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BNCA
Bhutan Narcotics Control Agency

National Baseline Assessment of Drugs and Controlled Substance Use in Bhutan-2009



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Acronyms

AA	Alcoholics Anonymous
AIDS	Acquired Immuno Deficiency Syndrome
ALD	Alcoholic Liver Disease
ART	Anti-Retroviral Therapy
BNCA	Bhutan Narcotics Control Agency
CBA	Community-Based Assessment
DIC	Drop-in-Centre
FGD	Focus Group Discussion
HE	His Excellency
HISC	Health Information Service Centre
HIV	Human Immuno Deficiency Virus
IDU	Injection Drug User
JDW	Jigme Dorji Wangchuk
MoH	Ministry of Health
NACP	National STI and HIV/AIDS Prevention and Control Programme
NBA	National Baseline Assessment
NCB	Narcotics Control Board
NGO	Non-Government Organisation
RGoB	Royal Government of Bhutan
RSA	Rapid Situation Assessment
RSRA	Rapid Situation and Response Assessment
SBA	School-Based Assessment
SD	Standard Deviation
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
UNICEF	United Nations Children's Fund
UNODC ROSA	United Nations Office on Drugs & Crime, Regional Office of South Asia
VCTC	Voluntary Confidential Testing and Counselling Centre
WHO SEARO	World Health Organization, South East Asia Regional Office
YDF	Youth Development Fund

Preface

I am pleased to acknowledge the findings of the 'National Baseline Assessment (NBA) report on Drugs and Controlled Substance Use in Bhutan-2009' which is the outcome of RGOB & UNODC collaboration. The drug use epidemic is in its early phase in Bhutan and timely interventions and preventions can be explored in-depth.

Along with alcohol, use of psychotropic and narcotic drugs is a growing concern to the nation especially when the majority of those affected are the youths comprising of more than 50% of our population. The problem may be socio-cultural in origin but is sure to affect the health, economy and general well being of the people. Experience from countries around the world shows the distressing socio-economic impact caused by the drug use epidemic.

Numerically, findings of NBA indicate the prevalence of drug use and correlated HIV situation in Bhutan as emerging, though preventable and very much reversible provided we view the evidences with caution and respond appropriately with scientifically proven approaches and timely action.

The findings have also alarmed us that the presence of injecting drugs is not only confined to bordering areas and cities and towns but also fairly widespread in small and satellite towns. We are, therefore, gravely concerned about the abuse of drugs which may become epidemic in this Buddhist and GNH country. All the Bhutanese must not only be cognizant of the danger but work collectively for timely intervention. If each of us is guided by the precepts and principles of Buddhism in terms of our thinking, speech and action and change our behavior, we will win the war against the deadly drugs and alcohol related diseases.

I take this opportunity to thank the UNODC, ROSA for the support in every aspect of the survey and look forward to the continued cooperation in helping us strategize, plan and take appropriate actions to prevent drug use and HIV epidemic among the people of Bhutan.



Lyonpo Zangley Dukpa
Health Minister and Chairman
Narcotic Control Board

Foreword

It is a great honor for me to present the first ever National Baseline Assessment of drugs and controlled substances in school and community based settings in Bhutan.

From our work all over the world, we know, that the vulnerability to drugs and HIV is a complex social phenomenon which requires awareness building and action from all stakeholders. Drug use and HIV impact relationships, deplete financial resources, increase health costs for the family and the society and affects its overall productivity. The global drug market evolves constantly, poses new threats with new drugs and changing trafficking routes which impact patterns of substance use.

In the larger context of marginalization and discrimination, those who are most vulnerable are generally women, children and young people. We must ensure that these men, women, children and young adults find answers to questions about what HIV or substance use is, how they can prevent them and in case they already need treatment, where can they and their families get care and support.

Since some years, UNODC has been working with the Bhutan Narcotics Control Agency, Royal Government of Bhutan to address drug-related concerns in Bhutan both to control the trafficking of drugs and precursors and to prevent drug use and provide treatment to drug users. In this context, research and analysis of drug use patterns remain an important task for proper planning in prevention and treatment. In 2005, UNODC commissioned a Rapid Situation and Response Assessment (RSRA) among drug users in Thimphu followed by another RSRA in Phuentsholing in 2008. These studies have demonstrated that it is possible to reach out to the hidden populations of drug users as well as their partners. The studies found evidence of risk practices in drug users in the community setting as well as school settings. Injecting drug use is still insignificant in Bhutan and therefore HIV through IDU not a major risk. But it is important to remember that also non-injecting drug users become vulnerable to HIV through risky behaviours and unsafe practices. Low prevalence rates should not lead us to be complacent, but motivate us to act on prevention. Although both studies were instrumental in helping understand the nature of drug use and vulnerability to HIV among drug users in Thimphu and Phuentsholing, more research was needed to provide a holistic picture of drug use across the country. We are proud that now in 2010, Bhutan counts with its first National Baseline Assessment, which will help to identify the right measures to develop and implement a national response to prevent drug use and HIV in the country. Our common aim must be to maintain low prevalence rates in drug use and HIV, thus adding to the development and the happiness of the country and its people in the spirit of ensuring universal access to health as a human right and of raising awareness and educating children and youth to take informed and responsible decisions for their own lives.



Cristina Albertin
Representative
UNODC, South Asia

Acknowledgement

The drug related problems in Bhutan has been on the rise since the late 1980s and has been seeping into the social fabric of the Bhutan cutting across all section of the society irrespective of their socio-economic backgrounds. The 'drugs' and their use constitute a serious threat to the health, safety and well being of all our citizens especially the youths. The impacts of drug use affect not only those who abuse drugs, but also their families, friends and the country as a whole.

The government has been making concerted effort to address the growing problem of drug abuse since 1988. However, the information and data on narcotic drugs and substance abuse has been sketchy and scant if not null. The challenge of the stakeholders therefore has been to overcome this void and put the pieces together and grasp the pulse of the situation and come to terms with drug related issues in Bhutan. Therefore, the Bhutan Narcotics Control Agency (BNCA) carried out the National Baseline Assessment (NBA) on drug and controlled substances in 2009 with the following objectives:

1. To understand the type of drugs used and their pattern at the community level.
2. To estimate the size of drug using population in the surveyed Dzongkhags.
3. To assess the risks and vulnerabilities of drug users to HIV and sexually transmitted diseases in various Dzongkhag at the community level.
4. To identify the extent and nature of drug use and related risk behaviours amongst students in educational institutions.
5. To map the existing responses for drug use and HIV prevention, treatment, rehabilitation and risk reduction.

The protocol of the NBA was developed with inputs from relevant partners and requisite clearances were obtained. The team members, comprising of BNCA officials and the field assessment team were trained with the help of the UNODC consultants. The NBA covered 1048 drug users in the community and 27,080 students in 60 schools. Data cleaning, entry and analysis finally gave way to the report that was once again moderated through feedbacks from the stakeholders and the Narcotic Control Board.

In conclusion, I on behalf of the entire team of BNCA and on my own behalf would like to thank the Hon'ble Chairman and the NCB members for their continued guidance and support. I acknowledge the guidance received from NSB, NACP and Ministry of Health. I also treasure the collaborative support received from the Ministry of Education, Dzongkhag Education Officers, the Head of the Schools and their staff and students. We are grateful to the Chief of police along with police OCs in every Dzongkhag, the Thrompons, Drangpons, Dzongdas, District Medical Officers (DMO) and their staff in District hospitals for their continued support and cooperation.

Finally, I would also like to take this opportunity to extend our appreciation and sincere thanks to the members of the Project team for their technical support and financial assistance. We deeply appreciate UNICEF Bhutan for supporting our field workers during the study.

We are aware that the NBA findings and recommendations will be valuable assets as a step towards developing national strategy on drugs and substances abuse prevention intervention which can further guide all stakeholders in addressing the menace of drug with much more scientific approach.

Looking forward for a continued support from all valued partner agencies.



Mr. Kinley Dorji
Executive Director
Bhutan Narcotics Control Agency

Research Ethics Committee Approval Letter



RESEARCH/PROPOSALS/09/9149

24th April 2009

TO WHOM IT MAY CONCERN

This is to inform that ethical clearance for the study on “National Baseline Assessment on Drug and controlled substances” to be conducted by Mr. Chhador Wangdi, Bhuntan Narcotics Control Agency (BNCA) has been approved by the Research Ethics Board of Health (REBH) with following Conditions:

1. Any adverse outcome during the course of the study must be immediately reported to the REBH.
2. In the event of any form of complaints/issues from the study participants received or communicated to REBH, the Board will have the right to investigate.
3. Final report of the study both in soft and hard copy must be submitted to REBH at the end of the study before publishing.
4. Author must acknowledge in the report about the non-feasibility of coming up with a representative sample both for the communities and schools selected, and the strategies deployed for this study.

(Dr. Phub Dorji)
Chairman

Research Ethical Board for Health

Chairperson
Research Ethics Board of Health
Ministry of Health

Letter of Support from Department of School Education



Royal Government of Bhutan
Ministry of Education
Department of School Education

Ref: MoE/DSE-30/2009/5085

12th May 2009

The DEOs,
Bumthang, Chukha, Mongar, Paro,
Punakha, Samtse, Samdrup Jongkhar, Thimphu,
Trashigang, Trongsa, Tsirang, Wangdue, Zhemgang,
HRH Prince Namgyel Wangchuk Academy.

Sub: School based assessment of the Baseline Survey on Drugs and controlled substances

Dear all,

The Bhutan Narcotics Control agency, Thimphu has planned to carry out survey in selected schools (lists enclosed) on the above theme.

You are requested to kindly facilitate the above program.

Thanking you.

Yours Sincerely,

A handwritten signature in black ink, appearing to be 'Tshewang Tandin'.

Tshewang Tandin
DIRECTOR

Letter of Clearance from National Statistics Bureau



NSB/CAID/2009/1784

January 8, 2009

Research Clearance

This is to state that Bhutan Narcotics Control Agency will be conducting a national baseline survey for Bhutan. Survey methodology as well as questionnaire was submitted. NSB is pleased to clear him to conduct the research on the above mentioned survey. We wish them Good Luck!


Director
National Statistics Bureau

Executive Summary

Background and rationale

The drug use epidemic is in its early phase in Bhutan and its link with HIV is yet to be explored in-depth. However, recognition of increasing drug use by youths in recent times has been a major concern among government agencies and civil societies. Schools have also witnessed different types of substance use among students. The present study was undertaken against this backdrop as drug use in any society can negatively impact upon individuals as well as families, adversely affecting the 'gross national happiness'.

Bhutan Narcotics Control Agency (BNCA) under the guidance of Narcotic Control Board (NCB) carried out the current initiative in 2009 in collaboration with UNODC ROSA. The aim of this initiative was to assess the extent and type of drug and controlled substance use in Bhutan and help develop appropriate intervention. As the drug-HIV link was one of the issues explored under the assessment, BNCA partnered with the Ministry of Health, Royal Government of Bhutan (RoGB), in this regard. An initial assessment, conducted on a smaller scale in 2008 in the bordering town of Phuentsholing, paved the path for the present national study. The study is expected to provide guidance for drawing up a National Strategy for prevention as well as mitigating the impact of drug use.

The present 'National Baseline Assessment' (NBA) on drugs and controlled substance use (2009) in Bhutan was conducted in two different settings, a) community and b) schools. While the community-based component of the assessment followed principles of 'Rapid Situation and Response Assessment' (RSRA), in the case of schools, self-administered questionnaires were used to generate responses from the students. Information on socio-demography, drug/substance use, sexual practice, interface with the law and enforcement, and HIV/AIDS knowledge was also collected under the present assessment.

Key findings from community-based assessment

A pre-assessment exercise was undertaken to identify Dzongkhags (districts) having drug users before the field work for NBA began. Information sources used for this exercise comprised police records, interaction with drug users (ex and current) and newspaper reporting. The findings of this exercise indicated that 14 out of 20 Dzongkhags needed to be covered for community-based surveys in the country. The schools in these Dzongkhags were covered under the school based assessment (SBA) to obtain a comprehensive picture.

Dzongkhag-wise distribution of drug use

Current (within the last one month) cannabis use and glue-sniffing was reported from all the 14 Dzongkhags. Current pharmaceutical use was also recorded in all of them except one (Zhemgang). The types of pharmaceuticals used were codeine containing cough syrup, benzodiazepine or nitrazepam tablets, dextropropoxyphene and antihistaminic preparations. Heroin (brown sugar) injecting within the last one month was reported only from Monggar and Samtse. However, from these two Dzongkhags, buprenorphine, pethidine and benzodiazepine injecting was also reported by 3 to 6 percent of the respondents.

Socio-demographic profile of the drug users

Anyone who was above the age of 18 years was eligible to be interviewed under the community based assessment (CBA). Following rejection of some of the filled-in questionnaires due to data gaps and inconsistencies, 991 records were available for final analysis of the data generated through CBA.

Ninety-three percent of the respondents in CBA were males (917) and the rest females (74); while 46 percent of the male drug users (418/917) were unemployed, more than two thirds (49/74; 67%) of the female drug users reported so. No difference in age was observed among drug users recruited from different areas for interview (mean and median age being about 22 years). One-tenth of the respondents were married. The majority (>90%) of the drug users attended schools. Forty percent of the drug users who attended schools had completed higher secondary level of education and about 20 percent had lower secondary (VIIIth standard) or a lower level of school education.

Drug use by males and females

A relatively higher proportion of the respondents recruited from areas proximal to the Indo-Bhutan border reported 'ever use of alcohol' (294/321; 92%) as compared to the respondents from the capital city (271/350; 77%) and areas away from the border as well as from the capital (26/320; 83%). However, the mean age at the onset of alcohol use was 16 years in all these areas (the median being 17 and SD 3 years). Eighty-five percent of female drug users (65/74; 88%) had reported 'ever use' of alcohol. No difference in drug use pattern was observed between female and male drug users, except that none of the females had reported yaba (amphetamine type substance) or heroin (brown sugar) use within the last one month.

Injecting Drug Use

Ninety-eight male drug using respondents (98/917; 11%) and only one female respondent reported ever injecting drugs. The drugs used for injecting were heroin alone or along with injecting use of other substances such as buprenorphine, dextropropoxyphene, antihistaminic preparations, pethidine and benzodiazepines. Higher age at onset of injecting drugs was observed when compared with the age at onset of alcohol use.

Drug use, law enforcement and violence-related issues

While 4 percent (3/74) of the female drug users were arrested for alcohol-related offences, this was eight-fold less than similar events taking place in the lives of male drug users. All these three female drug users were sentenced to jail. Imprisonment for alcohol-related offences in male drug users was considerably higher compared to the experience in females. In order to understand the vulnerability of female drug users in particular, we explored issues around their regular partnerships. About thirty percent of the female drug users (21/74) reported having regular sex partners. Alcohol and drug use among those regular sex partners was reportedly high (12/21; 57% and 10/21; 48% respectively). It was a matter of concern to note that about 20 percent of the female drug users reported being physically abused by their regular sex partners; verbal abuse was also reported by a similar proportion of the respondents.

