

National Youth Survey-2012-13: Health profile and risk behaviors of the Sinhalese, Buddhist Unmarried Youth Stratum

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Abstract

Objectives

This article summarizes the preliminary findings of the National Youth Health Survey 2013, which aimed to assess the current health concerns of Sri Lankan youths and the factors influencing youth risk behaviors.

Design, setting and sample

The National Youth survey is a cross sectional descriptive survey. This analysis focusses an initial data taken from a stratified random cluster sample of 925 subjects, who represent the Sinhalese Buddhist youths of Sri Lanka.

Methods & measurements

Data were collected using a self-administered questionnaire applied in the community. Data on socio demographic details, physical health, mental health, life styles, substance abuse, sexual behaviors, and knowledge on sexual and reproductive health were gathered.

Results

Nearly, 40 % of youths were still schooling and further 19 % were following higher education. Almost quarter of youths were idling at home without engaging in gainful work or education. One fifth of youths did not attend school beyond secondary level. Around 16 % of them were not feeling happy about life, around 19 % felt life was not worth living and 6 % had strong suicidal feelings. Approximately 32 % males and 2 % females had ever smoked and 38% males and 3.2 % females reported ever having taken alcohol. Nearly 19 % percent males and 7 % females used abusive substances. Twelve percent males and 3 % females admitted ever having sex.

Conclusion

A considerable risk behavior and health burden is prevalent among youths.

Key words : Youth, health, risk behaviors.

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INTRODUCTION

Youth is considered as the period between 15 to 24 years[1]. At present, approximately 3.2 million youths account for 15.3 % of Sri Lankan population[2]. Of them the majority(77 %) are Sinhalese Buddhists [3].Rapidly changing reproductive vigor, physical and psychological changes of youth, often make them vulnerable in many respects. The common susceptibilities include substance abuse, unprotected sexual encounters, unwanted pregnancies, sexual abuse, accidents,violence, sexually transmitted disease including HIV/AIDS, mental stress and deliberate self-harm [4]. The impact of these vulnerabilities of youth can be exaggerated, if the youth is from poor segments of society, unemployed, lives alone away from parents, inexperienced and lacks the essential knowledge on important life concerns such as sexuality and reproduction related matters[5].

A national survey conducted in 2004[6, 7] indicated that around 32% of male youth and 6.8% female youth has ever smoked and 40 % male youth and 15% female youth has ever taken an alcoholic drink. Mood altering drugs were ever used by 3 % of male youth and 2% of female youth respectively. Eighteen percent male youth and 4% female youth reported ever having sexual intercourse. United States' youth risk surveillance report 2011 indicated that of youth lived in the United States around 45 % has ever smoked, 71% has ever used alcohol and 47 % has had at least one sexual encounter [4].

The youth's leadership and participation is vital for a country's un-interrupted progress as they should be healthy and be ready to undertake the responsibilities borne by aging citizens. Hence, ensuring positive health and wellbeing of youth through appropriate health promotion strategies becomes an essential prerequisite for any country's development agenda [8]. The nature and extent of youth specific problems and desirable strategies to overcome them may vary by contexts in which they occur [9]. Hence,

understanding of specific nature of youth problems becomes an essential requirement before finalizing the action frameworks related to youth health and wellbeing.

Literature survey revealed only 2 national surveys on youth issues in Sri Lanka, which were conducted in the year 2004 [6,7] and in year 2008 [10]. Thereafter, no national level inquiry on contextual profiles and problems of Sri Lankan youths has been carried out. The Family Health Bureau of Ministry of Health Sri Lanka, in collaboration with UNICEF and UNFPA, currently conduct a large scale survey on youths in Sri Lanka. This article summarizes the preliminary findings of this survey and focus on socio demographic profile of youths, their physical health and relevant life styles, mental health, prevalence of substance abuse, mental health, and sexual behaviors among Sinhalese Buddhists youths in Sri Lanka. It also assesses the factors influencing selected risk behaviors of them.

