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Current Scenario of Substance Use Disorder in Sikkim

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Abstract
Background: *Alcohol and substance related issues are very complex and challenges governmental resources at different levels to fulfill the obligations under the Government of India enacted various legislations and obligation under various International Conventions ratified by India. With the growing evidence of harmful and hazardous effects of alcohol and substance misuse (physical, psychological, social and occupational), growing realization of increasing trends in alcohol & substance misuse among vulnerable groups of population (women & children) and multi-components approach to treatment including social and occupational rehabilitation, question emerging across the country is- how do we control this problem.*
Aims: *To examine the extent of alcohol and other substance use prevalence in Sikkim, provide a comparison with the national scenario, summarize governmental endeavors with regard to control and prevention and existing health care system to develop a range of approaches for the establishment of services for substance use disorders in the State within the matrix of existing health care system.*
Materials & Methods: *The body of information presented in this review has been generated through an extensive review of research papers published in peer reviewed journals, websites of the Sikkim government and Indian Council of Medical Research (ICMR), and newsletters.*
Results: *Though there are many innovative activities being undertaken by the State Government to control, regulate and prevent alcohol & substance misuse in the society, policy makers needs to include measures that ensure early recognition and better management of alcohol & substance related harm by empowering the community through adequate human resource and capacity building training.*
Keywords: *Substance abuse, scenario, Sikkim.*

Introduction

The State has witnessed tremendous growth and development after merger with India in several fields including health sector as indicated by Infant mortality rate of 26 (SRS 2011), full immunization coverage of 70%, total sanitation of 100% and ranks highest among all the states in the proportion of households that use the public medical sector as

their main source of health care.[1,2] However, there is a rising trend in the prevalence of non-communicable diseases (NCDs) including mental illnesses predominantly suicide and alcohol/ substance misuse. From unofficial estimates alcohol use has traditionally been prevalent among Sikkim's population which is reflected in the national surveys. However, there is a growing recognition that newer substances are becoming popular among the younger generation. It is, therefore, obvious that Sikkim is going through a social transition, which is reflected in the changing substance use practices in the community.

Extent of problem

Though there is a dearth of epidemiological studies to determine the extent, pattern, trends and harm related to substance use in India, studies that have attempted to address these issues have found wide regional variations in the prevalence of drug use in the country. In-addition the use of licit substance is more common than illicit substances.

Tobacco

Tobacco use is a major preventable cause of premature death and disease worldwide with nearly one million deaths in India every year due to tobacco use. Currently there are 274.9 million tobacco users, age 15 and above.[3] The National Household Survey of Drug Use (NHS-2001) documented the nation-wide prevalence of tobacco use was high at 55.8% among males, with maximum use in the age group 41-50 years.[4] In 2005-06, according to the National Family Health Survey-(NFHS-3), 19% of women and 62% of men in Sikkim use some form of tobacco.[5] The respective national average was 11% in women and 57% in men. Most women and men who use tobacco chew pan masala, gutka, or other tobacco. Cigarette or bidi smoking was reported by 33% of men and only 5% of women.[5] Though Sikkim was declared a smoke free state, ***India's first "Smoke Free State"*** the Global Adult Tobacco Survey (GATS India 2010) reported the overall prevalence of current tobacco use was 42% higher than the national average of 35%.[3,6] The implementation of the provisions of ban has been effective but there is an increasing trend of tobacco use especially among women from 2005 to 2010 which indicates greater women empowerment, employment, social acceptance and easy availability.

Alcohol

Alcohol (21.4%) was the primary substance used (apart from tobacco) in the National Household Survey (NHS), the first systematic effort to document the nation-wide prevalence of drug use in the country.[7] Seventeen to 26% of alcohol users qualified for ICD 10 diagnosis of dependence, translating to an average prevalence of about 4%. There was a marked variation in alcohol use prevalence in different states of India (current use ranged from a low of 7% in the western state of Gujarat (officially under Prohibition) to 75% in the North-eastern state of Arunachal Pradesh.[7] In Sikkim, alcohol use was reported by 45% of men and 19% of women above 15 years of age in NFHS-3 (1998) in comparison to 32% and 17% respectively in NFHS-2(2005).[5,8] These figures are much higher than the national average of 32% in men and 2% in women (NFHS-3).[5] There is an increase in trend towards alcohol use in particular from NFHS-2 to NFHS-3 which may be due to greater availability, accessibility, affordability, and social acceptability.