Sexually transmitted diseases among drug users

Eighty-six percent of the drug users (850/991) reported having experience of sexual intercourse. The mean and median age at first sexual intercourse among them was 17 years (SD 3). Condom use during first sexual intercourse was however low at 38 percent. Of the sexually active drug users, eighty-five percent reported having sex within the last one year (719/850). Twenty-nine out of the total 917 male drug users (3%) reportedly 'ever had sex' with a male partner.

Fifteen percent of the male (99/681) and 34 percent (13/38) of the sexually active female drug users ever within the last one year had either ulcers or warty growths around the genitalia or burning sensation during urination or discharge of pus per urethra. Specific inquiry in the NBA on vaginal discharge among female drug users who had had sex within the last one year revealed that 63 percent of them (24/38) suffered from white vaginal discharge.

TABLE 1: Alcohol and cannabis use reported by students

Self-reported substance use	VII-VIII	IX-X	XI-XII
	(Total respondents-7311)	(Total respondents-6948)	(Total respondents-6498)
	Number (%)	Number (%)	Number (%)
Alcohol use by students			
Once	1950 (27)	2060 (30)	1908 (29)
Sometimes	757 (10)	1271 (18)	1899 (29)
Daily	19 (0.25)	26 (0.37)	33 (0.5)
Cannabis use by students			
Once	539 (7)	633 (9)	839 (13)
Sometimes	242 (3)	395 (6)	557 (9)
Daily	26 (0.35)	49 (0.7)	53 (1)

School-based assessment findings

School-Based Assessment (SBA) was carried out in 60 schools (49 government and 11 private) spread over 14 Dzongkhags. Self-administered questionnaires were used in the SBA as a data gathering tool. The total number of questionnaires distributed to students was 27,080, and after they were returned 6,323 of them were rejected due to data gaps.

Drug use among school students

Drug and controlled substance use by school students was examined by analysing self-reported responses stating 'never', 'just once', 'sometimes or occasional' and 'everyday or daily' use of them. Daily tobacco use was found to be 5 percent (VII–VIII) and 8 percent (IX–X) in male students, while in case of female students from these classes, it was found to be less than 1 percent. However, higher prevalence of use was reported from classes XI–XII (13% and 1% in males and females respectively). Daily solvent use (sniffing) was reported only by 1 percent of male students from classes IX–X and the proportion of daily use was less than 1 percent for the rest across the classes. Detailed information on alcohol and cannabis use by school students can be obtained from the tabular presentation in this section.

Alcohol or drug-related problems in the family

In case of higher class students, we examined whether 'seeing alcohol-related problems in the family' was associated with 'self-reported use of alcohol'. The association turned out to be statistically significant. Drug use-related problems in the family were reported by one-fourth of the students from the higher classes.

Knowledge of HIV/AIDS

A very high percentage of students in classes VII–VIII had heard about HIV (97%, 7093/7311) and AIDS (6903/7311; 94%). The top ten sources of information on HIV/AIDS cited by these students in decreasing order were 'Television', 'Teachers', 'Friends', 'Family members including parents', 'Hospital/Health centre staff including doctors', 'Newspaper', 'Radio', 'Drama/skit', 'elders in the society' and 'movies'. The sources were mostly multiple from where one had received information.

A set of questions was posed to the students of higher classes to examine if they had in-depth knowledge about different routes of HIV transmission. Ninety-nine percent of students in classes IX–X (6894/6948)

and an equally higher proportion in XI–XII (6480/6498) had heard of the word HIV or AIDS. However, it was a matter of concern that about 15 percent of the students thought that HIV cannot be acquired by having sex just once without a condom. A considerable proportion (IX–X 1630/6894; 24% and XI–XII 1203/6480; 19%) also reported that HIV cannot be acquired by having sex with a healthy-looking person. These findings clearly provide the direction, which the future awareness campaign should take.

Self-reported sexual practices by school students

Sexual practice-related questions were incorporated in data collection tools distributed only to the students in class IX and higher. Twenty-seven percent of the male (901/3328) and 1 percent of the female students (30/3620) from class IX–X reported ever having sex. Although the proportion was higher for male students in classes XI–XII (1358/3292; 41%), the proportion of female students reporting ever having sex remained the same (1%; 34/3206) as with students from classes IX–X. The mean age at first sex among male students of classes IX–X was 14 years (median 15; SD 3) and that of females was 15 years (median 16; SD 3). Reported age at first sex was a little higher in the students in XI–XII. Of the male students from classes IX–X who reported having sexual experience, 46 percent (417/901) had had sex in the recent past (within the last one year) while the figure was 37 percent for female students from the same educational standard (11/30). About 47 percent of both male and female students from classes XI–XII had been sexually active in the recent past.

Condom use during the first sex act was reported by 41 percent of the male students (366/901) and 53 percent (16/30) of the female students from standards IX–X; which did not differ much with condom usage reported from students of higher classes (XI–XII male - 598/1358; 44%, female-17/34; 50%).

Findings related to drug treatment services in the country

Currently, detoxification services are available only at the Government-run Psychiatric unit in Jigme Dorji Wangchuk National Referral Hospital (JDWNRH), Thimphu. The unit has a capacity of 8 beds to cater to all psychiatric illnesses including those who seek services for drug/alcohol dependence. A total of 14 people received treatment for various drugs/alcohol-related problems in 2008 from this unit. As of now, no private

detoxification service exists in the country. One centre for 'residential treatment cum rehabilitation services' was set up in the month of August 2009 by Youth Development Fund – an NGO under the guidance of BNCA. The centre is supported by RGoB in collaboration with UNODC and UNICEF. It is designed to cater to only male clients (maximum of 12 at a time) and the duration of stay for each inmate is 3 months.

There are currently 3 Drop-in-Centres (DIC), one each in Thimphu, Phuentsholing and Gelephu, supported by RGoB in partnership with UNODC and UNICEF. Apart from peers reaching out to the drug users in the area, the DICs also provide education on ill effects of drug use, HIV/AIDS and related issues, counselling for drug-related problems and medical support through referral to the government hospitals. In 2009 (till the end of July) these peer outreach workers regularly reached out to 286 drug users (237 male 49 females), among them 2 were IDUs (both male).

Conclusion and recommendations

The current National Baseline Assessment has clearly addressed the much awaited information need on drug use patterns in wider geographical areas of Bhutan beyond the capital city of Thimphu and the bordering town of Phuentsholing. Collating information on female drug users has also added strength to the current NBA. Furthermore, issues related to alcohol use related morbidity and admission to the hospitals, have been explored through analysis of secondary data. It is now evident that country-wide intervention programmes for drug users have to take poly drug use into cognisance alongwith alcohol use, keeping gender perspective at its centre.

Sexually transmitted diseases and their potential role in driving an HIV epidemic in a population group is now common knowledge. However, recognising the existence of such a potential and mounting an effective response to stem such a possibility early on in Bhutan, would be assisted by the data generated through the current study. Insufficient understanding about the drug-HIV link among study participants, low test uptake for HIV, syphilis and other blood-borne infections by drug users during the current assessment, and the lack of specialized service provisions for comorbidities experienced by drug users, demand urgent intervention-attention.

Finally, the component of school based assessment throws light on drug use patterns and sexual practices among school-going youths, and therefore complements

the information generated from communities. A wider and comprehensive picture of the drug use scene in Bhutan has thus emerged, which was a major expectation of the entire exercise. The attitudes of communities towards drugs and drug users were explored as well, which would help fine tune the intervention design to follow.

Overall Recommendations

1. Under the leadership of the Narcotic Control Board, strengthen and strategise programming at regular intervals. Commissioning Dzongkhag-specific small-scale 'situation update and intervention development' studies, particularly focusing on areas that have recorded injection drug use and presence of female drug users under NBA, should form the mainstay of such programs.
2. Establish drug treatment facilities and allied services to work in close coordination with health services and educational institutes, at Regional/Dzongkhag levels in areas where evidence of considerable presence of drug use has been found through the current NBA.
3. Link school-based programmes with community based activities (focusing on adults and family members) where parents should be actively engaged.
4. Organize structured training programs to enhance capacity of health care professionals, social workers (peer outreach workers, peer counsellors) and school counsellors on early identification of alcohol and drug-related morbidities in the community, and plan offering appropriate services at local levels.
5. Design and implement sensitisation programmes for law enforcement officials and the judiciary to provide appropriate services to drug users.
6. Commence service programmes for drug/alcohol-dependent females on a priority basis in the Dzongkhags where the current assessment has identified their presence.
7. Institute stigma reduction initiatives in communities as well as government/private service initiatives.

Community-specific recommendations

8. Ensure community participation for various drug intervention programmes through well designed community engagement plan by involving Multi-Sectoral Task Force (MSTF) at Dzongkhag (district) and Gewog (block) levels.

9. Initiate or expand (as applicable) peer outreach intervention in the community/Dzongkhags that have been identified with current use of heroin (brown sugar), pharmaceuticals and injecting drug use. In order to facilitate these interventions, community-based Drop-in-Centres need to be established as starters.
 10. Initiate women-led and women-friendly drug treatment services for female drug users in communities/Dzongkhags reporting their presence.
 11. Integrate HIV/STD diagnosis and treatment facilities with community based intervention projects for people using drugs/alcohol.
- School-specific recommendations**
12. Create supportive environments in schools by consulting students and actively engaging them in programme planning, implementation and evaluation of school-based awareness activities.
 13. School-based parenting and health education programmes should address drug prevention education along with assistance for those who wish to avail confidential 'substance use treatment' services without any form of coercion.
 14. Establish prevention education in school curriculum in the context of 'life-skills training' and in conjunction with appropriate engagement of international and national level stakeholders. Policy formulation and strategic programming will play a key role in success of this approach.
 15. Finance innovative projects that would provide opportunities for inter school learning, cross-fertilisation of ideas and development of nodal teachers where ex-drug users and school students could work hand in hand.

1. Introduction

Bhutan is located on the southeast slope of the Himalayas, bordered by India in the east, south and west and by Tibet in the north (see map). The four Indian states with which Bhutan shares its border in the east, south and west are respectively Arunachal Pradesh, Assam, West Bengal and Sikkim, extending over a linear length of 600 kilometres. Approximately forty percent of the people live in the border districts of Bhutan and their movement across these borders is not difficult. It is important to note that in the 1990s some of the districts in these bordering States of India witnessed a shift (Panda 2006) in psychotropic substance use among youths from traditional (alcohol, cannabis, opium and areca nut) to non-traditional forms (brown sugar¹ and pharmaceuticals). Investigations in the recent past captured evidence of use of brown sugar and pharmaceutical use in the capital city of Thimphu (Kumar 2008) and the bordering town of Phuentsholing (Panda et al 2009) in Bhutan as well. However, this does not imply that traditional substance use was entirely replaced by newer forms of use and types of substances. The present prevailing pattern in the country is thus of a mixed nature. The current report moves beyond this common knowledge and describes the situation of substance use in wider geographical areas (Dzongkhags or districts) of Bhutan.

Socio-demographic context

As per the 2005 census, the total population of Bhutan was 6,72,425 (male 3,64,482 and female 3,07,943) with an overall sex ratio of 110 males per 100 females and population density of 16 persons per square kilometre (Office of the Census Commissioner 2005). Population figures projected for 2009 in Bhutan is 6,83,407. Thirty-one percent of the people live in urban and the

rest in rural areas, and 62 percent of the Bhutanese in the country belong to the age group 15 to 64 years, giving rise to a middle-heavy population pyramid structure. While overall literacy in males is 69 percent and females 49 percent, a marked difference in literacy exists between urban and rural settings (males 83% vs 63% and females 68% vs 41% respectively). The first national election held in 2008 marks the transition of Bhutan from an absolute monarchy established 100 years ago in 1907 to a democracy. Apart from this recent shift in political and administrative structure, Bhutan has also witnessed over the last four decades a growing trade with the neighbouring countries such as India, Nepal and Bangladesh, which has resulted in greater movement of people from and within the country. Simultaneously, subsistence farming, on which two-thirds of the Bhutanese used to depend for their livelihood, began to face problems due to the deterioration of traditional systems of labour mobilisation, increased mammalian pests and rural-urban migration. All of these form the socio-cultural milieu in which the present assessment of drug and controlled substance use was conducted.

The socio-economic changes described above had its impact on school enrolment during the period 1961 to 2004. The shift in interest of people from traditional monastic education to the modern system was underlined by an increase in the number of students from less than 400 in the late 1960s to around² 155,234 in 2004. The estimated gross primary school enrolment rate also increased from 0.2 percent in 1961 to 84 percent in 2003 (Ministry of Education, 2004). However, poor academic performance, unemployment and stresses of urban life posed challenges to some of the local youths. It is known that 'drug use' can make

¹ Impure variety of heroin

² The figures include students, trainees and learners enrolled in 433 schools, 14 institutions and 455 non-formal education centres facilitated by 5,216 teachers.

in-roads in such situations. There is also the evidence generated through the Phuentsholing study (Panda et al 2009) referred to earlier in this section. Based on all this we designed a component in addition to the community-based assessment under the current national study, which examined issues around drug use by school students. The link of HIV with drug use – either due to unsafe injecting practices or unsafe sex under the influence of drugs and the resulting HIV epidemic in the neighbouring countries – provided further rationale for such expansive investigation.

Assessment through partnership

It is worth noticing that the Royal Government of Bhutan (RGoB) has acted early to initiate HIV/AIDS prevention activities in the country. In its Tenth Five Year plan (2008–2013), the RGoB intends to adopt and implement a National HIV/AIDS Policy which will support additional measures to prevent mother to child transmission, provide anti retroviral treatment and standardised care and support for people living with HIV/AIDS, besides the general efforts toward prevention. Thus the objective was preventing escalation of drug use and HIV in Bhutan while supporting the costs of providing comprehensive treatment and care. However, given this background, treatment and care has to be considered in the context of resource scarcity, competing demands, gaps in the surveillance data and weaknesses in the risk and vulnerability analysis in the area of drug use and drug driven HIV. Accordingly, the United Nations Office on Drug and Crime (UNODC) started working with the RGoB to further the national response in the country. In the process, UNODC has been collaborating with the BNCA (set up in 2006) to address drug-related problems and responses in the country, 'National STI & HIV/AIDS Prevention and Control Program' (NACP), Ministry of Health (MoH) established to address HIV/AIDS related concerns and responses, and civil society partner Youth Development Fund (YDF). The efforts through this collaboration have been in the area of evidence generation, capacity building on HIV and drug issues, sensitisation of law enforcement officials, providing technical and financial

support to strengthen BNCA and establishing Drop-In-Centres (DICs) to provide drug users with a safe space to access information and primary health-care. These DICs also ensure comprehensive service delivery to drug users in Thimphu, Phuentsholing and Gelephu through networking. The services comprise outreach activity, education on drug use and drug-driven HIV, safer practices and referrals. Health Information Service Centres (HISCs) run by the MoH, RGoB address the needs of the referred cases by providing services that encompass HIV testing and counselling, Anti Retroviral Therapy (ART), prevention and treatment services for Sexually Transmitted Infections (STIs), viral hepatitis and tuberculosis (TB).

