# Factors associated with drug abuse relapse: A study on the clients of rehabilitation centers

## Samir Bhandari[1*], Maginsh Dahal[2] and Ganga Neupane[3]

[1]Project Officer, Adventist Development and Relief Agency (ADRA) Nepal, Sanepa Lalitpur, Nepal, [2]Department of Public Health, Asian College for Advance Studies, Purbanchal University, Satdobato, Lalitpur, Nepal and [3]Staff Nurse, BP Memorial Cancer Hospital, Bharatpur, Chitawan, Nepal.

**Abstract:** *Background and Objectives:* Drug addiction is a chronic relapsing behavioral disorder characterized by compulsive substance seeking and use, despite of harmful consequences. Any substance that affects our nervous through intoxication produced by it's repeated of chronic use which changes our mood, perception and sensation. The main purpose of this study was to explore the factors associated with drugs relapse. *Methods:* The research was carried out among 114 using semi structured questionnaires on the basis of primary data collection in rehabilitation centers of Lalitpur and Chitwan districts through the census technique for the drug user enrolled in the rehabilitation centers for the treatment. *Results:* Most of the respondents (94.7 percent) were relapsed in drugs after abstinence. The average number of times relapse in drugs is 3.29 times per person According to the respondents the main causes for the drugs relapse were peer pressure and the family relations. The age of the respondents is associated with the drugs relapse (P<0.029). Educational level of the respondents is associated with the drug relapse (P<0.004). *Conclusions:* Medium and higher economic background, type of family, job holder, lower education level have more chance to be relapsed. Relapsed can be prevented by providing support, care, positive attitude and rehabilitation for the behavioral treatment of the drug users.
**Keywords:** Drugs Relapse, Rehabilitation Center, Nepal.

## Introduction

Drug dependence is defined as: "A state, psychic and sometimes also physical, resulting from the interaction between a living organism and a drug, characterized by behavioral and other responses that always include a compulsion to take the drug on a continuous or periodic basis in order to experience its psychic effect and sometimes to avoid the discomfort of its absence. Tolerance may or may not be present. A person may be dependent on more than one drug [1].

Treatment for addiction is seen as an end to all problems that the client faces [2]. Family and society now expect the addict to live like any other individuals, little realizing that recovery brings with its problems which can be as difficult and complex as those encountered during the days of addiction [2]. Recovery means a new way of life for the client [3]. The transition from a drug-using world to one that is drug-free calls for numerous adjustments. This may mean a lot of struggle and the period can be very stressful. Even issues that seem trivial to others, like

finding ways to fill one's time or conversing with people can appear difficult [4]. Relapse needs to be viewed as a process – as a series of maladaptive responses that eventually lead to the act of taking drugs. Changes at the levels of thought and feeling, shifts in attitudes and behavior patterns can be noticed before the clients actually take drugs again. Relapse varies in intensity. Some may reach out for help after a single incident of drug use while others may go back to regular use, with some or all the drug related problems of the past [4].

Factors associated with the relapsing or the relapsing triggers play the vital role in the stabilization and recovery plan to safeguard sobriety [5]. Relapse is the biggest problem for recovering addicts; an addict can be forced to abstain from using drugs while they are admitted in a treatment clinic, but once they leave the clinic they are at risk of relapse [6]. Relapse can be triggered by stress, cues associated with past drug use, or re-exposure to the substance. Animal models of relapse

can be triggered in the same way [5]. There are various indicators for affecting relapse. Some of them are: level of education, peer group, stress related to work, Interpersonal conflicts related to family/friends, strong positive of negative feelings like happiness and grief, place of residence, mobility pattern, level of income, occupation, unemployment rate, socio-economic status etc [7]. These indicators can have a direct or indirect effect on an individual for his/her behavior of drug addiction [7]. The objective of this study was to explore the factors associated with drugs relapse.

## Material and Methods

The study design was a descriptive, cross sectional study which was focused to the clients of Journey of recovery rehabilitation Center of Chitawan district and Nirnaya rehabilitation center of Lalitpur district. All the drug user receiving treatment in the both rehabilitation centers i.e. 114were involved in the study. The Journey of recovery rehabilitation Center of Chitawan district (55 clients as respondent) and Nirnaya rehabilitation center of Lalitpur district (59 clients as respondent) were selected by the purposive sampling for the feasibility of the researcher.

The primary quantitative data were obtained by semi- structured questionnaire schedule. The primary raw data was processed by using computer software Statistical Package for Social Science (SPSS). Frequency tables, mean tables, cross tables were calculated whenever necessary.