Various studies have consistently reported higher prevalence of women drinking in comparison to the national average which reflects the greater social tolerance and acceptance in Sikkim.[5,8,9] This has an important bearing on women's overall health since they suffer equivalent physical health consequences to males at lower quantities and frequencies. In a recent WHO epidemiological study that assesses the impact of alcohol misuse on health and socio-

economic wellbeing of users and their families and harms to persons in contact with users, the prevalence of alcohol use in Sikkim was found to be 43.2% and 39.5% in male and female respectively. Majority of the respondents had infrequent high and frequent high as their typical drinking pattern. Moreover, substantial proportion of males (55%) and females (40.8%) had AUDIT score greater than 8 placing them in a hazardous drinking category (2011).[9]

Illicit substances

In the NHS, Cannabis (3%) and opioids (0.7%) were the commonest illicit substances prevalent in India. Data from Drug Abuse Monitoring Survey (DAMS) observes that cannabis (11.6%), heroin (11%), opium (8.6%) and other opiates (6.3%) constitute the majority of drug use by treatment seekers other than alcohol (43.9%) in India.[7] Epidemiological data on illicit substances is scarce and it is hard to draw any conclusion about the recent trends in illicit substance use pattern in Sikkim. Hospital based studies that examine the drug use profile of substance abusers revealed opiates as constituting the most common drugs of abuse contributing to 15.8% of treatment seekers in tertiary centers (2005). Prevalence of IDU was 16.66%. Among opiates, dextropropoxyphene and pentazocine are common opioids used for injection with an insignificant use of heroin.[10] Prevalence of cannabis and opioid use was found to be 13.6% & 5.8% respectively in a study conducted in rural Sikkim (2010).[11] The number of IDUs in Sikkim is estimated to be between 1,400 and 1,500 as reported by Sikkim State AIDS Control Society (SSACS).[12]

Sales and Revenues from beverage alcohol

One of the important determinants of effects of alcohol on health of people is its availability, which in turn, is linked to production and sales. The sales of alcohol have increased significantly in Indian society. Data available from the International Wine and Spirits Record (2010), reveal that the sales of alcohol increased by nearly 3 times from 72,000 litre cases in 2000 to 200 million cases by 2009.There were more than 2800 wholesale and 67,000 outlets in the country (Sinha,2005).[13]

Sikkim has also witnessed a tremendous growth of manufacturing units' right from the establishment of the oldest distillery-Sikkim Distilleries, Rangpo in 1954 to the present 8 existing units all set up during the last two decades. There are 8 distributors of SMFL/ Beer, 1 IMFL distributors, 895 retail shops, 821 foreign liquor bars, 77 pachwai and 33 army units in 2011-12. There are 304 retail vends per 100000 population.[14] The presence of large number of outlets and absence of restriction on sales makes alcohol easily available. As compared to revenue receipt of Rs.17.61 crores during the year 2001-02; the revenue during the 2011-12 was Rs. 96 crores.[14]

Responses to the problem of alcohol/ substance use

A governmental response with regard to control and prevention of drug use has primarily focused on supply reduction and preventive efforts to reduce the demand.

Legal response

Sikkim has done a commendable work in the control of tobacco and substances by enacting and enforcing a strict prohibition on sale, distribution and storage of gutkha**,** smoking in public places and recently the State Government has increased Value Added Tax (VAT) on sale of tobacco and all its products including cigarettes and chewing tobacco, other then beedis and raw tobacco leaves by introducing a new Schedule in the Sikkim VAT, Act 2005.[15] The ban on smoking in public places, which included work places also, was a remarkable achievement in terms of political will and commitment. In 31st May 2010, Sikkim was declared a smoke free state, ***India's first "Smoke Free State".***[6,16]

Sikkim Anti Drugs Act (SADA), 2006 was enacted to tackle the rising problem of drug abuse and

controlled substances in the State. The main objectives of the Act is to control, regulate and prevent the abuse of drugs and controlled substances and make stringent provisions to deal with the ever increasing phenomenon of abuse of medicinal preparations. A provision specified under the Act includes constitution of authorities and a separate fund for control of drug abuse, prohibition, control and regulation of controlled substances, punishment and offences, and treatment and rehabilitation of addicts. Further, the Act has emphasized more on supply reduction than demand and harm reduction.[17] The initiatives of the government with regard to tobacco and psychotropic substances have been impressive and widely supported by the people. However, existing alcohol control measures is mainly directed at controlling illicit production of alcohol, observation of dry day and fixing legal drinking age of 21 yrs.