NBA 2009 is the first assessment of its kind that provides a countrywide picture of drug and controlled substance use in Bhutan

Earlier studies

The collaboration between UNODC and BNCA commissioned two studies mentioned in the introductory paragraph of this section – first, an RSRA among drug users in 2005 in Thimphu as a part of the regional assessment in Bangladesh, Bhutan, India, Nepal and Sri Lanka. This was followed by another in depth RSRA in 2008 in Phuentsholing – a town located on the Indo-Bhutan border. Both these studies have demonstrated that it is possible to reach out to the hidden population of drug users. Additionally the study in Phuentsholing piloted investigations on drug use by school students as well as explored cross-border issues. Although these two studies have helped understand the nature of drug use and vulnerability to HIV among drug users in Thimphu and Phuentsholing and yielded valuable information for future intervention development, the evidence is not enough to develop a strategic plan for the whole country. The current NBA aims at bridging this information gap and generates evidence to assist national responses with evidence informed programming.

2. Purpose and Objectives of NBA

The overall purpose of NBA was to help develop interventions based on countrywide information on drugs and controlled substance use.

Objectives

The Objectives of the NBA were:

- a. To characterise drug use patterns at the community level in Bhutan.
- b. To estimate the size of the drug using population in the surveyed Dzongkhags.
- c. To assess the risks and vulnerabilities of drug users to HIV and sexually transmitted diseases (STDs) in various Dzongkhags at the community level.
- d. To identify the extent and nature of drug use and related risk behaviours among students in educational institutions.
- e. To map the existing responses for drug use and HIV prevention, treatment, rehabilitation and risk reduction.

3. Process & Methodology

3.1 Planning & design

Preparation for the NBA on drugs and controlled substance use – 2009, in Bhutan began with BNCA seeking advice on various aspects of the assessment from the board members at the NCB meeting held in early December, 2008. This was followed by a 'Pre-Assessment Exercise' to collect information on areas in the country having drug users. 'Drug use' included use of 'cannabis', 'brown sugar', 'solvent/glue' (sniffing), 'pharmaceuticals for pleasure', and 'injecting'. Information sources used for this exercise comprised police records, interaction with drug users (ex and current) and newspaper reporting. The findings of this exercise revealed that 14 Dzongkhags out of 20 in the country needed to be covered under the assessment of community based drug use scenario.

A study protocol was developed through consultation with international experts, BNCA officials and other stakeholders. Inputs were obtained during protocol development also at the regional level from the H-13 Project team, UNODC Regional Office for South Asia (ROSA), and World Health Organisation South East Asia Regional Office (WHO SEARO). In the last week of April 2009 the Honorable Minister of Education, RGoB chaired a stakeholders' meeting where the protocol was approved. The members of the 'Ethical Review Committee' were present at this meeting and provided critical inputs. Ethical clearance was obtained for undertaking the study in due course.

A comprehensive understanding has been generated through the current assessment in community and school settings in Bhutan

The NBA was conducted in two different settings – a) community and b) schools. While the community-component of the assessment followed principles of

'Rapid Situation and Response Assessment' (RSRA), in the case of schools, self-administered questionnaires were used to generate responses from the students. It is worth noting here that the rapid assessment technique distinguishes itself from the conventional practice of public health science by several methodological approaches, such as rapidity and orientation towards intervention development (Rhodes et al. 1999). Multiple methods and data sources are used in rapid assessments. We ensured applying other principles as well while conducting the RSRA, in addition to studying the social, cultural and economic contexts in which population, individuals and their behaviours are situated, and that the emphasis should rest on community participation. These are crucial in achieving synergy in activities among different stakeholders. It is also of paramount importance to appreciate that implementation of any intervention design based on the findings of rapid assessment requires political commitment.

The questionnaires used for NBA allowed us to collect information on socio-demographic aspects of the drug users and also the family structure in which the school students lived. Furthermore, key informant interviews conducted with the community members – including opinion makers and focus group discussions carried out with the drug users highlighted issues related to effects of drug use on the families as well as the communities. These original data sets will be preserved by BNCA to serve as a basis for comparison in future, and also to help prepare Dzongkhag-specific information brochures. However, the existing social taboo regarding drug use and the strained relationship between drug users and their families did not allow direct interviewing of family members by us. Information on drug/substance use, sexual practices, interface of drug users with law and enforcement and HIV/AIDS knowledge was collected under the present assessment.

In order to avoid duplication of responses and overlapping, those attending schools were not interviewed during the community-based assessment. UNODC provided technical assistance to BNCA and the NACP in Bhutan in order to facilitate appropriate execution of the assessment plan. Based on the inputs obtained during designing of the assessment from WHO SEARO, BNCA and NACP, the NBA-team intended to generate behavioural data from the drug using population in the community. A semi-structured questionnaire was used for this purpose. It was also decided that during the community-based assessment among drug users in Thimphu, Gelephug and Phuentsholing, opportunity for blood tests for HIV, syphilis, Hepatitis B and Hepatitis C would be offered free of cost on a pilot basis. Future planning for service provision would be carried out based on the experience of this exercise.

3.2 Criteria and principles followed

Anybody of age 18 years or above, who ever used drugs (defined above) and provided voluntary informed consent to participate in the study, was interviewed during CBA. Such contacts were established with the help of the local current drug users who were recruited as 'short term staff' from various Dzongkhags. Observing drug use practice was also attempted by NBA team members with consent from the practising drug users and no photographs were taken during these observations that could disclose identity of a drug user. Similarly, filled-in interview schedules did not have any personal identifier, which could link behavioural data with any individual drug user participating in the study. The questionnaires, which were to be self-administered and distributed at schools, were also unlinked and anonymous. Drug users in the community who decided to undergo tests for HIV, syphilis, Hepatitis B and Hepatitis C, and wished to know their individual test results were provided with a service card, which enabled them to access such services from centres operated by the National STI & HIV/AIDS Prevention & Control Program.

3.3 Training

The NBA team members were trained in 2 phases. The trainees included office bearers of BNCA and a partner NGO working in Thimphu, the capital city. Interviewers from mixed educational and experiential background (some of whom had past drug use history) participated in this training.

The first phase (26–27 April, 2009) focused on the steps of RSRA and analysis plan. The objective of this phase was to share knowledge regarding RSRA with the participants and provide skills in conducting the study. The international consultants who are authors of the present report were primarily responsible for conducting this training. The training also engaged the participants in discussion on analysis of study findings which would contribute in further development of intervention. A good mix of theoretical and practical sessions comprised the training methodology. Feedback was obtained every day in the morning on the previous day's sessions in order to customise the training as per the needs of the participants. The second phase of the training (29 April–1 May) revolved around 'tool development' such as 'secondary data collection format', 'one-on-one questionnaires' and 'focus group discussion (FGD) guide' and how to use them. Table 2 captures activities of the NBA team at different points in time including the development of study design and conducting of training.

3.4 Service provision for respondents

Some of the drug users who were met by the NBA team during community based assessment, asked for various drug treatment services ranging from detoxification to rehabilitation. Cases of intoxication or overdose needing treatment were also encountered. They were sent to the Jigme Dorji Wangchuk National Referral Hospital (JDWNRH) in Thimphu (with the name of the contact person Dr Chencho Dorji, consultant psychiatrist and technical advisor to the National Mental Health Program, Bhutan) as appropriate. However, participation in the study was not a pre-condition for the drug users to be able to avail of these services. Similarly, respondents complaining of STD related symptoms were provided information on treatment-related services, while in a few cases they were taken to the local hospital by the interviewer. Subsequently, these hospital attendees were referred by the respective hospital staff to HIV Voluntary Counselling & Testing Centres operated under the MoH, RGoB.

3.5 Scopes & limitations

The uniqueness and strength of the present study rests in its design, which allowed exploring the drug use scenario in the community as well as in schools. It is also worth noting that Bhutan as a country has undertaken such an extensive endeavour at a very early stage of the substance use epidemic in the country. The information generated from schools would clearly provide impetus

TABLE 2: Work-time milestones

Activities	Time frame
First presentation of NBA to the NCB members	1 st week of December, 2008
Preliminary assessment of drug use based on anecdotal evidence	2 nd week of February, 2009
Meeting and teleconference between BNCA, Project H-13 team, UNODC ROSA representative, WHO SEARO representative and the international expert for the NBA regarding setting the target group, developing the protocol and methodology etc.	2 nd week of March, 2009
Meeting between NACP and BNCA on conducting the biological surveillance as part of the NBA	4 th week of March, 2009
Finalisation of the protocol, methodology, target groups, coverage area, tools (data collection guide/questionnaire etc), work plan, in discussion with BNCA and other stakeholders	3 rd week of April, 2009
Training of the Assessment Team members	3 rd week of April, 2009
Received clearance from Ethical Review Board for NBA	3 rd week of April, 2009
Data collection from field	2 nd week May – 2 nd week August, 2009
Data entry and cleaning	3 rd week of May – 2 nd week October, 2009
Analysis and report writing.	October, 2009

**Figure 1: 'NBA field team during training'**

to future plans for primary prevention of drug use. This study is therefore going to play an exemplary role in the region and for other developing countries, where resource utilisation plans would depend on the current situation update report. Furthermore, this report would facilitate developing various intervention activities as well as the establishment of care and support services. The present study is also the first of its kind in Bhutan in terms of generating country wide information on drugs and controlled substance use. However, owing to the fact that the 'drug using population' represents 'hard to reach individuals' and that drug use is not a socially

approved phenomenon in Bhutan as in other countries, the present study faced a few challenges as follows:

- The lack of any preliminary countrywide report on drug use in Bhutan necessitated undertaking a pre-NBA exercise on information gathering, so that some form of national representation could be obtained.

Cross-sectional nature of the assessment provides an important snapshot of drug and controlled substance use in the country

- While the study team had to follow the 'convenient purposive sampling technique', the engagement of current drug users allowed establishing contact with local drug users in each of the assessed Dzongkhags.
- Limited uptake of blood tests offered to the drug users in Thimphu, Phuentsholing and Gelephu did not allow estimating the actual HIV and other blood-borne disease burden in these areas as well as the related service needs for the requisite care and support.
- The attempt towards triangulation around some of the issues identified in the design were constrained by the non-availability of appropriate secondary data such as – emergency room data for drug overdose, drug use-specific admission-related data (not aggregated with poisoning data) in hospitals etc.

Currently detoxification services are only available at the Government-run Psychiatric unit in Jigme Dorji Wangchuk National Referral Hospital (JDWNRH), Thimphu and that too in a very limited way

- Self-administered questionnaires used in schools did not allow clarifying issues when they were not clear to the students; nor did it provide an opportunity to check if the logical flow between

linked questions was understood properly by the respondents.

Ever use of heroin found in 12 out of 14 Dzongkhags covered under the NBA; heroin use in the last one month (current use) found in 6 out of these 12 Dzongkhags

- The key issue in using the 'multiplier method' is the need to have clear, consistent definitions between different data sources. First of all, the population definitions must be clear. For example, in principle it should be possible to use the statistics of the proportion of imprisoned drug users (derived through survey/interviews), together with the actual number of drug users in prisons, to arrive at an estimate of the total number of drug users in a country. Secondly, the time reference period must be clear (for example, imprisonment within the last one year of the assessment) and must be the same in both the data sources. Thirdly, the age range of the population to be compared must be similar. Finally, the catchment area for the services or institutions (e.g., jail) must be clear and should ideally be the same as that covered in the sub-population from which multipliers are derived (UNAIDS 2003). Fulfilling these assumptions posed hurdles for the NBA team.

4. Community-based Assessment Findings

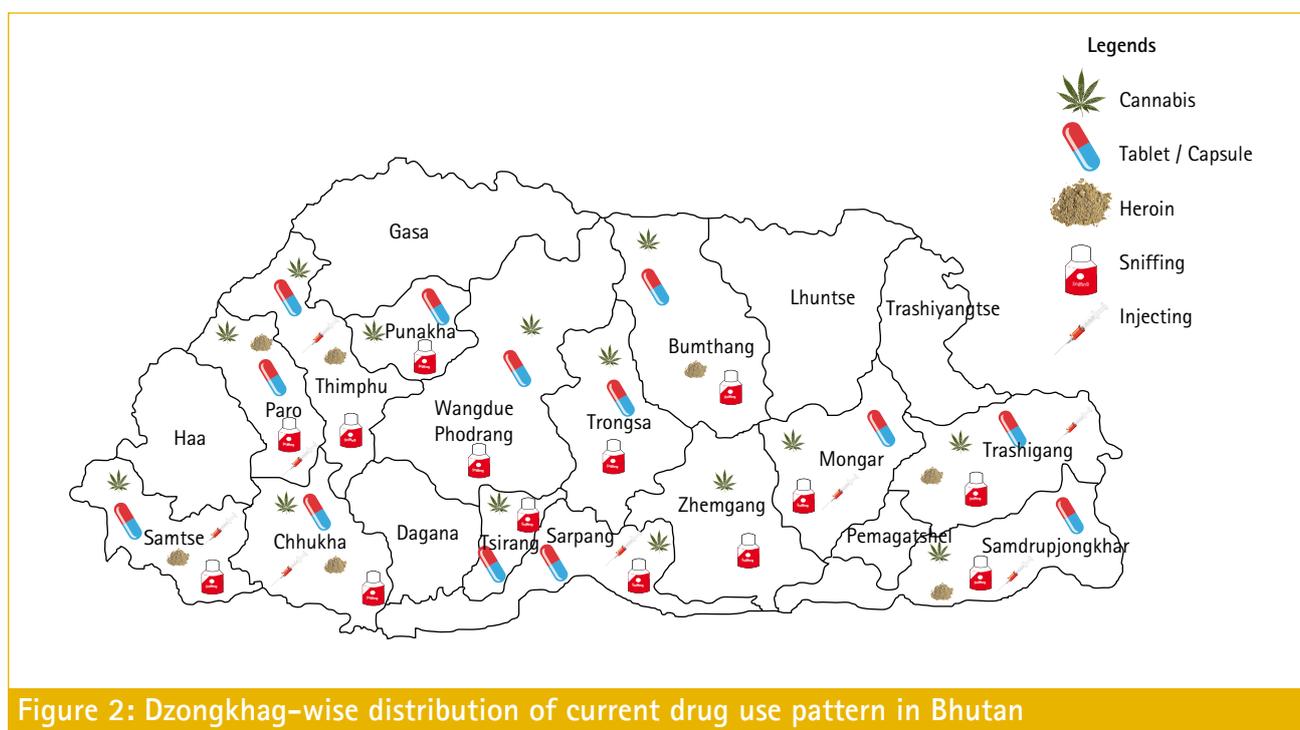


Figure 2: Dzongkhag-wise distribution of current drug use pattern in Bhutan

Cannabis use and glue-sniffing was reported from all the 14 Dzongkhags and pharmaceutical use was reported from all of them except one (Zhemgang); the types of pharmaceuticals being codeine-containing cough syrup, benzodiazepine or nitrazepam tablets, dextropropoxyphene and antihistaminic tablets. Current dextropropoxyphene use was reported by 63% of the interviewees from Samdrup Jongkhar, and 48% of the respondents from Trashigang reported using codeine- containing cough syrup

4.1 Dzongkhag-wise distribution of drug use

Current drug use was defined during NBA as use of a substance under consideration of the present study within the last one month from the date of interview. The

spot map (figure 1) indicates the Dzongkhags reporting current drug use. Cannabis (marijuana) smoking and glue-sniffing was reported from all the 14 Dzongkhags studied under the current national assessment (see annex 1 for detailed distribution of use of various substances). All 8 respondents recruited from Zhemgang

and more than 90 percent of the respondents from Samdrup Jongkhar (30/33) reported current cannabis use. While about 60 percent of the respondents from Trongsa (8/14) reported glue-sniffing, the lowest use-report came from Zhemgang Dzongkhag (1/8; 13%).

