INTRODUCTION
Substance use pattern changes over time. Substance use includes use of licit substances such as alcohol, tobacco, diversion of prescription drugs as well as illicit substances. Both licit and illicit substance use can cause serious public health problems in our country. Continued use may lead to misuse or abuse and/or addiction. In general terms ‘misuse’ means use beyond medical and societal harm and according to the “lexicon of alcohol and drug terms” [1] by WHO, it is the use of substance for a purpose not consistent with legal or medical guidelines, as in the non-medical use of prescription medications. Sustained misuse can lead to abuse. Abuse means use causing physical, social, psychological and economic harm. Abuse describes the maladaptive pattern of substance use, not related to therapeutic purpose, resulting in recurrent and significant adverse consequences. DSM III R (Diagnostic & Statistical Manual of Mental Disorders), published by the American Psychiatric association defines “drug abuse” as ‘a maladaptive pattern of use indicated by….continued use despite knowledge of having a persistent or recurrent social, occupational, psychological or physical problem that is caused or exacerbated by the use (or by) recurrent use in situations in which it is physically hazardous’. DSM IV defines substance/drug abuse as a ‘problematic use without compulsive use, significant tolerance, or withdrawal’. Commonly abused classes of drugs include opioids (both prescription opioids such as buprenorphine and non-prescription opioids such as heroin), CNS stimulants and CNS depressants.

Prescription opioids are drugs that are prescribed by doctors for the management of chronic pain and thereby improve quality of life. Various prescription opioids are mainly meperidine, methadone, morphine, dextropropoxyphene, buprenorphine, codeine, fentanyl, tramadol, pentazocine etc. On the other hand, illicit opioids (e.g. heroin) are those that are obtained from
illegal source such as by prescription forgery –either by writing or buying fake prescriptions, from dealer, friend, family members, by stealing from pharmacy, obtaining from medical stores without prescription etc. The main purposes of using those substances are either to get relieve from physical pain, to enjoy euphoria, to get rid of depression, anxiety, bad memories etc. It varies from person to person.

Tolerance and dependence develops to the actions of opioid analgesics. Common withdrawal symptoms associated with opioid group of drugs include feeling of unpleasantness, muscle aches, mydriasis, diarrhoea, insomnia, dysphoria, lacrimation, rhinorrhoea piloerection etc. The relatively modest efficacy of buprenorphine can lead to the precipitation of withdrawal if it is administered to someone who is physically dependent on a higher efficacy opioid (e.g. heroin). Beyond the withdrawal syndrome, that mainly lasts no longer than a few days, individuals who have received opioids as analgesics only rarely develop addiction.

Central nervous system depressants which are used to treat anxiety, sleep disorders, control stress reaction can cause abuse and addiction. They are of two types –barbiturates and benzodiazepines. Abuse potential is mainly seen with medium duration of action barbiturates such as amylobarbitone, pentobarbitone, butobarbitone, etc. Benzodiazepines that have high abuse potential are diazepam, nitrazepam, chlordiazepoxide etc. In addition to opioids and CNS depressant drugs, there are various central nervous system stimulants, which also has high abuse and addiction potential. They are mainly amphetamines, methylphenidate, and cocaine. Amphetamine is a powerful CNS stimulant which elevates mood and makes the user feel energetic, alert and self-confident. Amphetamine reduces feeling of hunger and fatigue. There is
slow development of tolerance to its euphoric effect. Therefore abusers need to increase the
dosage progressively to maintain its effect. There are developments of both physical as well
as psychological dependence of amphetamine. Chronic amphetamine users experience
intense craving and drug seeking behaviour. Abrupt withdrawal of this drug produces of
fatigue, depression and hunger. The other CNS stimulant drug methylphenidate needs special
attention as there is increased prescription of this drug in the treatment of ADHD. Cocaine is
another powerful central nervous system stimulant which produces increased energy,
wakefulness, confidence and facilitates social interchange. It produces euphoria i.e. great
feeling of well-being. There are number of physical dependence symptoms following
withdrawal of the cocaine. From low to high intensity, they are mainly lethargy, depression,
social withdrawal, tremor, muscle pain, sleep as well as eating disturbances, anxiety,
dysphoria and craving. Cocaine causes severe psychological dependence symptoms such as
craving and drug seeking behaviour, psychosis, which disrupts their normal life.

Both licit and illicit substance use, affects in an adverse way not only the individual but also
its family, community and society at large. Psychoactive substance users are at higher risk of
medical complications and attend health care facilities more frequently than normal
population.

Variety of diseases commonly co-occur with substance abuse and addiction (e.g., HIV,
hepatitis C, cancer, cardiovascular disease).