Responses by the Health system and Non-Governmental Organization

Awareness generation activities have been regularly conducted in the state especially the observation of **the "*International Day against Drug Abuse and Illicit Trafficking" on 26th June.*** Review of newspaper of the last three years revealed that the community participation is impressive. School students, Non-governmental organizations (NGOs), Panchayats bodies, and local people has been organizing activities like awareness campaigns, conducting seminars and workshops, and holding exhibitions etc. Majority of these programs are sponsored by the Sikkim State AIDS Control Society (SSACS).[18,19,20] Initiatives of SSACS such as Red Fest (Positive intervention in schools, Red Ribbon Music Contest, and Football tournament) to create awareness about HIV/AIDS and drug has received wide public support.[21,22] In 2011, NACO started opioid substitution therapy (OST) at STNM hospital as a harm reduction strategy for intravenous drug users (IDU).[23]

In 2010, ***Chief Minister's Comprehensive Annual Total Health Check-Up (CATCH Program)*** was initiated which aimed at tracking the health status of people and includes packages such as screening of NCDs such as hypertension, diabetes mellitus, cancer and other locally prevalent diseases, strategies to make Sikkim a sustainable smoke Free State, and promotion of healthy life-style.[24] Recently a programme for 'Eliminating Alcohol & Substance Abuse by 2015' adopted by ***'Saathi'***, was launched as, a part of Chief Minister Sikkim Youth Empowerment and Self- Reliant Mission,2013 as a pilot project in two government schools which aims at prevention of drug abuse.[25]

De-addiction Center

Psychiatric inpatient facility (20 bedded) is available only in the State hospital which is also providing de-addiction services especially for the management of detoxification. Though STNM hospital (Gangtok) and Namchi district hospital are designated DAC, infrastructure and trained manpower especially clinical psychologists, social workers and psychiatrist nurses for providing counseling and psychosocial intervention are not available. Six NGOs run de-addiction centres (DAC) supported by the Ministry of Social Welfare are functional in the State which are primarily providing rehabilitation services to the people living with addiction. Further, comprehensive listing of all existing de-addiction service facilities in the state is desirable. This will include all such facilities, listed by types (government, NGO, Private sector), infrastructure (outpatient/ inpatient/ laboratory facilities), activities undertaken (counseling and other brief intervention, detoxification, relapse prevention, rehabilitation, etc.), and source of funding (MoHF&W, MSJ&E, State government, other sources, and paid by patient, i.e., private sector).

Existing Health System: Sikkim has one of the best health systems in the country comprising of 2 referral hospitals, 4 District Hospitals (DHs) , 4

Community Health Centers(CHCs), 24 Primary Health centers (PHCs), and 147 Subcentres (SCs) catering to the needs of the 600000 population. All PHCs are strengthened with 2 Doctors and 3 Staff Nurses each with the provision of 24x7 services. A total of 636 ASHAs have been selected & 552 have been trained upto 4th Module. A total of 147 Sub-centres are functional with an ANM and Male multipurpose health worker (1 each). 58 SCs have been strengthened with 2nd ANM (NRHM-2009).[26]Further; the state government is constructing 575 bedded multispecialty hospitals at Gangtok. The psychiatrist –population ratio in Sikkim is one of the best in the country (1 per 43,406 populations). Therefore, it can be concluded that though there are many innovative activities being undertaken by the State Government to control, regulate and prevent alcohol & substance misuse in the society, policy makers needs to include measures that ensure early recognition and better management of alcohol & substance related harm by empowering the community through adequate human resource and capacity building training.

Recommendation

The recommendations have been made keeping in mind that alcohol and tobacco are serious public health problems in Sikkim. Responses within the existing health care system are hindered by the inadequacy of infrastructure and trained human resources to tackle the problem. Therefore, management of alcohol/substance use disorder has to occur within the matrix of the existing healthcare system in the State. Many persons, particularly young people with substance use rarely access the health care system, except in cases of overdose or accidents, or when they are diverted to treatment from the legal system. It is important that they become aware of the help offered by the public health system and access such care before they develop serious problems related to their use. Therefore, it is imperative that the intervention for substance related problems developed at various level of health system involving community, primary health care, district hospital and other institutions such as non-governmental organizations (NGOs), Panchayats, and other governmental programs. Planned activities should be integrated in the ongoing NRHM to take services to the doorsteps of the people.