Brown sugar smoking within the last one month was reported from six Dzongkhags (Bumthang, Paro, Samdrup Jongkhar, Samtse, Trashigang and Thimphu) by 1 to 13 percent of the respondents – being highest in Samtse (13%) and lowest in Thimphu (1%).

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Current yaba (amphetamine type substance) use was reported only from Thimphu (2/350) and Tsirang (1/22) by a very low proportion of the drug users interviewed.

Heroin injecting within the last one month was reported only from Monggar and Samtse. However, from these two Dzongkhags, buprenorphine, pethidine and benzodiazepine injecting was also reported by 3 to 6 percent of the respondents. Reported current injecting of dextropropoxyphene in Samtse was high (13%). The other Dzongkhags (except Zhemgang, Trongsa and Punakha) witnessed current injecting of the pharmaceuticals mentioned above within the last one month which was reported by 1 to 6 percent of the respondents.

Heroin (brown sugar) injecting within the last one month was reported only from Monggar and Samtse. However from these two Dzongkhags buprenorphine, pethidine and benzodiazepine injecting was also reported by 3 to 6% of the respondents. Proportion reporting current injecting of dextropropoxyphene in Samtse was high (13%)

Estimation of the size of drug users

Secondary data collected during field work revealed that information pertaining to drug overdose-related emergency room attendance at the hospitals, deaths

due to drug use, records of drug-specific arrests and sentences at the departments of law enforcement, were either not available or inconsistent in nature. If recorded, these types of information were not always linked with specific drugs. At times hospital admissions due to poisoning with pesticides also featured under drug-related morbidity records. Similarly, substances seized or arrest records for drug offenders also did not follow a similar reporting format over a period of time (BNCA Annual Report 2007, BNCA Annual Report 2008). Consequently, as the multiplier technique that was decided to be employed to arrive at the estimated size of the drug using population for various substances in different Dzongkhags, is dependent on good institutional record keeping, we were unable to generate estimated sizes. The table in annex 1, however, presents the number of drug users recruited for interviews from each of the 14 study-Dzongkhags and this provides a preliminary estimate which would pave the way for a robust estimation exercise to be undertaken in the future.

4.2 Socio-demographic profile

Data was collected from 1048 drug users in the community through administration of pre-tested questionnaires in a language comprehensible to drug users in 14 Dzongkhags out of the 20 in the country. Drug use was defined as 'ever use of cannabis, brown sugar or pharmaceuticals for pleasure or sniffing of glue, petrol or correction fluid'³. Anyone who was 18 years of age or above was eligible to be interviewed. However, those presently attending schools were not interviewed, as the school-based component of the NBA, explored drug use-related issues among school students in Bhutan. Following rejection of some of the filled-in questionnaires due to data gaps and inconsistencies, 991 records were available for final analysis under CBA.

In order to examine whether the profile of drug users and drug using pattern was different when compared between areas proximal to the Indo-Bhutan border, the capital city of Thimphu and areas away from the

³ These substances are particularly abused by the very young, no doubt largely because these are accessible at home and in ordinary shops and this group cannot easily buy alcohol or 'street' drugs (although this later may be changing as dealers target the youngest). Central Nervous System (CNS) effects include confusion and hallucinations, ataxia, dysarthria, coma, convulsions and respiratory failure. Kidney, lung and heart damage also occur. Sudden cardiac death may take place due to sensitisation of the heart to endogenous catecholamines (Bennett & Brown 2003). Toluene or benzol present in these solvents in addition to producing delirium together with presumably sought-after hallucinatory experiences, can also lead to liver failure. Another fatal complication is asphyxia which may be the outcome of using plastic bags to facilitate the sniffing process (Trethowan & Sims 1983). Signs of frequent volatile substance abuse include peri-oral eczema and the upper respiratory tract inflammation.

TABLE 3: Socio-demographic profile of the respondents interviewed in community settings

Profile	Areas proximal to Indo-Bhutan border*	Areas in the capital city of Thimphu	Areas away from the capital as well as Indo-Bhutan border	All respondents
	n ₁ =321 (%)	n ₂ =350 (%)	n ₃ =320 (%)	N=991 (%)
Age in years				
Median	22	23	22	22
Mean	23	24	23	23
Range	18-38	18-42	18-67	18-67
SD	3	5	4	4
Marital Status				
Unmarried	274 (85)	272 (78)	262 (82)	808 (82)
Lives with spouse	37 (12)	50(14)	39 (12)	126 (13)
Married but separated or divorced	6 (2)	26 (7)	15 (5)	47 (5)
Education				
Never attended school	6 (2)	21 (6)	25 (8)	52 (5)
Attended school	315 (98)	329 (94)	295 (92)	939 (95)
Level of education (school attendees used as denominator)				
Lower than primary	5 (2)	8 (2)	18 (6)	31 (3)
Primary (IV th standard) completed	21 (7)	19 (6)	33 (11)	73 (8)
Lower secondary (VIII th standard) completed	42 (13)	42 (13)	21 (7)	105 (11)
Middle secondary (X th standard) completed	103 (33)	112 (34)	72 (24)	287 (31)
Higher secondary (XII th standard) completed	129 (41)	125 (38)	117 (40)	371 (40)
Bachelors degree and others	15 (4)	23 (7)	34 (12)	72 (7)

* The areas proximal to the Indo-Bhutan border where community-based drug use assessment was conducted were Samdrup Jongkhar, Zhemgang, Sarpang, Gelephu, Phuentsholing and Samtse.

border as well as the capital, we categorized the entire data set in three such groups. The socio-demographic profiles of the respondents are presented accordingly (table 3); 93 percent were males and the rest females (917 and 74 respectively).

No difference in age was observed among drug users recruited from different areas for interview. One-tenth of the respondents were married. The majority (>90%) of the drug users attended schools. Forty percent of the drug users who attended schools had completed higher

secondary and about 20 percent had lower secondary (VIIIth standard) or a lower level of education.

4.3 Alcohol and drug use by the respondents

A relatively higher proportion of the respondents recruited from areas proximal to the Indo-Bhutan border reported 'ever use of alcohol' (294/321; 92%) as compared to the respondents from the capital city (271/350; 77%) and areas away from border as well as from the capital (26/320; 83%). However, the mean age at onset of alcohol use was 16 years in all these areas (median being 17; SD 3 years). Investigations on alcohol use patterns within the last one month revealed that one-fifth of the respondents drank alcohol at least once every day and an equal proportion reported drinking alcohol 1 to 2 days a week. While one-third bought drinks from their own earnings, reportedly about

Eleven percent of drug users in Bhutan reported ever injecting drugs. The drugs injected are heroin (brown sugar), either used alone or along with other substances such as buprenorphine, dextropropoxyphene, antihistaminic preparations, pethidine and benzodiazepines that are also injected.

40 percent of alcohol users were dependent on others to obtain such financial support. All these findings indicate that intervention for drug users should take concomitant use of alcohol into account.

We incorporated the CAGE⁴ questionnaire in our investigation and the data revealed that based on CAGE criteria, about 65 percent of the respondents had alcohol dependence. On the contrary, only 5 percent of alcohol users reported ever receiving treatment for 'problem alcohol use' and more than 70 percent of them returned to alcohol use after treatment.

Analysis of 'drug use within the last one month' revealed that the overall proportion of current cannabis use among those who reported ever smoking cannabis was 65 percent; whereas current heroin use among ever users of heroin (an impure variety is available in Bhutan) was 12 percent. While approximately one-third of the respondents from areas proximal to the border, in the capital or distant locations reported using codeine-containing cough syrup, about 34 percent of all interviewees had currently used nitrazepam tablets.

The proportion of drug users reporting glue-sniffing within the last one month varied from 12 (areas in the capital city of Thimphu) to 37 percent (non-border and non-capital areas). The current use of yaba (amphetamine type substance) was noted among a very low proportion (1%) of drug users as compared to other drugs, and remained restricted only to Thimphu and a few other locations.

84% (766/917) male and 88% female drug users (65/74) had reported 'ever use' of alcohol.

Ninety-eight male drug using respondents (98/917; 11%) and only one female respondent reported ever injecting drugs. The drugs used for injecting were heroin, used either alone or along with other substances such as buprenorphine, dextropropoxyphene, antihistaminic preparations, pethidine and benzodiazepines that are also injected. A higher age at onset of injecting drugs was observed when compared with the age at onset of alcohol use; (mean being 19 to 20 years in different areas, median 20, the range being 12 to 27 years for areas in the capital as well as distant locations and 15 to 34 years in areas on the Indo-Bhutan border).

⁴ a) Have you ever thought you should 'Cut down' (reduce) your drinking? b) Have people ever 'Annoyed' you by criticizing your drinking? c) Have you ever felt bad or 'Guilty' about your drinking? d) Have you ever had a drink the first thing in the morning (Eye opener) to steady your nerves (i.e. reduce tremors) or to get rid of a hangover (i.e. headaches etc.)?

The daily expenditure related to alcohol use by drug users was about 150 Nu in the capital city and 200 Nu for other areas. For drug use the figure was about 200 Nu in various places.

4.4 Drugs – street price, setting and practices

Among all the substances reported to be used by drug users, cannabis appeared to be the cheapest at 5 to 10 Nu⁵ per small packet. In some places it is collected straight from the cannabis plants which grow wild in different parts of Bhutan and therefore need not be purchased. While the cost of 10 nitrazepam tablets or dextropropoxyphene tablets/capsules varies from 40 to 80 Nu in Phuentsholing, the street price goes three to four folds higher in the capital city of Thimphu, probably reflecting cost escalation due to transportation of drugs to the interior of the country.



Figure 3: Pot with cannabis in it

Among all the drugs, the cost of brown sugar on the street was reported to be highest – 250 to 300 Nu per 'small packet' in Phuentsholing.

Information generated through FGDs with drug users indicated that drugs are secretly used in places like forests, bushes and river side or deserted

⁵ Ngultrum, (in short Nu), is the currency of Bhutan. One US\$ is equivalent to almost 48 Nu.

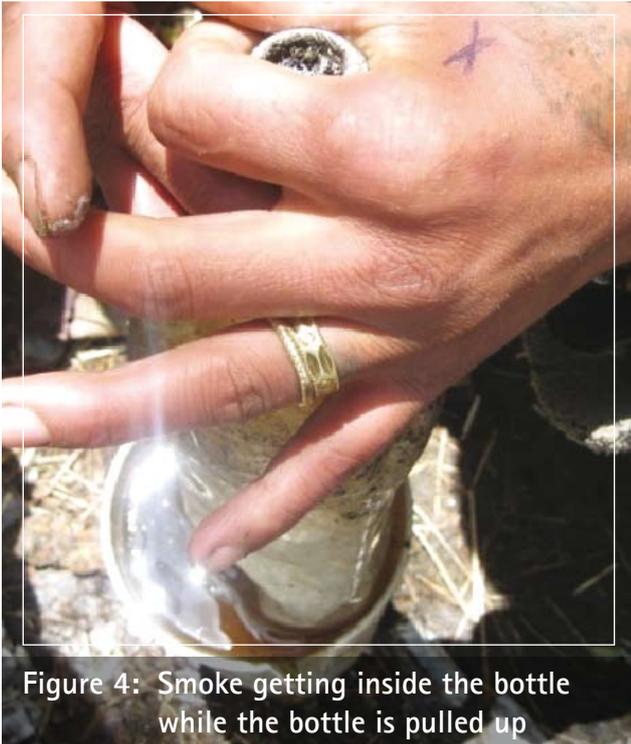


Figure 4: Smoke getting inside the bottle while the bottle is pulled up

huts. The drug users feel safer in such settings. Information obtained from key informants such as district education officers, police officials and medical practitioners corroborated these findings (vide verbatim cited below):

"Yes, we have many places [to use drugs] far away from this area, such as the river bank, the forest and bushes for our safety."

-FGD with Drug users – Changjj, Thimphu

"Their favourite places are the empty huts below the school area. We cannot go there since they become violent and disturb the community."

-District Medical Officer, Trongsa

"The place where they use drugs are under the bushes below the Sherubling and the hospital."

-District Education Officer, Trongsa

"Spots are areas fenced with railings, haunted houses, smoke rooms, forests, behind Mick hall and the river side."

-FGD with drug users, Upper market Phuentsholling

Although actual drug use practice could not be observed for most of the substances during RSRA due to difficulty in accessing places where drug users congregate to use

drugs as well as the clandestine nature of drug use, we could document a unique method followed by marijuana users in many parts of Bhutan, known as 'gravity'. The method is described below.

An empty plastic bottle used for packaging mineral water or soft drinks constitutes the main body of the 'paraphernalia'. The base of the bottle is cut and discarded. An aluminum foil from a cigarette packet is turned into a small pipe like structure with the paper from cigarette-packet rolled into a ball (used as filter) to plug one end of this small-pipe. This acts as the 'pot'. Sometimes the broken neck of a glass-made beer bottle which essentially serves as a hollow cylindrical structure is also used as a 'pot'.

The marijuana leaves are cut and 'rubbed' on the palm and then roasted (called black, dope or hash). This is mixed with tobacco from cigarettes and stuffed into the pot. At times dried marijuana leaves are mixed straightaway with tobacco and used for stuffing the pot.