Many people who regularly abuse drugs are also diagnosed with mental disorders and vice
versa. The high prevalence of this comorbidity has been documented in several studies.
Strong associations of substance use, abuse and dependence with a range of mental disorders
has been observed in several studies by Langås et al.,[2] Meyer D et al. [3]. Alcohol abuse
results in gastrointestinal complications such as gastritis, hepatitis and
cirrhosis and other eventual complications. In comparison to alcohol, opiates (including prescription opioids) and cannabis cause less direct organ damage. It is their vehicle and route of administration, which is responsible for many health hazards. If smoked, users of both of these drugs are at risk of developing chronic smoking related complications. More significant problems are associated with parenteral modes of drug use where in the users exposes them to both local (at the injection site) and systemic infection besides running the risks of sudden death due to over dose. The growing incidence of injection drug use (which includes opioids, sedatives as well as stimulants) and the alarming finding of association of HIV transmission with Injection Drug Use (IDU) are increasingly being recognised as a major public health problem. Since drug use often imposes a significant financial burden on user, which soon is reflected in the family’s financial status, and drag them to the lower socioeconomic strata of the society.

Prescription opioid abuse not only adversely affects the vitals of the society but also badly affects the economic growth of the country, because this is the trade which generates huge unaccounted money. The money generated is used for various purposes including antinational and terrorist activities. Opioids including prescription opioid abuse also impair thinking, understanding capabilities, and decrease interests towards school, among students.

Pain –both acute and chronic type is a most common symptom for which person always seeks treatment. One of the very common causes of pain recognised globally is musculoskeletal diseases. The prevalence of chronic pain from India was reported 19% according to a World Health Organization study in ‘primary care’ and that of musculoskeletal pain was found 25.9% in India. Prescription opioids are drugs that are prescribed for management of chronic non-
cancer pain mainly. They are believed to be safer than illicit drugs of abuse and are also more easily available than illicit opioids such as heroin. This has resulted in increases in incidence of abuse of prescription opioids. Increased opioid prescribing trends has been observed globally.\textsuperscript{[7]} UNODC World Drug Report 2015 estimated that in 2013, between 246 million people aged 15-64 years had used an illicit substance at least once in the previous year. Of which an estimated 27 million were problem drug users and an estimated 32.4 million people aged 15-64 years were opioid users.\textsuperscript{[8]} In North America, Oceania, and in some of the European countries, abuse of fentanyl and buprenorphine observed more in comparison to heroin use according to UNODC report.\textsuperscript{[8]} Prescription opioid misuse and diversion globally was also observed among ‘high school students’\textsuperscript{[9]}, ‘college students’\textsuperscript{[10]}, ‘older persons’\textsuperscript{[11]}, and ‘women’\textsuperscript{[12-13]}. Most of who initially obtain prescription opioids via legitimate medical practices. The elderly as well as older populations are among those most vulnerable to prescription opioid problems (abuse or misuse). This is because adolescence is a period of experimentation and search for identity and that young people are more likely than adults to experiment with various things, including drugs like prescription opioids. In India, Bangladesh, Nepal, long standing problems with the licit control of pharmaceutical preparations has led to widespread abuse among all segments of the population. In general, pharmaceutical preparations are diverted from domestic distribution routes and are sold without prescription in pharmacies and various other retail outlets in the region. In South-Asian countries, abuse of buprenorphine, dextropropoxyphene and codeine based cough syrup observed more and incidences of unsafe practices including injection drug use was reported which remains one of the key factors for spread of HIV/AIDS in India, Nepal and Bangladesh.\textsuperscript{[14]} Non-medical use of prescription opioids also reported by various surveys and
study settings such as ‘Drug abuse monitoring system’ study, ‘Rapid Situation Assessment survey’, ‘Rapid Situation and Response Assessment’ among Indian populations.[15-17] Injection prescription opioids use in India was initially acknowledged in the north east states of Manipur and Nagaland, mainly due to their proximity to the ‘Golden Triangle’ –Burma, Thailand, and Cambodia where abuse of prescription opioid is very common.[18] Sikkim, a small mountainous state in the eastern Himalayas, borders Nepal to the west, China's Tibet Autonomous Region to the north and east, and Bhutan to the southeast. The Indian state of West Bengal lies to the south. Sikkim is a multi-ethnic state, where Bhutias and Nepalese (approximately 70% of Sikkim’s population) have migrated from Tibet and Nepal, respectively. As a result, a lot of migration took place from its Border States and countries, with introduction of new substances of abuse including prescription opioids.

North East India is a major source of IDUs and associated HIV/AIDS. Sikkim observe changing cultural & societal values. While substantial epidemiological information on prescription opioid abuse is available globally and from India but until date, there is no systematic study available from Sikkim. The study of prescription opioid abuse in Sikkim is needed as there is increased reporting of abuse of prescription opioids from various treatment centres. In this context it is necessary to study the complete epidemiological profile of prescription opioid abusers of Sikkim, another state in north eastern India, with no information on this emerging public health problem.