Hence, to achieve these objectives, we envisage a ***"Stepped Care Approach"*** that entails provision of intervention at appropriate level of health system by trained manpower with provision of referral service to the higher centre in a stepped care fashion. According to this approach, for **e.g.** in the case of alcohol, low risk drinking / abstinence can be managed by a brief intervention using simple advice and patient education materials. Harmful and hazardous drinking can be managed by a combination of simple advice, brief counselling and continued monitoring, with further diagnostic evaluation indicated if the patient fails to respond or is suspected of possible alcohol dependence. These patients should be referred to a specialist for diagnostic evaluation and possible treatment for alcohol dependence. If these services are not available, these patients can be managed in primary care, especially when mutual help organizations are able to provide community-based. Since studies have found that the majority (40-50%) of alcohol use disorders belongs to harmful/ hazardous pattern with greatest implications for psychosocial consequences (Benegal et al.), cost effective intervention targeting this population can be develop and training imparted to the primary care physician and grass-root level workers. Further, DAC unit in District hospitals can act as a first referral unit for the management of 5-10% of alcohol dependence syndrome. Finally, State Nodal Centre (SNC) in Gangtok can be established to develop policy relating to alcohol and substance control/ prevention, human resource development

and management of complicated/ co-morbid cases as well is a tertiary referral unit.

To strengthen implementation of the tobacco control provisions under Cigarettes and Other Tobacco Products Act (COTPA) and policies of tobacco control mandated under the WHO Framework Convention on Tobacco Control, the Government of India piloted National Tobacco Control Programme (NTCP) in 2007-2008.[16] Although different levels of success have been achieved by the State, mainstreaming the program components as part of the health care delivery mechanism under NRHM framework still exists and effective implementation of tobacco control policies remains largely a challenge. Hence, tobacco control cells with dedicated manpower for effective implementation and monitoring of anti tobacco laws and initiatives should be established in the State. At the district and primary care level, setting up tobacco cessation facilities and training of health and social workers, NGOs, school teachers etc should be undertaken. There is a need to develop a well designed public education campaign that is integrated with community and school based programmes, and help for tobacco users who want to quit. Such integrated programmes have been demonstrated to lower smoking among young people by as much as 40%. [16]

For other substances misuse, interventions will include assessment including detailed physical examination, management of overdose, detoxification, counseling, harm minimization approaches. Difficult to treat cases may be referred.

Therefore***, suggested strategies*** should comprise of the following:

1) Constitution of State Alcohol and Substance Control Committee (SASCC)
2) Establishment of State Nodal Centre (SNC)
3) Strengthening of DHs to make provision for the delivery of alcohol, tobacco other substance services.
4) Human resource development/ capacity building training
5) Infrastructure development for DAC in district hospital/ SNC.
6) Integration with National Rural Health Mission (NRHM), NACO, RNTCP & NCD etc.
7) Better linkage with various stakeholders including NGOs, panchayats system schools, self help groups and local people.
8) Community based treatment and prevention approach to bring the treatment process closer to the alcohol/ substance afflicted individuals and families.

Conclusion

The public health burden of alcohol and substance misuse is enormous. Alcohol and tobacco is known to be a causative or complicating factor in more than 70 non-communicable disorders Overall, NCDs are emerging as the leading cause of deaths in India accounting for over 42% of all deaths (Registrar General of India). In Sikkim, prevalence of cancer, diabetes mellitus, hypertension (HTN) and suicide has reached to the epidemic proportion in recent years. Tobacco consumption has been the major reason for NCDs which causes 74% of deaths in Sikkim. Harm due to substance misuse is not only limited to physical diseases, psychosocial consequences of such use is more concerning because it not only affects the individuals but also have significant impact on their spouses, children, family, relationships, education, occupation and restricts the socio-economic growth of the families. Furthermore, substance users usually come into contact with the legal system because of domestic violence and other crimes committed under intoxication or crimes to procure the substance. Hence, management of substance users demands extensive governmental resources ranging from medical care to psychosocial rehabilitation including re-integration back into the community.

Therefore, it is imperative that alcohol and substance control policy needs to be broad, multidimensional, and target not only people with addiction disease but planned activities should include intervention to prevent, promote and encourage healthy lifestyle. Equally important aspect is early detection and management by empowering community through adequate training to recognize people with substance misuse at the earliest signs of problem and offer brief advice and motivation to seek appropriate help. These measures will require extensive efforts on the part of various agencies delivering different levels of services (supply, demand & harm reduction). It is also important to develop better linkages and co-ordination between the government and non-governmental agencies and establish appropriate networking among different partners. The expected outcomes of such activities will be much broader than the intended action of containing alcohol/ substance misuse such as reduction in morbidity and mortality due to non-communicable diseases, reduction in domestic violence, crimes, road traffic accidents & injuries, absenteeism from work, and decrease in mental illnesses including suicide rate which is the highest in India.

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