METHODS

The national youth survey study population was divided in to 3 strata: North & East provinces, estate sector, and other areas of the country. The youth focused in this article were from the sector identified as other areas. The sample studied constitute a group of 925 youths who were the initial consecutive members of the multistage cluster sample of the national survey. All of them were Sinhalese, Buddhists and were unmarried. The clusters were identified within the randomly selected census blocks used for the 2011 Sri Lankan national census. One cluster consisted of 20 youths the of 15- 24 year old age group. Descriptive estimates estimated by a sample of 925 subjects are capable of having a minimum absolute precision of 4%, given a confidence level of 95 % and design effect of 2. A youth in the sampling frame was considered as eligible, provided that he or she had been living in the area for more than 6 months and was consenting to be included in the sample. The youth, who may not

have adequate capacity to provide valid information due to a condition such as a mental illness or mental retardation was excluded.

The survey sought information on level of education, income, occupation, physical health, life styles, mental health, substance use behaviors, reproductive health knowledge, and sexual behaviors.

A preliminary population enumeration within the selected sampling blocks was carried out with the help of field Public Health Midwives (PHMs). The enumeration lists were used to prepare a list of eligible youths in selected census blocks. Whenever, an eligible youth was found in these households, the area PHM informed a household member about the potential selection of this youth as a subject of the survey. A cluster of 20 youths (10 from 15-19 year age group and another 10 from 20-24 year age group) were randomly identified from the list. A trained investigator couple (a male and a female in their youth) were sent to selected households for data collection. They were introduced to the household members by area PHMs. As many sensitive matters were questioned, a self-administered questionnaire was used for data collection. The male and female investigatory introduced the questionnaire to the male and female youth respectively. After explaining purpose of the survey, obtaining written informed consent and preliminary answering instructions were given, youths were asked to fill the questionnaire by themselves. However, if the selected youth was not a literate person, the investigator filled the questionnaire after interviewing him or her. In both occasions the other members of the family were requested to remain away to ensure privacy. On average 30 to 45 minutes were spent for the collection of data from a youth. Filled data sheets were kept in safe custody and sent to the center for analysis. The ethical approval for this study was obtained from the ethical review committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura.

Statistical analysis

Prevalence estimates were summarized as percentages along with 95% confidence intervals. Binary logistic regression was used to identify the factors influencing 4 selected risk behaviors of youths. Four separate models were run and odds ratios and their 95% confidence intervals were reported as measures of strength of association. EPIDATA software [11] was used for the data base compilation. The analysis was carried out using STATA10 software [12].

RESULTS

Socio demographic profile of the sample

This analysis focused on a group of 925 Sinhalese, Buddhist unmarried youths. Fifty two point five percent of them were females. Their ages ranged from 15 to 24 years with mean age of 18.7 (SD 2.6) months. The majority were from rural areas, while 25.6 % were from the urban sector. Around 38.2 % youths were still schooling, and further 18.7% were following some form of continuing education. About 9.5 % are having full time jobs, while 8.2 % were having part time jobs. Nearly, quarter (25.4%) of them were passing time at home and not engaged in productive work. Educational level of the youths, who are currently above the school going age of 19 years (n= 482), was analyzed to study the average level of school education of youths. Of them, only one youth, has never been to a school. Another 1.1 % (females, 1.6%; males 0.5%) was only educated up to primary level. Further 21.7% (females, 15.8 %; males 28.2%) dropped from the school while in secondary level classes (i.e. grades 6 to 11). About 11.9% (females, 9.3%; males 14.8%) passed the ordinary level examination and stopped schooling. Further 24.9% entered advanced level classes (females, 22.0%; males 28.2%), yet failed to pass the advanced level examination. Around 32.7% (females, 39.8%; males 24.5%) had passed advanced level examination and the rest, 7.6% (females, 11.0%; males 3.7%), were in to higher education after their advance level.

Of all youths (n=925), 17.7 % (females, 14.4%; males 21.4%) were having either a full or part time income generating activity. Their median monthly income was 10,200 Sri Lankan rupees and varied from 1,000 to 45,000 rupees. About 6 % of youths were living in the families that did not have a monthly income sufficient for providing basic meals to its members. Ninety six percent (females, 95.7%; males 96.4%) of them were living in parental residences.