## Results

| Table-1: Demographic distribution | | | | |
|---|---|---|---|---|
| Sl. No | Demography | Description | Frequency | Percentage |
| 1 | Age(years) | 15-25 | 47 | 41.23 |
| | | 25-35 | 27 | 23.68 |
| | | 35-45 | 23 | 20.18 |
| | | 45 and above | 17 | 14.91 |
| | | Average = 32.14 year and SD = 11.15 year | | |
| 2 | Sex | Male | 112 | 98.24 |
| | | Female | 2 | 1.76 |
| 3 | Ethnicity/ Caste | Brahmin/Chhetri | 67 | 58.80 |
| | | Janajati | 42 | 36.80 |
| | | Dalit | 5 | 4.40 |
| 4 | Religion | Hindu | 99 | 86.84 |
| | | Buddhist | 9 | 7.90 |
| | | Christian | 6 | 5.26 |
| 5 | Occupation | Agriculture | 14 | 12.28 |
| | | Business | 18 | 15.79 |
| | | Service | 20 | 17.54 |
| | | Jobless/Student | 62 | 54.39 |
| 6 | Educational level | Under SLC | 50 | 43.86 |
| | | SLC and above | 64 | 56.14 |
| 7 | Marital status | Unmarried | 68 | 59.65 |
| | | Married | 37 | 32.46 |
| | | Divorced | 9 | 7.89 |
| 8 | Economic status | Poor | 26 | 25.0 |
| | | Medium and Higher | 78 | 75.0 |

Age group of 15-25 were higher percent (41.23%) than other age group. Male respondent were higher (98.24%) than Female. About three fifth (58.80%) of the respondents were among Brahmin and chhetri ethnicity. Lowest percent (4.4%) of ethnicity were among Dalit ethicity. Majority (86.84%) of the respondents were among Hindu religion. About one third (31.58%) were the student among the drug user clients. More than half (56.14%) of the respondents had education level of SLC and above. About two fifth(59.65%) of the respondents were unmarried. Three fourth of the respondents were among the Medium and higher level of economic status.

**Table-2: Use of drugs after abstinence (Relapse) [n=114]**

| Response | Frequency | Percent |
|----------|-----------|---------|
| Yes | 108 | 94.7 |
| No | 6 | 5.3 |
| Total | 114 | 100.0 |

Among total (114) respondents, most of the respondents were relapsed after the abstinence of

drugs. About 5 percent respondents became cleaned after abstinence of drugs.

**Table-3: Causes of relapse [n=108]**

| Causes | Frequency | Percent |
|--------|-----------|---------|
| Peer Pressure | 27 | 25.0 |
| No guidance | 12 | 11.11 |
| Family problem | 27 | 25.0 |
| still will of doing Drugs | 26 | 24.07 |
| Failure in life | 6 | 5.56 |
| Failure in love | 3 | 2.78 |
| Others | 7 | 6.48 |
| Total | 108 | 100.0 |

One fourth (25 percent) among the 108 respondents were relapsed due to the family problem. Similarly One fourth respondents said that they were relapsed due to peer pressure. The least percentage was due to the failure in love. The other causes of relapse (due to drug dependent, due to self motivation etc.) had about six percent.

**Table-4: Relationship between demographic characteristics and relapse [n=114]**

| | Use of drugs after abstinence (Relapse) | | | | | | $\chi^2$ p value |
|---|---|---|---|---|---|---|---|
| | **Yes** | | **No** | | **Total** | | |
| | **n** | **%** | **n** | **%** | **n** | **%** | |
| **Age group** | | | | | | | |
| 15-25 | 41 | 93.83 | 6 | 6.17 | 47 | 100 | |
| 25-35 | 27 | 100 | 0 | 0 | 27 | 100 | 0.029 |
| 35-45 | 23 | 100 | 0 | 0 | 23 | 100 | |
| 45 and above | 17 | 100 | 0 | 0 | 17 | 100 | |
| **Sex** | | | | | | | |
| Male | 106 | 94.64 | 6 | 5.36 | 112 | 100 | 0.73 |
| Female | 2 | 100 | 0 | 0 | 2 | 100 | |
| **Ethnicity** | | | | | | | |
| Brahmin and Chhetri | 64 | 95.52 | 3 | 4.48 | 67 | 100 | |
| Janjati | 39 | 92.86 | 3 | 7.14 | 42 | 100 | 0.72 |
| Dalit | 5 | 100 | 0 | 0 | 5 | 100 | |
| **Religion** | | | | | | | |
| Hindu | 93 | 93.94 | 6 | 6.06 | 99 | 100 | |
| Buddhist | 9 | 100 | 0 | 0 | 9 | 100 | 0.62 |
| Christian | 6 | 100 | 0 | 0 | 6 | 100 | |

