual partners were pregnant or had illegally aborted.

Knowledge on STD/HIV and available services

The large majority of the participants (n=324, 81.25%) never heard of a disease called AIDS. Only 3.25% (n=13) of respondents had ever heard of diseases called sexually transmitted infections.

Majority of the respondents (69%, n=276) had no knowledge of condoms, even though they were sexually active. Only 87 male (46% of 188) and 31 female (15%) respondents were aware of male condoms.

Of those 400 responses, only one girl was aware of the existing youth friendly clinic in Nuwara Eliya and 3 participants (0.75%) were aware that there is a clinic called STD clinic and its available services.

Sexually transmitted infections

Only 4.5% had ever experienced symptoms of STI or genital tract infections. Among those who had symptomatic episodes suggestive of STI, genital ulcers (1.5%), genital warts (1.25%), vaginal discharge (1.0%) and genital soreness (0.75%) were the common symptoms.

None of the participants were tested positive for HIV or hepatitis B. Only one person tested positive for syphilis

Discussion

Premarital sex is not culturally accepted in Sri Lanka. Previous studies in urban and semi urban settings in Sri Lanka clearly revealed that the sexual debut for both males and females is found to be around 15 years [10].

Significant proportion of the participants (5%) was sexually exposed before the age of 10 years. Although it is essential to have a “penetration” to fulfil the definition criteria for a sexual intercourse, the majority of participants consider that external non penetrative sexual stimulation also an intercourse. Therefore it is essential to understand that all these sexual exposures before the age of 10 years or even before 15 years is not sexual intercourse. During the interview sessions most of the male participants agreed that their initial sexual contact was a non penetrative external sexual act with a male, mostly elder than the participants.

Even though a large number of males had same sex experiences, most of them were engaged in either non penetrative sexual activity or oral sex instead of a penetrative anal intercourse. Therefore these sexual contacts are safer than the penetrative sexual acts which do not fulfil the requirements of transmitting the HIV infection. But this carries a risk of transmitting other STIs such as genital warts and Herpes.

Nearly half of the participants of this study population engaged in low risk sexual behaviours, although they were sexually active. When comparing the probabilities of transmitting the HIV infection via penetrative anal intercourse and penovaginal sexual acts, non penetrative exposures carrying very small chance of transmitting or acquiring HIV. This is one of the contributing factors of very low level HIV epidemic observed in Sri Lanka.

Having an early sexual experience is a common finding in other lower socio economic settings in Sri Lanka, according to the studies carried out in urban and semi urban areas [9]. This can be observed in this study cohort who shares certain socio economic similarities with other under privileged groups. According to the findings of the current study, males tend to start their sexual career earlier than their counterparts.

Nearly two third of sexually active males have more than one sexual partner and this may be because

males have more freedom to move compared to females within the socio cultural settings in the estate sector and females are expected to maintain certain cultural norms.

Even though there are large numbers of female sex workers are operating, organised sex trade cannot be observed within the plantation. External mobilization of those sex workers cannot be observed and they do not act as a bridging population.

In the mean time there are casual labours, garment and domestic workers who are working outside the estates particularly in Colombo and suburbs visiting their families during the festive seasons. This category of youth can act as a bridging population in between high risk groups, such as CSWs who are operating in urban settings and the estate sector. This will be a threat to the estate youth in terms of introduction of new STIs.

The findings of this study indicated that knowledge about HIV/ AIDS, STIs and condoms was very poor among estate youth.

With many programs and millions of rupees investment made available by the government and other non government organizations within the estate sector, a very small portion of younger generation in the plantation sector knows about HIV/ AIDS and STDs. The benefits of the current HIV/AIDS and other STI prevention programmes have not reached priority groups within the plantations. National policy makers, regional health authorities and representatives of this community need to evaluate the past and ongoing awareness programmes and reassess their protocols and priorities.

Participants accepted that either they or their sexual partner had at least one illegal abortion following an unwanted pregnancy and certain amount of male respondents were not aware that their partner was pregnant or not.

This study found that, these particular participants were engaged in casual relationships. These casual

relationships may be either with a CSW or less known sexual partner. Frequent and high rate of partner change has a positive correlation with HIV and other STI transmission rates.

Low level of knowledge on sexual and reproductive health, lack of life skills, problems associated with accessibility and acceptability of existing contraceptive services are some of the contributing factors to illegal abortions in the plantation sector.