Physical health

About 19.9% (95% CI: 17.3 -22.5%) of youths, had suffered form an illness, which required them to avoid their daily engagements such as schooling, work, etc. during the month preceding the survey. The main form of illness reported was viral fever (16%). Headache, dengue fever, asthma, accidental injuries were reported by less than 1% of youths respectively. The survey inquired whether the youth were informed by a medical practitioner about the presence of a several chronic illnesses among them. Asthma was present among 5.8% (95% CI: 4.3 -7.4%) youths and heart ailment was reported by 0.5% (95% CI: 0.1 -1%) of them. Only 0.1 %, 0.2 % of youths reported having diabetes and

epilepsy respectively. Nearly 9 % (95% CI: 3.6 - 6.4%) of youth were having eye sight problem and 4 % of them was using spectacles for this problem. Two percent (95% CI: 0.9 -2.7%) reported that they were having hearing difficulties. Survey inquired whether the youth had met with an accident, which required him or her to take treatment at an outpatient clinic or in a hospital as an inpatient. Five percent (95% CI: 3.7 -6.6%) of youths reported having met with such an accident with in the past 12 months preceding the survey. Nearly half (45 %) of these accidents were due to road traffic accidents. Falling from heights (26%), sports injuries (13%), injuries due to fighting with others (8%) and burns (2%) were reported as the major reasons for accidents.

Mental health

Youths' perceptions on general happiness, main worries, feeling the life is not worth living, suicidal feelings were studied as indicators reflecting mental health of them. During the preceding 2 weeks of inquiry, about 16% (95% CI: 13.7 -18.5%) of youths were feeling not happy about the life due to some reason. Figure 1 presents the various reasons for unhappiness of them.

Figure 1 Percentages distribution of reasons for the 16 % youths to be unhappy during preceding 2 weeks of inquiry



Sentiment that the life is not worth living, and having suicidal feeling reflect a significant mental health problem among a person. Approximately, 18.7 % (95% CI: 16.2 -21.2%) youths had felt that life was not worth living, while 6 % (95% CI: 4.4-7.5%) had strong suicidal feelings at least on one occasion during past 12 months.

Prevalence of substance abuse and sexuality related behaviors

Use of alcohol, smoking, and other abusive substances, intimate relationships, sexual behaviors, and exposure to various forms of abuses were enumerated in the survey. Table 1 presents the overall and gender based prevalence of these behaviors.

Table 1 : Prevalence of substance abuse behaviors among youth

Type of substance abuse behavior	Prevalence (95% CI) (n=925)		
	Males	Females	All
Ever smoking	31.8 (27.4-36.2)	1.4 (0.4- 2.5)	15.9 (13.5-18.3)
Smoking during past week	15.9(12.4-19.3)	0.0	7.5 (5.9-9.3)
Chewing beetle and tobacco during the past week	12.5 (9.4-15.6)	0.08(0.01-0.16)	6.3 (4.8-8.0)
Ever drinking alcohol	37.8 (33.2- 42.5)	3.2 (1.6-4.8)	19.9 (17.3-22.5)
Alcohol use during the past week	37.2 (25.3-40.1)	0.0	30.7 (23.2-36.9)
Ever use of other abusive substances	18.6 (15.0-22.3)	7.4(5.1-9.7)	12.7 (10.6-14.9)

Considerable gender differences were seen among high risk behaviors. Smoking was seen as an almost exclusive male behavior, where nearly 32 % and 16% males smoked ever and during the week preceding the survey respectively. Of those who smoked during the past week, around 36.7% were smoking daily and consumed around 2 cigarettes on a usual smoking day. Smoking among females was rare. Only 1.4 % of female youths admitted having ever smoked. On average, the first smoke has taken place around 16 years (95% CI: 15.7 -16.5 years).

Alcohol use was also seemed to be predominantly a male behavior. Youths, who used alcohol seemed to have used it regularly, as indicated by more or less similar prevalence (around 37%) of ever use of alcohol and alcohol use during the week preceding the survey. Average age at the first alcoholic drink was 16.4 years (95% CI: 15.9 -16.9 years). Only 3.9 % daily drinkers were present among those who drank alcohol during the week preceding the survey.

Nearly, 18 % male youths reported abusing narcotic substances. Unlike in the cases of smoking and alcohol use relatively larger percentage (7.4%) of female youths had ever tried some form of abusive substances. “Madnana Modkaya” (37.2%), Cannabis (31.2%), Babul (24.5%) Some form of medicinal drug obtained from a pharmacy (9.3%), and Heroin (0.08%) were the commonly abused

substances among youth reporting narcotic substance abuse (n=118). Average age at initiating substance abuse was 16.7 years (95% CI: 16.2-17.3 years).

Several dimensions of intimate relationships, sexual behaviors and exposure to sexual abuse among youths were assessed in the survey.