The stuffed pot is fitted in the neck of the plastic bottle (on capped) whose base has been cut open (as described earlier) and this open bottle-base is dipped in a bucket or jug filled with water. The marijuana-tobacco mixture in the 'pot' sitting in the neck of the bottle is then lit by a match stick or a lighter and the 'plastic bottle' is simultaneously raised from the 'deeper' water towards the surface but never completely taken out of the water. The vacuum thus caused inside the 'plastic bottle' causes the smoke to get in from the 'pot' due to atmospheric pressure from outside. The plastic bottle

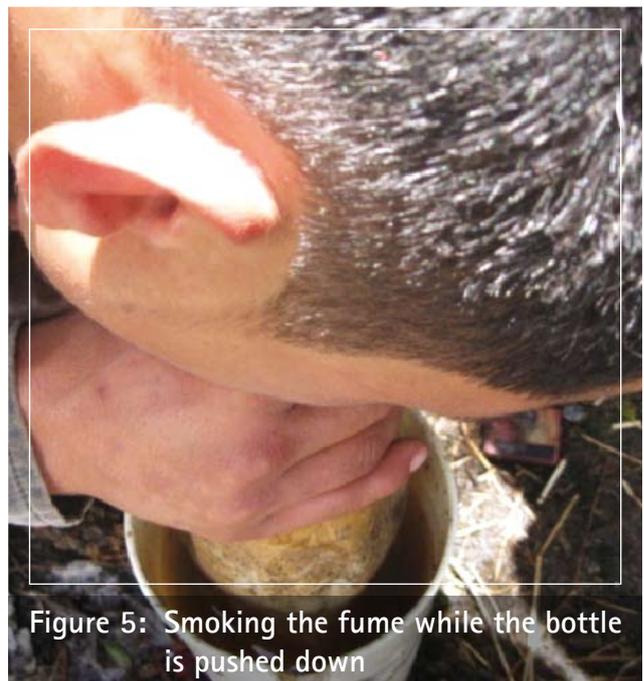


Figure 5: Smoking the fume while the bottle is pushed down

is thus filled with smoke from the 'marijuana mixture' (see figure 2 , 3 and 4). The 'pot' is subsequently removed manually and the user inhales the smoke with his/her lips tightly held around the mouth of the bottle while simultaneously pushing it down into the water. This downward movement of the plastic bottle helps to push or force the smoke out of the 'instrument' resulting in a large amount of marijuana smoke entering the smokers' lungs within a short span of time. The drug users believe that this process (known as gravity) of smoking marijuana gives a better high than smoking by 'rolling' it into a cigarette.

4.5 Injecting Drug Users (IDUs)

The current NBA reached out to 98 male respondents who had ever injected drugs and 31 of them were current (having injected within the last one month) injectors. In order to understand the risks and vulnerabilities associated with injecting drug use, they were asked about their needle syringe sharing and sexual practices. It was found that 19 percent (6/31) had ever reported using needles and syringes that had previously been used by someone else. Among these, 67 percent (4/6) had reported using needles and syringes during the last injecting episode that had been used by others. All the current IDUs who reported sharing needles and syringes did so in groups of 2 to 3 persons. A very small number of these IDUs had ever cleaned their needles and syringes; distilled water was used for cleaning.

When asked about their sexual practices, 94 percent (29/31) of the male current IDUs reported having experience of sexual intercourse and 97 percent (28/29) reported having had sexual intercourse in the last one year. Twenty-one percent (6/29) had used condoms during the first sex act, while 79 percent (23/29) reported having used condoms during the last sex act. Among those who reported having had sex within the last one year, 7 percent (2/29) reported painful scrotal swelling, 3 percent (1/29) reported small cauliflower like growths on the genitals and 10 percent (3/29) reported burning sensation during urination within the last one year.

4.6 Female drug users reached out through the National Baseline Assessment (NBA), Bhutan

Among the drug users interviewed (991) in various Dzongkhags, 74 (7%) were females. Majority of the female drug users were recruited from the capital city

of Thimphu (42/74; 57%) and 28 percent (21/74) were recruited from the Indo-Bhutan border areas. The rest were from areas located away from the border as well as the capital city (11/72; 15%). The mean age of the female drug users was 20 to 21 years with a range of 18 to 30 years for all the areas (SD 2 to 3 years). There was no significant difference in age structure when female respondents were compared to their male counterparts with mean age 23 to 24 years (median 22 to 23 years; range 18–67 and SD 4 to 5 years).

Among the drug users interviewed (991) in various Dzongkhags, 74 (7%) were females. Majority of the female drug users were recruited from the capital city of Thimphu (42/74; 57%) and 28% (21/74) were recruited from Indo-Bhutan border areas.

About a quarter of the female respondents were ever married (17/74; 23%) and more than half of them (9/17; 53%) were either separated from their spouses or divorced. On the other hand, 18 percent of the male drug users were ever married (165/917) and a lower proportion reported being separated or divorced (38/165; 38%).

Ninety-five percent (70/74) of female drug users had ever attended schools as was found with male drug users. While 7 percent (5/70) among those attending schools dropped out before reaching middle secondary level, almost half (49%) had completed this level (Xth standard). Contrarily, a higher proportion of male drug users (204/869) dropped out before middle school level and only 29 percent completed middle school. Forty percent of female drug users (28/74) had completed higher secondary level and 4 percent had even completed their bachelor's degree or a higher level of education – findings similar to the data obtained from their male counterparts.

More than two-thirds (49/74; 67%) of the female drug users reported being unemployed – the proportion was higher when calculated separately for the capital city (31/41; 76%).

Eighty eight percent of female drug users (65/74; 88%) had reported 'ever use' of alcohol. The mean age at initiation of alcohol use in different areas was 16 to 17 years (median 16 to 18 years; range 6 to 22; SD 2 to 4) – a similar picture emerged for male drug users. While a higher proportion of the female respondents who reported drinking alcohol had used it at least once every day (male vs female; 20% vs 29%) within the

last one month, the proportion of those having a drinking frequency of one to two times a week was higher for males (male vs female 20% vs 6%).

No difference in drug use pattern was observed between female and male drug users except that none of the females had reported yaba (amphetamine type substance) or heroin use within the last one month. Only one of the 74 female respondents had reported ever injecting drug (heroin). Applying the CAGE criteria included in the questionnaire, 73 percent (48/65) of the female drug users who ever had alcohol were found to be alcohol dependent – closely matching their male (65%) counterparts.

4.7 Drug use, law enforcement and violence-related issues

While, 4 percent (3/74) of the female drug users were arrested for alcohol-related offences, which was eight-fold less than similar events taking place in the lives of male drug users, all the arrested women were sentenced to jail. Imprisonment for alcohol-related offences in male drug users was considerably higher compared to the experience of females. Utilizing this existing interface between drug users and law enforcement, and turning it around to increase the opportunities for drug users to avail of treatment services would constitute a risk reduction intervention measure⁶.

In order to understand the vulnerability of female drug users in particular, we explored issues around their regular partnership. About thirty percent of the female drug users (21/74) reported having regular sex partner. Alcohol and drug use among those regular sex partners

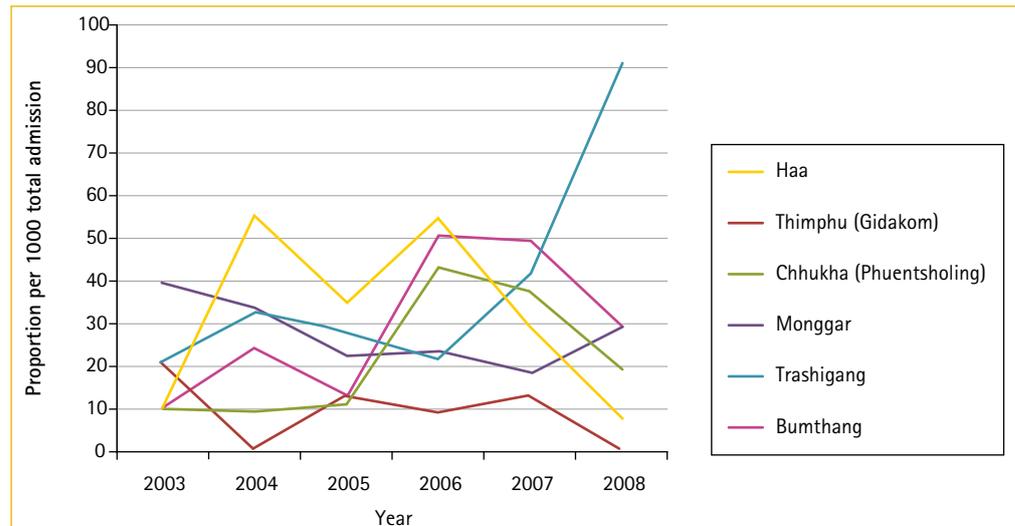


Figure 6: Alcoholic Liver Disease Hospital Admissions (Male)

was reportedly high (12/21; 57% and 10/21; 48% respectively). It was of concern to note that about 20% of the female drug users reported being physically abused by their regular sex partners; verbal abuse was also reported by a similar proportion of the respondents. Given that violence increases chance of STD transmission within a sexual relationship, future intervention development should take these findings into account.

4.8 Alcoholic Liver Disease (ALD)-related admission in select hospitals in Bhutan

As part of the secondary data analysis, the present study examined the change in hospital admission rates due to ALD in different Dzongkhags. Gender dis-aggregated data from select hospitals allowed examination of the records of ALD from hospitals in 6 Dzongkhags, namely, Haa, Thimphu (Gidakom), Chukha (Phuentsholing), Monggar, Trashigang and Bumthang for the period 2003–2008 (figures 5 & 6).

Examination of data revealed that while a bi-modal increase in the rate of ALD admission was noticed in Haa for males in the year 2004 and 2006, there was a noticeable increase in the rate of ALD admission among males and females in Monggar and Trashigang – both situated in the eastern part of Bhutan. The rates in figures 5 and 6 were calculated as the number of alcoholic liver disease-related admissions per thousand total admissions in these hospitals.

The quantitative data generated through interviews with community-based drug users in the current study

⁶ In the text of the provision in the 'Narcotic Drugs, Psychotropic Substances and Substance Abuse (NDPSSA) Act 2005, it is worth noticing that under Section 61 clause 'f' Narcotic Control Board (NCB) is the responsible agency in Bhutan to review the services being provided by MoH, MoE and other relevant stakeholders on an annual basis, and it also orders review of services for education and prevention, early detection, treatment, rehabilitation, after-care and social re-integration of drug dependent persons and drug users.

showed that out of the 74 female respondents, a high proportion (65; 88%) reported to have ever taken alcohol. The percentage of female drug users in areas proximal to the Indo-Bhutan border who had ever used alcohol was 81 percent while it was 91 percent in the capital city of Thimphu and areas away from the capital as well as the Indo-Bhutan border. Only 3 percent (2/65) of the female drug users ever using alcohol were in treatment and

accessed government facilities in Bhutan and centres located outside the country for alcohol-related problems. All of them reportedly went back to alcohol use at a latter phase. Alcohol use among male drug users was similar. In addition to quantitative data, the study examined qualitative information collected through various interactions. These narratives, some of which are cited below indicate that although alcohol use is culturally accepted, there is a mixed perception about alcohol use in the community.

"Women are also creating problems but not that much as men, since they can't tolerate a larger quantity of alcohol or drugs."

–FGD (Males), Changjiji,
Thimphu

"Women drink inside the house."

–Vice Principal, Sarpang High Secondary School,
Trongsa

"Here in this community we don't have any existing services for problems related to alcohol use except the hospital."

–Officer-in-Charge, Local Police Station,
Sipsu, Samtse

"Alcohol is a dangerous drug because we know that due to alcohol use many people are dying."

–Dasho Dzongdag (District Administrator),
Thimphu

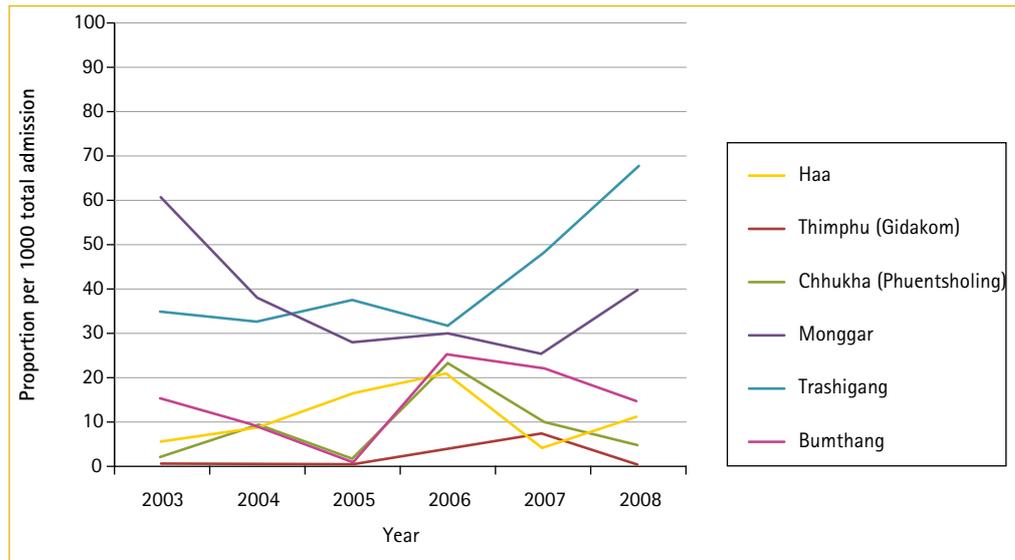


Figure 7: Alcoholic Liver Disease Hospital Admissions (Female)

"Services are available at DIC, DYS, hospital, rehab (has just started) and there is a huge demand but few services provided and users face discrimination."

–Member, Narcotics Anonymous,
Thimphu

"Till date, I don't think there are services/treatments as such for alcohol users in Bhutan. But they can approach various rehabilitation centres outside Bhutan like India."

–General Duty Medical Officer,
Paro

"About existing services for alcohol-related problems we don't have equipment in our hospitals to deal with them except just giving general health advice not specific to alcohol use."

–Physician, Galeyghu Hospital,
Sarpang

"We have no services other than hospitals, every alcoholic is taken there so everything is done there."

–Superintendent of Police,
Thimphu

"We don't have any other services and what we only have is the hospital. It would be good if government could establish DIC or rehab centres."

–Dasho Dungpa, (Sub-divisional Officer),
Sipsu, Samtse

Qualitative and quantitative data considered together, indicate that due to the lack of proper services and facilities in communities, people are approaching hospitals when they are in an advanced stage of ALD and need to be admitted. It should however be noticed that treatment services in the hospitals do not cater to the specific needs of women. It is important to appreciate that community-based service centres, if initiated, should have 'women friendly space' and should not be designed only for men. Staff at these centres should therefore comprise of both men and women conducting outreach activities in the community. They should be trained to identify alcohol and other substance use-related morbidity early in the course of the disease and offer appropriate help. Training of hospital staff on 'dependence treatment'- related issues also need to be organized concurrently.

4.9 Self-reported sexual practices by drug users in Bhutan

Male drug users who reported having sex within the last one year had a mean number of 5 (median 3; range 1 to 60) sex partners (total), 3 commercial sex partner (median 2; range 1 to 50) and 4 non-regular non-commercial (casual) sex partners (median 3; range 1 to 55) during the last 12 months period. Noticeably fewer numbers of total (mean 3; median 2; range 1 to 10), and casual sex partners (mean 3; median 2; range 1 to 10) were reported by sexually active female drug users.