It is clear that this community is under threat in terms of HIV and other STIs. Even though there is a low prevalence in general population and rural remote communities like plantations, all the other factors which can take Sri Lanka to a disasters situation are freely available.

Recommendations

Availability and acceptability of services, confidentiality, accessibility to available services, lack of infrastructures and less skilled service providers are some of the universal barriers in terms of sexual health. Therefore it is essential to demonstrate the potential barriers that exist in this community.

It is recommended to establish an active youth friendly health service centre in order to deal with adolescents and youth needs. It is the regional health authorities' responsibility to appoint permanent trained staff and establish sufficient infrastructures. On the other hand there is a necessity to enhance the accessibility of the services and make youth aware of available services.

Although there were number of sexual health and HIV focused programs designed to target adolescents and youth in the plantations, according to observers most of the attendees were school going children. The most vulnerable and at risk populations like recent school leavers and those who not attending schools were often being kept away from awareness programs. Therefore policy makers should make sure to find new innovative ways to reach and attract risk populations.

The development of school teacher's life skills to overcome the barriers associated with classroom based teaching and change of their attitudes towards sex education in schools are key factors. Self learning materials should be freely available in school and community libraries and community centres.

Conclusion

In this study of youth in some tea plantations of Sri Lanka, out of 400 participants none tested positive for HIV and hepatitis B and one tested positive for syphilis.

This study provides an overview of youth sexual health problems, sexual behaviours, and knowledge about available services, in section of the tea plantations of Sri Lanka.

It has identified remarkable gaps in terms of knowledge among youth in the tea plantation sector. Additional efforts are needed to understand more about sexual behaviours and their driving forces within the rural and remote communities like estate youths. Well-designed and sufficiently monitored HIV prevention programs focused on underprivileged populations are essential in Sri Lanka for her to remain further within the state "low level of epidemic".

References

1. WHO *Global consultation on adolescent health services a consensus statement*. Geneva , Department of Child and Adolescent Health and Development, World Health Organization; Geneve.2001. [Cited 2010 Feb 12]. Available from: http://www.who.int/c h i l d _ a d o l e s c e n t _ h e a l t h / . . . / w h o _ h i v _ i n f a n t _ f e e d i n g _ t e c h n i c a l _ c o n s u l t a t i o n . p d f
2. Steinberg L. Autonomy, Conflict and harmony in the family relationship. In: Feldman, Elliot G, editor. *At the threshold: The developing adolescent*. Cambridge, Harvard University; 1990. pp. 255–276

3. Department of Census and Statistics, *Sri Lanka Demographic and Health Survey 2000*. Colombo, Department of Census and Statistics; 2002. [Cited 2010 Feb 22]. Available from: <http://www.statistics.gov.lk>
4. UNFPA *Sri Lanka: Country Population Assessment Report – 2001*. Colombo, United Nations Population Fund; 2001. [Monograph on the internet]. New York: National Academy Press; 2001 [cited 2010 Mar 18]. Available from: <http://www.unfpa.org/public/global/publications>.
5. National STD/AIDS control programme. Report on mapping key populations for HIV prevention in Sri Lanka, March 2010. Colombo: publications NSACP;2010[Cited 2010 May 21]. Available from <http://www.aidscontrol.gov.lk/publications>.
6. National STD/AIDS control programme. National HIV/AIDS strategic plan 2007-2011. Colombo: publications NSACP;2010[Cited 2010 Apr 15]. Available from <http://www.aidscontrol.gov.lk/publications>.
7. UNAIDS report on the global AIDS epidemic 2009: Geneva [Cited 2010 Feb 25]. Available from: <http://www.unaids.org/globalreport/default.htm>
8. W Indralal De Silva. Aparnaa Somanathan. Vindya Eriyagama *Adolescent reproductive health in Sri Lanka, status, policies, programmes and issues*. Institute Policy studies of Sri Lanka; 2003.
9. Thalagala NI. Rajapakse L *National survey on emerging issues among adolescents in Sri Lanka*. Colombo, UNICEF; 2004. Geneva [Cited 2010 Feb 21]. Available from: <http://www.unaids.org/globalreport/default.htm>
10. UNAIDS. UNICEF. WHO *Epidemiological fact sheet on HIV/AIDS and STI, Sri Lanka*. WHO; 2009. Geneva [Cited 2010 Feb 21]. Available from:<http://www.unicef.org/publications/index.html>