Table 2 Prevalence of sexuality related behaviors among youths.

Risk behavior / type of abuse	Prevalence (95% CI) (n=925)		
	Males	Females	All
Presently in an intimate relationship	37.6 (33.0-42.3)	37.0 (32.6-42.4)	37.3 (34.1-40.5)
Ever having sexual intercourse	11.6 (8.6-14.7)	2.7 (1.3-4.2)	7.0 (5.3-8.6)
Sexual intercourse within the past year	6.8 (4.5- 9.2)	0.6(0.1 1.3)	3.6 (2.4-4.8)
Had inter-crural sex within the past year	6.3 (4.1 (8.7)	1.4 (0.4-2.5)	3.8 (1.2-4.8)
Had oral sex within the past year	3.6 (1.9- 5.4)	0.8 (0.01-1.6)	2.3 (1.2-3.1)
Practice masturbation within the past year	33.7(29.3-38.1)	1.4 (0.4-2.5)	16.8 (14.3-19.2)
Used the internet for sexual gratification within the past year	11.8 (8.8-14.8)	2.2(0.8-3.3)	6.3 (5.1-8.3)
Forced to have sex by someone else	3.5 (1.8-5.3)	2.5 (1.1-3.9)	2.9 (1.9- 4.1)
Experienced sexual advances while using public transport	3.9 (2.1-5.7)	14.6 (11.5-17.6)	9.5 (7.6-11.4)

Of youths, around 38% were in an intimate relationships and on average they started these relationships around 17.2% (95% CI: 16.8 -17.4 years) of age. Around 11.6% of male youths reported ever having sexual intercourse; while only 2.7 % of female youths did so. The first sex was most commonly experienced with the intimate partner (73%) while further 12 % had experienced the sexual debut with a friend or a relative. The first sexual experiences of 10.6% of male youths were with commercial sex workers.

Another, 3.5 % had the first sexual experience with incidental contacts. Only 58% of youths who had sexual intercourse during the past year used condoms. Prevalence of others forms of sexual acts were relatively lower except masturbation that was reported by nearly 17 % of youths with a predominance among males (34% among males vs 1.4% among females). Use of internet for sexual gratification was reported by nearly 12% of youths, males taking the lead. Average age at having sexual debut was 18.1 years (95% CI: 17.5 -18.8 years).

Nearly 3 % of youths reported that they were ever forced to have sex with someone. Relatively higher percentage of male youths (3.5%) than female youths 2.5% had experienced such situations.

Factors affecting substance abuse & risk behaviors

Binary logistic regression was used to determine the effects of selected influencing factors on the abusive behaviors “ever smoked”, “ever drank alcohol”, “ever used an abusive substance”, and the risk of “ever having exposed to a sexual encounter”. The influencing factors evaluated included the sex of the respondent, residential sector defined as urban and rural, family environment defined as very pleasant to live versus otherwise, socially active or not based on reported involvement in social actions by the youth, felt socially isolated based on whether

having or not supportive figures other than the family, ever felt socially discriminated, proxy economic status of the family defined as the family's income during the last month was adequate to fulfill all routine needs versus otherwise, has own source of income or dependent on parents, and the level of reproductive knowledge defined as low and high based on the marks obtained for set of 32 questions dichotomized at its median. Reproductive knowledge was considered as a risk factor of ever having sex only.

Based on the likelihood ratio chi square tests, all 4 models were significant at p values less than 0.0001 for some selected variables. Models were considered to be adequate fit, whenever Hosmer Lemeshow ChiSquare test based probability was more than 0.05. Table 3 presents the factors that were found to be influencing different outcomes.

Table 3 Effects of selected factors influencing substance abuse and sexual behavior among youth

Outcomes	Influencing factors (# Reference category)	OR (95% CI)
Ever smoked	Males vs. Females [#]	25.6 (11.6-56.6)
	Socially active vs. Socially not active [#]	2.0 (1.2- 3.2)
	Has own income versus dependent on parents [#]	3.4 (2.2-5.3)
Ever drank alcohol	Males vs. Females [#]	14.3 (8.1-25.2)
	Socially active vs. Socially not active [#]	2.0(1.3-3.2)
	Felt socially isolated vs. not [#]	1.9 (1.01-3.4)
	Has own income versus dependent on parents [#]	3.2(2.1-4.8)
Ever used an abusive substance	Males vs. Females [#]	2.5 (1.6-4.0)
	Socially active vs. Socially not active [#]	1.7 (1.1-2.8)
	Has own income versus dependent on parents [#]	3.0(1.9-4.6)
Ever had sex	Males vs. Females [#]	3.7 (1.9-7.2)
	Socially active vs. Socially not active [#]	2.1 (1.1 -4.1)
	Has own income versus dependent on parents [#]	4.9 (2.7-8.7)
	High Knowledge vs. Low Reproductive knowledge	3.1 (1.7-5.6)