Twenty-nine out of a total of 917 male drug users (3%) reportedly 'ever had sex' with a male partner. While the mean number of male sex partners was 1 (median 1; range 1 to 2) in the areas in Thimphu, it was 2 in the areas close to the Indo-Bhutan border (median 2; range 1 to 4) and 4 in areas located away from the Indo-Bhutan border as well as the capital city (median 2; range 1 to 30). Condom use during the last 'same-sex

sex' among male drug users was higher at areas close to the Indo-Bhutan border (1/9) as compared to other places (in Thimphu 0/4 and in the rest 1/16). However, it is worth noting that a comparatively higher proportion of male drug users from areas close to the Indo-Bhutan border, who admitted to having had sex with males, reported 'same-sex sex' taking place under the influence of alcohol (5/9; 55%). Having sex with males under the influence of alcohol was reported by no male drug user recruited from different areas in Thimphu and a lower proportion (4/16; 25%) of respondents from areas away from the capital as well as the border. A similar phenomenon was recorded while we investigated the issue of male drug users having sex with a male partner under the influence of drugs (66% vs 19% between border and non-border-non capital areas respectively).

4.10 Sexually transmitted diseases among drug users

Eighty-six percent of the drug users (850/991) reported having experience of sexual intercourse. The mean and median age at first sexual intercourse among them was 17 years (SD 3). Condom use during first sexual intercourse was however low at 38 percent. Of the sexually active drug users, eighty-five percent reported having had sex within the last one year (719/850). The following table (table 3) describes STD symptoms in drug users who reported having been sexually active during the last one year.

Fifteen percent of the male (99/681) and 34 percent (13/38) of the sexually active female drug users ever within the last one year had any one of the symptoms presented in the table below. It is worth noticing that the data generated during general population survey conducted in 2006 in Bhutan (Policy and Planning Division 2008) found about 5 to 9 percent of men and 3 to 7 percent of women suffering from STD symptoms mentioned in the table 4.

TABLE 4: STD symptoms in sexually active drug users within the last one year

Symptoms	Male drug users who had sex within the last one year (681)	Female drug users who had sex within the last one year (38)	All drug users who had sex within the last one year (719)
- Ulcer on genitalia	22 (3%)	1 (3%)	23 (3%)
- Ulcer around anus	7 (1%)	0	7 (1%)
- Warty growth on genitalia	18 (3%)	0	18 (3%)
- Warty growth around anus	6 (1%)	0	6 (1%)
- Burning sensation during urination or discharge per urethra	88 (13%)	13 (34%)	90 (14%)

Specific inquiry in the NBA on vaginal discharge among female drug users who had had sex within the last one year revealed that 63 percent of them (24/38) suffered from white vaginal discharge. A lower proportion of drug using female-respondents (8/38; 21%) reported having lower abdominal pain, which along with other causes demand investigation in the light of pelvic inflammatory disease. On the other hand, 8 percent of the sexually active male drug users (51/681) reported having painful scrotal swelling, which also highlights the need for appropriate investigation for STDs.

4.11 HIV knowledge and risk perception among drug users

Ninety-nine percent of male (911/917) and female drug users (73/74) had heard of the word HIV or AIDS and only 70 percent of them (638 of 911 male drug users and 51 of 73 female drug users) thought that consistent and correct use of condoms during sex could prevent HIV transmission. This underlines the knowledge gap in a proportion of drug users and an area for future intervention. The gap assumes greater importance in the light of self-reported sexual practices of the drug users. Knowledge about transmission of HIV through sharing of used syringes and needles was high in drug user respondents (881/911; 97% in males and 73/73; 100% in females). On the other hand, 28 percent of male drug users (257/911) and 14 percent of female drug users (10/73) thought HIV could be transmitted

through mosquito bites. Misconceptions about the possibility of getting HIV by sharing a meal with someone living with HIV was also noticed among 11 percent of male respondents and 6 percent of females, which could serve as a source of stigma arising out of irrational fear of transmission.

Risk perception about HIV among drug users was low as 38 percent of male (346/911) and 53 percent (39/73) of female drug users responded that they had no risk of contracting HIV and another 25 percent and 16 percent respectively, said that they had low risk. Being asked 'how much risk are they at for getting HIV' about one-fifth of the drug users (175/911 males and 15/73 females) said they were at moderate risk. While 18 percent (162/911) of the male drug users responded that they were at high risk of HIV, only 10 percent of the women said so. Contrastingly, the offer for HIV, syphilis and Hepatitis B tests by NBA teams in Phuentsholing, Gelephu and Thimphu was availed of by only 42 drug users, 2 of whom were females. None of the tests turned out to be positive. While this level of low test uptake could actually reflect low individual risk perception, it is worth noting that as per the report of the National STI and HIV/AIDS Prevention and Control Program' (NACP), till November, 2008 a total of 160 individuals have been detected positive for HIV in Bhutan with 26 recorded deaths (17 males and 9 females). Two out of every one hundred HIV infections in the country are in IDUs. It is also worth noting that 90 percent of these infections fall within the age range 15–49 years.

5. School-based Assessment Findings

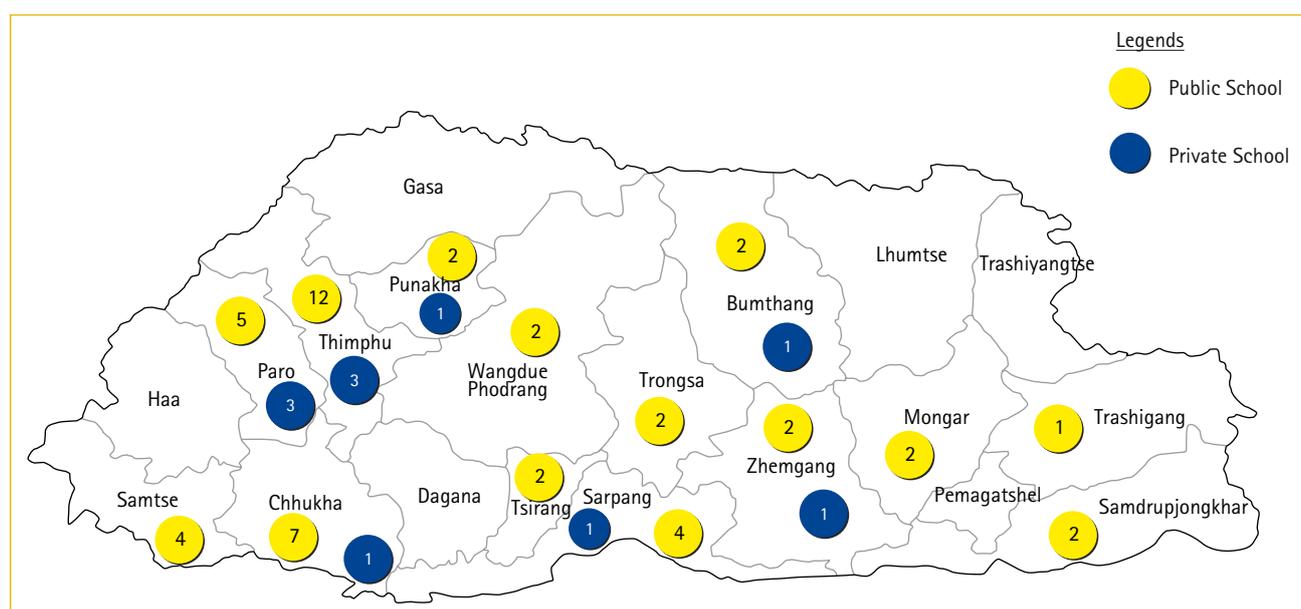


Figure 8: Dzongkhag-wise distribution of schools covered under NBA – 2009-2010 (numbers in the circles indicate number of schools)

Records of 20757 students analyzed under the NBA; 35% students are from classes VII-VIII; 33% from IX-X and 31% XI-XII

School Based Assessment (SBA) was carried out in 60 schools (49 Public and 11 Private) spread over 14 Dzongkhags during the last week of April through the first week of August, 2009 (Figure 8). Information on drug use in the community was available from these 14 Dzongkhags as described in the earlier section and therefore covered under assessment in the schools as well. Self-administered questionnaires were used in SBA as a data gathering tool which included tobacco use in addition to the drugs mentioned earlier in this report. The total number of questionnaires distributed to students was 27080 and after they

were returned 6323 of them were rejected due to data gaps. The number of questionnaires considered valid for analysis was 20757 (table 5). This may have happened due to the students perceiving the questionnaires as a knowledge examination. Furthermore varying interpretations of questions by students – a limitation attached to self-administered questionnaires – posed challenges for data analysis. The variables considered for analyses in this study were selected based on their relevance in terms of public health importance, ongoing or future interventions and their completeness in the data set.

TABLE 5: Distribution of records collected from schools and used in analysis

Classes	No. of records rejected due to data gaps	No. of records from male students used in analysis	No. of records from female students used in analysis	Total
VII–VIII	1476 (Male 615 Female 771 No response 90)	3441	3870	7311
IX–X	2408 (Male 1140 Female 1190 No response 78)	3328	3620	6948
XI–XII	2439 (Male 1276 Female 1114 No response 49)	3292	3206	6498
Total	6323	10061	10696	20757

60 schools (49 government and 11 private) in 14 community/Dzongkhags covered.

The analysis of data in SBA was done category-wise as per different classes – 'VII–VIII', 'IX–X' and 'XI–XII' and responses coming from male and female students were compared as appropriate. Furthermore, in order to examine if drug use practices reported by students differed according to geographical locations of the schools, we used three groups as created in the earlier section (schools situated close to the Indo–Bhutan Border, schools in Thimphu and schools away from the border as well as away from the capital city).

5.1 Profile of the school students

Students in standards VII–VIII

The total number of students from classes VII–VIII covered under SBA was 7311; males 3441 (47%) and females 3870 (53%). Seventy-five percent of the respondents were from government (public) schools and the rest from private ones. The proportion of students from schools located in areas proximal to the Indo–Bhutan border, the capital city of Thimphu and from areas away from the capital as well as the Indo–Bhutan border was almost similar; 29 percent, 36 percent and 35 percent, respectively. The mean age of the male students was 15 years (median 15 years, SD 2) and that of female students was 14 years (median 14 years; SD 1).

While 'both parents working outside to earn money' was reported by one-fifth of all students in this group, the proportion was relatively higher for those in schools in the capital city (687/2627; 26%) and less in the Indo–Bhutan border areas (335/2124; 16%); 2560 respondents were from schools in areas away from the border and away from the capital city, and 20 percent

of these students responded that both parents were working outside. In about 50 percent of situations only the father, and in 3 percent only the mother was reported to be working outside to earn money. A little over 20 percent of students reported that neither their fathers nor mothers were working outside to earn money, although the proportion was comparatively less when examined for students from the capital city of Thimphu (375/2627; 14%).

Students in standards IX–X

The total number of students from classes IX–X covered under SBA was 6948; males 3328 (48%) and females 3620 (52%). Sixty seven percent of the respondents were from public schools and the rest from private schools. While the proportion of students in this category, coming from schools located at the Indo–Bhutan border and the capital city of Thimphu, was similar (25%, and 29% respectively), it was higher at 46 percent from areas away from the capital as well as the border. The mean age of the male students was 17 years (median 17 years, SD 1) and that of females was 16 years (median 16 years; SD 1).

The proportion of students reporting 'only father working outside to earn money' or 'only mother working outside to earn money' in this group, was similar to that in lower standards at 50 percent and 2 percent respectively. Similarly while 24 percent of the students recruited from schools in Thimphu (482/1998) responded that 'both parents were working outside to earn money' it was about 15 percent for school student participants from the Indo–Bhutan border (255/1750) and schools situated away from this border as well as away from the capital (511/3200). One-third of the school students recruited from the Indo–Bhutan border in this educational standard group (562/1750) and those from schools located away from border and away from the capital (1111/3200) had none of the parents working; the proportion was lower for the capital (406/1998; 20%).

TABLE 6: Discussion by teachers/parents with students/off-springs about ill effects of drugs

Talk on ill effects of drugs with students/ off-springs	VII-VIII $n_1 = 7311$ (%)	IX-X $n_2 = 6948$ (%)	XI-XII $n_3 = 6498$ (%)
Teachers			
– not at all	269 (4)	143 (2)	145 (2)
– sometimes	5406 (74)	4395 (63)	3917 (60)
– frequently	1636 (22)	2410 (35)	2436 (38)
Parents			
– not at all	402 (6)	186 (3)	104 (2)
– sometimes	4318 (59)	3148 (45)	2430 (37)
– frequently	2591 (35)	3614 (52)	3964 (61)

Students in standards XI-XII

The total number of students from classes XI-XII covered under SBA was 6498; males 3292 (51%) and females 3206 (49%). Forty three percent of the respondents were from public schools and the rest from private schools. The proportion of students in this group belonging to schools located in areas proximal to Indo-Bhutan border was 19 percent. Schools in the capital city of Thimphu and areas away from the capital as well as the Indo-Bhutan border contributed 36 percent and 47 percent student respondents, respectively. The mean age of the male students was 19 years (median 19 years, SD 1) and that of females was 18 years (median 18 years; SD 1).

The pattern of either one or both parents working outside to earn money did not differ significantly in this group of students, compared to the earlier standards in schools. While 15 percent of the students reported (1007/6498) having both parents working outside, in 2 percent of cases only the mother (147/6498) and in 46 percent of cases (2970/6498) only the father worked outside home. Thirty-seven percent of the students (2374/6498) responded that neither of the parents was working outside.

5.2 Students' opinion on adequacy of teaching/talking on drug/alcohol issues

Half of the students from classes VII-VIII thought that prevention of drug/alcohol use was covered as a subject in curriculum and co-curricular activities 'to some extent' and only 20 percent of them thought that they were well covered. The rest felt that these issues were not covered. In higher classes a lower proportion of students (1363/6948; 20% in class IX-X and 1419/6498; 22% in class XI-XII) opined that the

subject of drug/alcohol use prevention was not covered at all. When asked about frequency of talks on the 'ill effects of drugs/alcohol' by teachers and parents, most of the students responded that sometimes they were told about it (table 5).

When asked 'who had the greatest influence on them', one-fifth of the students, irrespective of classes they were studying in, said it was 'friends'; an equal proportion said it was 'teachers' and the other 20 percent said 'parents'. The rest of the responses consisted of various combinations of these influencers. Intervention regarding drug use among students cannot therefore be approached through school-based activities only and should rather engage multiple players and innovative methods. Peers in and outside schools, nodal teachers, parents – all have to play a role in such intervention design.

5.3 Knowledge of HIV/AIDS

A very high percentage of students in classes VII-VIII had heard about HIV (97%, 7093/7311) and AIDS (6903/7311; 94%). The top ten sources of information on HIV/AIDS cited by these students in decreasing order were 'Television', 'Teachers', 'Friends', 'Family members including parents', 'Hospital/Health centre staff including doctors', 'Newspaper', 'Radio', 'Drama/skit', 'Elders in the society' and 'Movies'. The sources were mostly multiple from where one had received information.