DISCUSSION

National Youth Survey provides an opportunity to have insight on issues among Sri Lankan youths after nearly a decade. Such surveys were previously conducted in the year 2004 and 2008 [6, 10]. This article only summarizes the status of Sinhalese Buddhist unmarried youths of whom the data was available at the time of writing. This stratum of youths comprises the majority of youths (77%) in Sri Lanka.

The facts that nearly quarter of youths idle at home without engaging in education or gainful employment, nearly 6% of them were from homes that have got no income at least to bare basic needs and nearly 23% of youths were either never attended to a school or only educated up to the primary level are among the noteworthy socio demographic concerns surfaced from the study.

Youths studied seemed to be relatively physically healthy except for relatively smaller proportions reporting of having asthma (6%), eye sight problems (9%), and hearing difficulties. Around 5 % of youths reported to have met with an accident that was severe enough to seek hospital treatment. Though these figures are in relatively lower proportions, they represent a considerable disease burden when they are transferred to number of youths affected at national level. Mental health of youths seemed to have relatively poor outlook, when compared to their physical health. About 16% of them were not happy, 18 % were

considering the life was not worth living and 6 % has had strong suicidal feelings. The Global School Health Survey conducted in 2008 [10], revealed that 9.9% had seriously considered attempting suicide during the previous 12 months. The findings related to mental health are noteworthy in a context where deliberate self-harm is among the leading causes of deaths among youths in Sri Lanka.

The substance abuse seems to be predominantly a male behavior at present as it was in 10 years

back. It was shown that percentage of ever smoking among males was 10 percent lower than the corresponding percentage, 42%, in the last national survey in 2004 [6]. Prevalence of ever taking alcohol (38%) also was shown to be lower than 49% recorded 10 years back. Prevalence of ever trying a mood altering drug however has shown a higher value, 18 % compared to 6 % in 2004. Prevalence of ever having sex has shown a lower value 12 % compared to corresponding percentage of 27 in the last survey. About 10 % of youths reported of having experienced their sexual debut with a commercial sex worker. All these indicators seem to be lower than that shown in US national surveillance report [4].

Gender, level of social involvements, having access to money seem to be common factors that increase youth risk behaviors. It is also interesting to note that having high reproductive health knowledge increased sexual behaviors. These are shown to be some of the main factors fostering risk behaviors elsewhere [13].

Though favorable trends are seen in some youth indicators such as smoking and alcohol use, there still seem to be a considerable burden of risk and ill-health among youths at present that should be addressed through a systematic youth health promotion programme.

Several strategic interventions related to the youth wellbeing were launched during past years in Sri Lanka. The National Youth Health Policy was launched. A pilot study on youth friendly health centers were initiated in selected Medical Officer of Health areas. Adolescent health strategic plan is currently under development. However, there seems to be a considerable delay in picking of the momentum to scale up of these initiatives. Many reasons can be identified for this inertia. One may be that subject matters and strategic interventions related to youth health promotion are not familiar to the current health workforce compared to the familiarity of such aspects related to its parallel areas such as

maternal child health and family planning. Another difference of existing youth initiatives from other primary health care programmes is that they tend to be implemented as isolated projects rather than programmes mainstreamed to primary health care system. So far there is no mechanisms set in place to systematically cover all youths in different areas of the country. One such potential mechanism, the national school health programme, should be utilized for introducing reproductive health knowledge and services to the maximum extent possible. The youth friendly health services should be systematically scaled up in to all MOH areas of the country and a systematic approach should be adopted to ensure all youth required such services are covered by those.

CONCLUSIONS

A considerable proportion of youth were not gainfully occupied. Substance abuse and Mental health problems among adolescents seemed to be more prevalent than physical health problems therefore needs attention. Being a male, having own income, and being socially active seem to increase the youths vulnerability to risk behaviors.

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