About 15% of the students (IX-XII) thought that HIV can't be acquired by having sex just once without condom. A considerable proportion (IX-X 1630/6894; 24% and XI-XII 1203/6480; 19%) also reported that HIV can't be acquired by having sex with a healthy looking person.

A set of questions was posed to the students of higher classes to examine if they had in-depth knowledge about different routes of HIV transmission. Ninety-nine percent of students in classes IX–X (6894/6948) and an equally high proportion in XI–XII (6480/6498) had heard of the word HIV or AIDS. However, it was a matter of concern that about 15 percent of the students from XI–XII thought that HIV cannot be acquired by having sex just once without condom. A considerable proportion of students (IX–X 1630/6894; 24% and XI–XII 1203/6480; 19%) also reported that HIV cannot be acquired by having sex with a healthy-looking person. These findings clearly provide the direction, which the future awareness campaigns should take. Furthermore, these responses attain greater importance in the light of self-reported sexual practices among students described in the latter section of the report, where partners during first sexual

intercourse ranged among students from 'boyfriends', 'girlfriends', 'next-door neighbours', 'strangers' and 'sex workers' and more than fifty percent of these sexual encounters were without the use of condoms.

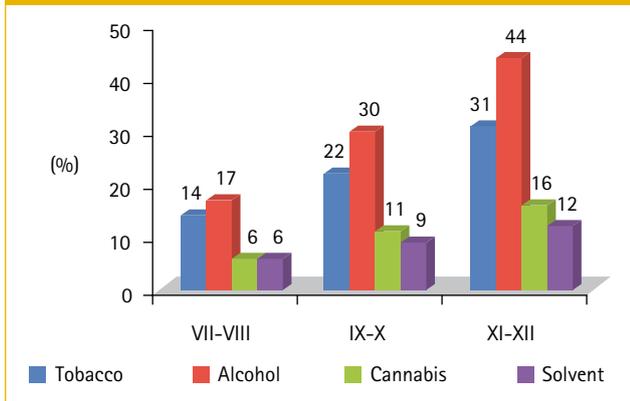
One-tenth to one-fifth of the respondents expressed their uncertainty about the various routes of HIV transmission by responding 'I don't know' (table 6).

5.4 Drug use by school students and their friends

Drug use among school students was examined by analysing self-reported responses stating 'never', 'just once', 'sometimes or occasional' and 'everyday or daily' use of drugs. Daily tobacco use was found to be 5 percent

TABLE 7: Knowledge of students about different routes of transmission of HIV

Information	Routes	IX–X (6894)	XI–XII (6480)
Distribution of knowledge in the field of proven routes of transmission	Transmission through sharing used syringe and needles	Yes-5791 (84%)	5677 (88%)
		No-379 (6%)	311 (5%)
		I don't know-724 (10%)	492 (7%)
	Transmission through having sex just once without a condom	Yes-3946 (57%)	3998 (62%)
		No-1132 (17%)	951 (15%)
		I don't know-1816 (26%)	1531 (23%)
	Transmission through sex with healthy-looking person	Yes-2442 (35%)	2783 (43%)
		No-1630 (24%)	1203 (19%)
		I don't know-2822 (41%)	2494 (38%)
	Transmission through blood/blood products	Yes-5767 (84%)	5705 (88%)
		No-278 (4%)	212 (3%)
		I don't know-849 (12%)	563 (9%)
	Transmission through breast feeding by a mother who has HIV	Yes-5070 (73%)	4719 (73%)
		No-661 (10%)	830 (13%)
		I don't know-1163 (17%)	931 (14%)
Myths and misconceptions	HIV transmission through mosquito bite	Yes-1838 (27%)	1444 (22%)
		No-3436 (50%)	3800 (59%)
		I don't know-1620 (23%)	1236 (19%)
	HIV transmission through having food from the same plate with a person who has HIV	Yes-477 (7%)	176 (3%)
		No-5540 (80%)	5859 (90%)
		I don't know-877 (13%)	445 (7%)

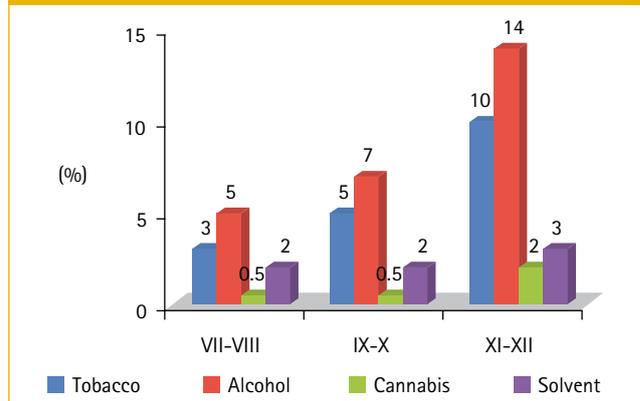
Figure 9: Occasional use of substance by male students

(VII-VIII) and 8 percent (IX-X) in male students, while among female students from these classes, it was found to be less than 1 percent. However, higher prevalence of use was reported from classes XI-XII (13% and 1% in males and females respectively). Daily alcohol use was reported by only 1 percent of male students from classes XI-XII, while less than 1 percent of their female counterparts and less than 1 percent of all students from lower classes reported daily alcohol use. Daily cannabis use was reported by 1 percent of male students from both classes IX-X and XI-XII, but less than 1 percent by female students and less than 1 percent of all students from lower classes reported such practices. Daily solvent use (sniffing) was reported only by 1 percent of male students from classes IX-X, and the proportion of daily use was less than 1 percent for the rest across the classes.

In addition to the daily substance use by students, data on occasional use was analysed as well. It was found that the prevalence of occasional use of tobacco, alcohol and solvents was higher among male students who were in higher classes as compared to those in lower classes. Although the trend held true for female students as well, the overall prevalence of occasional use of these substances was significantly lower in their case as compared to males (figures 8 and 9).

807 students in classes VII-VIII, 1077 in classes IX-X and 1449 in classes XI-XII reported ever use of cannabis.

A higher proportion of male students had friends who use different types of dependence-producing substances as compared to females. More than 60 percent of the male students from classes IX-X and XI-XII reportedly had friends using cannabis, alcohol or solvent (sniffing),

Figure 10: Occasional use of substance by female students

whereas about one-third of the female students said so. Self-reported injection drug use practice by school students (which is of very low proportion) is not presented here as we could not check if they meant pharmaceutical injecting due to pleasure as opposed to medical use while interpreting and responding to this question-item.

5.5 Alcohol or drug-related problem in the family

When asked, 'if the students had ever seen problems related to alcohol use in the family', in classes VII-VIII, 48 percent (3473/7311) reported 'yes', while 20 percent (1474/7311) reported seeing problems related to drug use in the family. No difference was observed in this regard when data from schools located in different geographical regions such as the Indo-Bhutan border, in the capital city or away from the border as well as the capital were analysed separately.

2726 students in classes VII-VIII, 3357 in classes IX-X and 3840 in classes XI-XII reported ever use of alcohol.

A little higher proportion of students in classes IX-X (male 1877/3328; 56% and female 1945/3620; 54%) and XI-XII (male 1882/3292; 57% and female 1673/3206; 52%) reported ever seeing alcohol use-related problems in the family. In the case of higher class students, we examined whether 'seeing of alcohol-related problems in the family' was associated with 'self-reported use of alcohol', and the association turned out to be statistically significant. Drug use-related problems in the family were reported by one-fourth of the students from higher classes.

While 32 percent of the male students in classes VII–VIII (1115/3441), 39 percent in classes IX–X (1304/3328) and 37 percent in classes XI–XII (1236/3292) reported that they were ever treated badly by adults who were under the influence of alcohol, the proportions reporting such experiences were 26 percent, 32 percent and 29 percent for female students. All these findings underline the assertion that, interventions for school students cannot be designed without having an element focusing on drug/alcohol use by adults in the society. The impact of drug/alcohol use by adults on youth should form an integral part of such discussions.

5.6 Attitude of school students towards drug use

Attitudinal questions were posed only to the students belonging to the highest educational standard in schools covered under NBA. Being asked if 'using alcohol is a smart thing to do', 2 percent of male students (72/3292) from classes XI–XII responded in the affirmative, whereas a much lower proportion of female students (13/3206; 0.4%) responded so. Similarly, yielding to friends' requests to use drugs was viewed as important by a higher proportion of male students (51/3292) as compared to females (26/3206). Given a choice, a proportion of students wrote that they would pick up a substance among tobacco, alcohol, cannabis, injecting drugs, pharmaceuticals or solvent-sniffing to try. The following table (table 7) provides a distribution of these choices, which was distinctly different for males and females.

As a part of the exploration of attitudes, we also wished to know how the youngsters thought that drug users should be viewed. It was encouraging to note that a considerable proportion of male (1459/3292; 44%) and female students (1697/3206; 53%) view a drug user as one who needs help. However negative feelings towards people using drugs such as 'hate' (253/3292; 8% by

male and 216/3206; 7% female students) and 'people using drugs are abnormal' (699/3292; 21% by male and 670/3206; 21% female students) were also expressed, which indicate areas for future intervention. Not only positive messages but also easily comprehensible information on where from to obtain help and 'how' would go a long way in this regard.

Mean age at first sex among male students of classes IX–X was 14 (median 15; SD 3) and that of females was 15 (median 16; SD 3). Reported age at first sex was a little higher in the students in XI–XII.

5.7 Self-reported sexual practices by school students

Sexual practice-related questions were incorporated in data collection tools distributed only to the students in class IX and higher. Twenty-seven percent of the male (901/3328) and 1 percent of the female students (30/3620) from classes IX–X reported ever having sex. Although the proportion was higher for male students in classes XI–XII (1358/3292; 41%), the proportion of female students reporting ever having sex remained the same (1%; 34/3206) as with students from classes IX–X. No significant variation was observed in sexual practices in students when schools located in different geographical areas were examined separately. The mean age at first sex among male students of class IX–X was 14 years (median 15; SD 3) and that of females was 15 years (median 16; SD 3). Reported age at first sex was a little higher in the students in XI–XII.

While 57 percent (512/901) of the male students from IX–X had first sex with their girl friends, 43 percent of female students from same educational standard had

TABLE 8: Intention of school students to try different dependence producing substance

Substance	Male n ₁ =3292 (%)	Female n ₂ =3206 (%)
None	2053 (62)	2843 (89)
Tobacco	608 (18)	130 (4)
Alcohol	301 (9)	109 (3)
Cannabis	86 (3)	15 (0.5)
Injecting drug	5 (0.2)	5 (0.1)
Medicines for pleasure	16 (0.5)	18 (0.6)
Sniffing	43 (1)	18 (0.6)
Combining a few of the above	180 (5)	68 (2)

It was a matter of concern that in classes XI-XII one in every 6 male students having sex experience ever had sex without a condom with a stranger under the influence of alcohol or drug; the proportion was much less in female students (2/34; 6%).

first sex with their boyfriends. Next-door neighbours featured as second in the list of those with whom these students had their first sex (13 to 21%). It was striking to note that 7 percent of the male students had had first sex with a stranger. This was not reported by any female student. About 4 percent of male students had their first sex with either a relative or sex workers and 10 percent of the female students reported having first sex within family relations. Condom use during the first sex act was reported by 41 percent of the male students (366/901) and 53 percent (16/30) of the female students from standards IX-X; which did not differ much with condom usage reported from students of higher classes (XI-XII male- 598/1358; 44%, female-17/34; 50%).

Of the male students from classes IX-X, who reported having sex experience, 46 percent (417/901) had sex in the recent past (within the last one year) while the

figure was 37 percent for female students from the same educational standard (11/30). About 47 percent of both male and female students from classes XI-XII had been sexually active in the recent past.

It was a matter of concern that in classes XI-XII, one in every 6 male students having sex experience, ever had sex without a condom with a stranger under the influence of alcohol or drugs; the proportion was much less in female students (2/34; 6%). It was intriguing that a higher proportion of male and female students from IX-X reported ever having such practices (179/901; 20% and 4/30; 13%). Risks associated with unprotected sex and drug-alcohol-sex interface among higher grade school students is therefore a reality in the country and calls for well designed behavioural interventions.

Of the male students from classes IX-X, who reported having sex experience, 46 percent (417/901) had sex in the recent past (within the last one year) while the figure was 37% for female students from same educational standard (11/30). About 47% percent of both male and female students from class XI-XII were sexually active in the recent past.

6. Drug Treatment and HIV Services

Apart from peers reaching out to the drug users in the surrounding areas, the DICs also provide education on ill effects of drug use, HIV/AIDS and related issues, counselling for drug-related problems and medical support through referral to the government hospitals. In 2009 (till the end of July) these peer outreach workers regularly reached out to 286 drug users (237 male 49 females). Among them 2 were IDUs (both male). The DICs in Thimphu and Phuentsholing work in close collaboration with the HISCs and are located in the same premises.

Currently detoxification services are only available at the Government-run Psychiatric unit in JDWNRH, Thimphu. The unit has a capacity of 8 beds to cater for all psychiatric illnesses as well as for those who seek services for drug/alcohol dependence. In total, 14 people received treatment for drug/alcohol dependence in 2008, and 6 others were provided with similar services till 31st July 2009. As yet no private detoxification services exist in the country.

One centre for residential treatment cum rehabilitation services for drug/alcohol dependence has been set up in the month of August 2009 by Youth Development Fund – an NGO under the guidance of BNCA. The centre is supported by RGoB in collaboration with UNODC and United Nations Children's Fund (UNICEF). It is designed to cater to only male clients that too 12 at a time, the minimum duration of stay being 3 months.

The outpatient services are presently available from the psychiatric unit at JDWNRH, Thimphu. In 2008, just 9 individuals received treatment and 3 others were treated between January and July of 2009.

There are currently 3 Drop-in-Centres (DICs) operating in Thimphu, Phuentsholing and Gelephug and are supported by RGoB in partnership with UNODC and UNICEF. Apart from peers reaching out to the drug users in the surrounding areas, the DICs also provide

education on ill effects of drug use, HIV/AIDS and related issues, counselling for drug-related problems and medical support through referral to the government hospitals. In 2009 (till the end of July) these peer outreach workers regularly reached out to 286 drug users (237 male 49 females), among them 2 were IDUs (both male). The DICs in Thimphu and Phuentsholing work in close collaboration with the HISCs and are located in the HISC premises. On the other hand the DIC at Gelephug collaborates with the Youth Information Centre, Department of Youth and Sports (DYS) and shares the same space. Three Alcoholics Anonymous (AA) Groups and one Narcotics Anonymous Group are currently operating in Thimphu. Phuentsholing – the trade town on the Indo-Bhutan border has one AA group.

6.1 HIV testing and counselling

All the twenty Dzongkhags (districts) in the country have integrated VCTCs in the district hospitals. There are two 'Health Information Services Centres' (HISCs), one each in Thimphu and Phuentsholing providing confidential counselling and testing services to the general population. Provisions for specialised HIV-related services for drug users are not currently available. During KIIs it was revealed that the existing staff in HISCs do not possess the required skills to address

drug use-related HIV issues and urged for training to be imparted in this regard. Furthermore, appreciation of creating a drug user friendly environment at the existing health facilities would catalyse mainstreaming of drug intervention services within the broad health delivery framework.

As reported by the Ministry of Health, 'Anti Retroviral Therapy' (ART) is presently available in all districts where HIV cases have been reported since 2005.

Currently 36 people living with HIV are on ART and one of them is a recovering IDU. It is worth noting that 2 percent of the total number of detected cases of HIV in Bhutan (160 till November, 2009) reported to be drug users and 90 percent of the HIV cases detected in the country fall within the age range 15 to 49 years. A variety of condom outlets set in bars, hotels, hospitals are in place. Additionally, HISCs are the existing condom distribution channels in the country.

7. Conclusion

The current National Baseline Assessment has clearly addressed the much awaited information need on drug use patterns in wider geographical areas of Bhutan, beyond the capital city of Thimphu and the bordering town of Phuentsholing. While the 14 Dzongkhags explored under the assessment have witnessed evidence of use of cannabis and solvent-sniffing, and 13 of them have recorded use of pharmaceuticals, estimating the true size of drug users would require further work – the quintessential part of which is establishing a good institutional record-keeping system. Reaching out with services to the drug users who have provided valuable information during interviews conducted under the current NBA is another critical piece of work in this direction for the future. It is also worth noting that information has been generated through the present study on heroin (brown sugar) use in six Dzongkhags and injecting of various substances.

Collating information on women drug users has added strength to the current NBA. Furthermore, issues of alcohol use-related morbidity and admission to hospitals have been explored through the analysis of secondary data. It is now evident that countrywide intervention programmes for drug users has to take poly drug use into cognisance in addition to alcohol use, and keep gender perspective at its centre.

Sexually transmitted diseases and their potential role in driving an HIV epidemic in a population group is

now common knowledge. However, appreciating the existence of such a potential and mounting an effective response to stem such a possibility early on, in Bhutan, would be assisted by the data generated through the current study. Particularly, poor HIV risk perception among drug users and low HIV, syphilis and other blood-borne infection-related test uptake during interviews, demands urgent intervention-attention in this regard.

Finally, the component of school-based assessment highlights drug use and sexual practices among school going youths and therefore complements the information generated from communities. A wider and comprehensive picture of the drug use scene in Bhutan has thus emerged, which was a major expectation of the entire exercise. The attitude of school students towards drugs and drug users was explored as well. This would help in fine-tuning of the intervention design. The experiences faced by school students in their families with regard to 'problem alcohol use' or 'problem drug use' among family members further helped in building the intervention-context. Knowledge of school students regarding HIV/AIDS and misconceptions surrounding the disease added another facet in the gamut of situation updates leading to the identification of critical elements in the proposed intervention package. This is presented below as relevant to three levels – a) overall framework, b) communities in various Dzongkhags and c) schools.

8. Recommendations

Overall framework

1. Under the leadership of the Narcotics Control Board, create a task force engaging key stakeholders from various sectors such as Ministry of Education (including Department of Youth and Sports), labour, health, drugs, law and enforcement, UN agencies and civil society organisations. This body would strategise programming at regular intervals to help develop and expand non-coercive innovative substance use-related interventions. It will commission small-scale community/Dzongkhag-specific in-depth studies to inform development and improvement of such interventions. These studies should include assessing the impact of drug use on family members/spouses of drug users, and in particular, the effects of drug use by adults on the development of children. Reasons for initiation of drug use can also be explored under these studies. The task force members should draw up working guidelines in this regard within the premise of convergence, coordination and collaboration, and sharing of resources. The 'force' thus created will oversee and guide quality data recording and archiving, particularly in the areas of 'drug/alcohol related morbidities and mortalities in hospitals', 'drug trafficking routes' and 'drug seizure'.
2. Establish drug treatment facilities at community/Dzongkhags where evidence of considerable presence of drug use has been found through the current NBA. These facilities should not only offer drug treatment but also have a system in place for exchange of information between various stakeholders, including civil society organisations, government agencies and UN partners. Networking at Dzongkhag level for service provisions would constitute another mandate of these centres. Delivering a comprehensive package of services (targeted information, education and communication around HIV prevention, oral substitution treatment and drug treatment, HIV counselling and testing, condom distribution for drug users and their regular sex partners, prevention and treatment of tuberculosis, prevention and treatment of viral hepatitis, sexually transmitted infection treatment and care, antiretroviral therapy and needle syringe exchange programme for injecting drug users) to drug/alcohol users will be possible through this approach.
3. Link school-based programs with community-based activities (focusing on adults and family members) where parents should be actively engaged by establishing an effective network of various stakeholders. NGOs, school authorities, government sectors and civil society organisations should be actively involved in such networks.
4. Organise curriculum-based structured training programmes through 'Technical Resource Group' (TRG) in the capital city of Thimphu as well as the Dzongkhags studied under the 'National Baseline Assessment of Drug and Controlled Substance Use-2009' to enhance the capacity of health-care professionals and social workers on early identification of alcohol and drug-related morbidities in the community. Plans to establish community-based service centres in the Dzongkhags away from the capital city should be paired up with these training programmes so that people with 'problem alcohol use' could be helped locally.
5. Design and implement sensitisation programmes for law enforcement officials and the judiciary with a view to expanding the opportunities of drug users to access services. This should go beyond the existing punitive approach of marginalization and punishing a drug user. Law

enforcement officials will thus play the role of a care-provider by appropriately referring drug users to drop-in-facilities and community based service centres. 'Advocacy needs assessment' would help identification of various advocacy steps in this regard, modalities and the agencies/individuals with whom advocacy-intervention needs to be taken up. The aim would be to influence policy change which would expand the opportunities of drug users to access services from different stakeholders including the judiciary.

6. Commence service programmes for female drug/alcohol users on a priority basis in the Dzongkhags where the current assessment has identified the presence of drug/alcohol use by women.
7. Institute stigma reduction initiatives in communities as well as government/private treatment facilities. The focus of this initiative should be on ensuring the rights of drug users. This would have a positive impact on 'drug treatment service utilisation', as well as 'mitigation of impact of drug use on family members', which could be captured through programme indicators.

Recommendations for intervention activities in the community

8. Ensure community participation for various drug intervention programmes through well designed community engagement plans by involving the Multi-Sectoral Task Force (MSTF) at Dzongkhag and Gewog Tshogdu (block development committee) levels.
9. Initiate or expand (as applicable) peer outreach intervention in the communities/Dzongkhags that have been identified with current (within the last one month) use of brown sugar, pharmaceuticals and injecting drug use. This can be carried out in two phases by covering first the Dzongkhags reporting highest prevalence of use of these substances. While experience from 'Phase-I' would help in expanding outreach services in 'Phase-II', 'Phase-I' itself would mitigate the impact of drugs on local youths by attracting more drug users for accessing services. Outreach intervention should operate alongwith drop-in-facilities offering a 'comprehensive package of services'.
10. Initiate women-led drug treatment services for female drug users in Dzongkhags reporting their presence. Ensure provision of life-skills training as

suggested by WHO (World Health Organisation)⁷ as well as training on positive living through these centres; by which women would learn how to reduce the impact of drug/alcohol use on their own lives. These centres should also cater to the regular female sex partners of males using drugs/alcohol and reach out to mitigate the far reaching effects of substance use by males on their wives, children and other family members.

11. Integrate HIV/STD diagnosis and treatment facilities with community-based intervention projects for people using drug/alcohol.

Recommendations for schools

12. Create a supportive environment in schools by consulting students and actively engaging them in programme planning as well as implementation of school-based awareness activities. Students should also evaluate and suggest changes to this programme as per evaluation findings. Train identified nodal teachers as well as counsellors on life-skills, which will go a long way towards the betterment of communication between students and teachers. 'How to consult children' should also constitute training sessions for teachers and counsellors.
13. School-based parenting programmes should address drug prevention education along with assistance for those who wish to avail of confidential drug treatment services. Punitive measures towards drug using students should be replaced by a participatory motivating intervention approach through this programme.
14. Establish prevention education in the school curriculum⁸ in the context of 'life-skills training'⁹ and in conjunction with appropriate engagement of international and national level stakeholders. Policy formulation and strategic programming will play a key role in success of this approach.
15. Finance innovative projects that would provide opportunities for inter-school learning, cross-fertilisation of ideas and development of nodal teachers where ex-drug users and school students could work hand in hand.

⁷ Life-skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life (World Health Organization).

⁸ UNODCCP, 2003. School-based Drug Education: A guide for practitioners and the wider community.

⁹ UNICEF Life Skills-based Education Drug Use Prevention Training Manual.

ANNEX 1: Proportion of drug users reporting current use (within the last one month) of non injecting substances*

Dzongkhag	No. of drug users recruited (male/female)	Cannabis (current use/ever used)	Heroin (Brown Sugar) (current use/ever used)	Codeine-containing cough syrup (current use/ever used)	Nitrazepam (current use/ever used)	Dextropropoxyphene (current use/ever used)	Solvents (current use/ever used)	Yaba/ Amphetamine type substance (current use/ever used)
Bumthang	42 (40/2)	24/42	1/5	5/12	5/5	4/15	11/33	0
Chukha	169 (156/13)	78/161	0/22	21/75	34/34	40/92	26/130	0
Monggar	39 (38/1)	22/38	0/4	3/10	10/10	10/17	13/29	0/2
Paro	89 (85/4)	68/81	3/12	37/49	45/45	34/47	22/42	0/1
Punakha	34 (33/1)	21/33	0/3	0/7	6/6	5/12	5/19	0/1
Samdrup Jongkhar	33 (30/3)	30/32	1/1	5/11	18/18	21/22	10/18	0
Samtse	64 (62/2)	47/60	8/14	26/40	36/36	34/43	29/52	0
Sarpang	84 (80/4)	48/75	0/7	6/25	26/26	32/57	12/54	0
Trashigang	29 (28/1)	26/28	1/2	14/18	16/16	15/21	12/18	0/1
Thimphu	350 (308/42)	216/344	5/60	82/197	129/129	131/244	42/267	2/7
Trongsa	14 (14/0)	10/13	0	0/1	3/3	3/3	8/12	0
Tsirang	22 (21/1)	16/20	0/1	4/10	3/3	7/15	6/19	1/1
Wangdi	14 (12/2)	7/14	0/5	1/8	1/1	2/8	2/10	0
Zhemgang	8 (8/0)	8/8	0	0/2	0	0/4	1/5	0
Total	991 (917/74)	621/949	16/136	204/465	332/332	338/600	209/708	3/13

* 29 out of 917 male respondents reported ever using antihistaminic tablets for pleasure, of whom 4 (4/29) reported using them within the last one month. Similarly 59 out of 203 ever user (males) of diazepam reported using it within the last one month.

ANNEX 2: Proportion of drug users reporting current use of injecting substances*						
Dzongkhag	No. of drug users recruited	Heroin (Brown Sugar) Current use/Ever used	Buprenorphine Current use/Ever used	Dextropropoxyphene Current use/Ever used	Benzodiazepine Current use/Ever used	Pethidine Current use/Ever used
Bumthang	42	0	0	0	0/1	0
Chukha	169	0/4	1/5	3/3	0/1	2/2
Mongar	39	1/2	1/3	1/1	0/2	1/3
Paro	89	0	0/2	6/6	7/7	3/8
Punakha	34	0	0	0	0	0
Samdrup Jongkhar	33	0	2/2	1/1	0/1	0
Samtse	64	3/4	3/3	8/8	4/4	4/5
Sarpang	84	0/1	0/3	0	0	1/3
Trashigang	29	0	1/3	0	0	0
Thimphu	350	0/8	0/23	6/6	1/6	3/24
Trongsa	14	0	0	0	0	0
Tshirang	22	0	0/1	0	0/1	0
Wangdi	14	0/1	0/2	0	0/1	0/1
Zemgang	8	0	0	0	0	0
Total	991	4/20	8/47	25/25	12/24	14/46

* Injection antihistamine use within the last one month was reported by 3 male drug users who also reported ever using injection antihistamine. Injection benzodiazepine use within the last one month was reported by 12 male drug users among 24 ever users of injection diazepam.

References

- Bennett & Brown 2003. Bennett PN & Brown MJ. "Non-medical use of drugs." Chapter 10 (pp 171). "Clinical Pharmacology." Churchill Livingstone (ninth international edition).
- BNCA 2003. Bhutan Narcotics Control Agency, Kingdom of Bhutan. "Implementation Framework for the Narcotic Drugs, Psychotropic Substances and Substance Abuse Act 2005."
- BNCA 2008. Bhutan Narcotics Control Agency, Royal Government of Bhutan. "Annual Report 2008."
- BNCA 2007-2008. Bhutan Narcotics Control Agency, Royal Government of Bhutan. "Annual Report 2007-June 2008."
- Kumar S 2008. Kumar S. "Rapid Situation and Response Assessment of Drugs and HIV in Bangladesh, Bhutan, India, Nepal and Sri Lanka: a Regional Report." United Nations Office on Drug and Crime Regional Office of South Asia.
- Ministry of Education 2004. Ministry of Education, Royal Government of Bhutan. "Annual Statistical Report 2004."
- NACP 2008, National STI & HIV/AIDS Prevention & Control Program. "HIV/AIDS - Report Bhutan (Update)."
- Office of the census commissioner 2005. Office of the Census Commissioner, Government of Bhutan (2005).
- "Fact Sheet, Population and Housing Census of Bhutan, 2005."
- Panda 2006. Panda S. "Drug Use in the Northeastern States of India." United Nations Office on Drug and Crime & Ministry of Social Justice and Empowerment, Government of India.
- Panda S et al 2009. Panda S, Chowdhury L, Dendup T, Pahari Sobha. "Drug use situation and responses in schools and communities: a rapid assessment in Phuentsholing, Bhutan." United Nations Office on Drugs and Crime & Bhutan Narcotic Control Agency, Royal Government of Bhutan.
- Policy and Planning Division 2008. Policy and Planning Division, Ministry of Health, Royal Government of Bhutan (July - 2008). "HIV/AIDS General Population Survey, Bhutan - 2006."
- Rhodes T et al 1999. T Rhodes, Stimson G, Fitch C, Ball A, Renton A. "Rapid assessment, injecting drug use and public health." *The Lancet*. 354 (9172): 65-68.
- Trethowan & Sims 1983. Trethowan William Sir & A.C.P. Sims. "Psychiatry". ELBS (low priced fifth edition).
- UNAIDS 2003, UNAIDS/WHO working group on HIV/AIDS/STI Surveillance. "Estimating the size of populations at risk for HIV: Issues and methods updated July 2003." FHI/Impact/USAID/UNAIDS/WHO/UNDCD.



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