| | Use of drugs after abstinence (Relapse) | | | | | | $\chi^2$ p value |
|---|---|---|---|---|---|---|---|
| | Yes | | No | | Total | | |
| | n | % | n | % | n | % | |
| **Marital status** | | | | | | | |
| Unmarried | 62 | 91.18 | 6 | 8.82 | 68 | 100 | |
| Married | 37 | 100 | 0 | 0 | 37 | 100 | 0.12 |
| Divorced/ separated | 9 | 100 | 0 | 0 | 9 | 100 | |
| **Educational level** | | | | | | | |
| Under SLC | 44 | 88 | 6 | 12 | 50 | 100 | 0.004 |
| SLC and above | 64 | 100 | 0 | 0 | 64 | 100 | |
| **Occupation** | | | | | | | |
| Agriculture | 14 | 100 | 0 | 0 | 14 | 100 | |
| Business | 18 | 100 | 0 | 0 | 18 | 100 | |
| Service | 20 | 100 | 0 | 0 | 20 | 100 | 0.27 |
| Jobless /Student | 56 | 90.32 | 6 | 9.68 | 62 | 100 | |
| **Economic status** | **n = 104** | | | | | | |
| Poor | 23 | 88.46 | 3 | 11.54 | 26 | 100 | 0.15 |
| Medium/Higher | 75 | 96.15 | 3 | 3.85 | 78 | 100 | |

Among the age group of 30 -35 universally relapsed among the 19 respondents. Chi- Square test between age group and relapse gives statistically significant result the, p value is less than 0.05. Among the total male respondents (112), about 95 percent of the respondents were relapsed. p value is 0.73, which shows that there is statistically not significance. This may be the insufficient sample of the female respondents. Statistically there is no association between ethnicity and drug relapse (p= 0.72).

There was found that among the 99 respondents of Hindu religion about 94 percent of the respondents were relapsed. But statistically it was not significant; where p value is equal to the 0.619. Similarly there is no statistically significant association between Marital status and drug relapse (p = 0.12). It is observed that 88 percent relapsed among total (50) under SLC level respondents. But SLC and Higher education level respondents were totally (100 Percent) relapsed. It shows that there is statistically significant association between education level and drugs relapse but P value is less than 0.05.

There is no statistically significant association between occupation and drug use after abstinence (p=0.27). Similarly there is no statistically significant association between economic status and drug relapse (p=0.15).

**Discussion**

On the basis of this study among 114 respondents, most of the respondents (94.7 percent) were relapsed in drugs after abstinence. The average tried for abstinence from drugs is 3.29 times. This study provides the evidences of relapse who starts using drugs at age of 15 to 35 years, they were relapsed 100 percent. It is observed that the mean age for the first drug use was 17.04 years. p- value is less than 0.05.

The data clearly shows that relapse is associated with age group and is statistically significant. Forty three percent respondents started using drugs at the age group of 15-20 years and about 60 percent respondents are unmarried. Similarly, the study of Rai (2000)

says that most of the drug users start drugs before the age of 19 years [7]. This may be due to the nature of more curiosity fun and excitement of the teenagers in this age group.

About 95 percent of the male respondents were relapsed. Among the female respondents (2) were totally relapsed. p- value is greater than 0.05,which shows that it was statistically insignificant. But one of the literatures of the Maehira et al, (2013), shows that there is more relapsed in female among the people who use drugs (PWUDs) [8]. This variation may be due to the low number of sample of female user in the study. Among the Brahmin and Chhetri ethnic group there were large respondents (67) which of them about 96 percent were relapsed. Dalit ethnicity had lowest respondent (5). Among them universally got relapsed. p-value is greater than 0.05. But Rai (2000) study says that the highest users are from the Newar community [3, 7]. This may be due to the study area is not limited only in Kathmandu. Katmandu has the high Newar community.

The main causes of the relapse were peer pressure and family problem [9-10]. Nearly one fourth (24.07 percent) were relapsed due to the unmet will of using drugs. Sportingly other studies had found that the various indicators for affecting relapse which are level of education, peer group, stress related to work, interpersonal conflicts related to family/friends and place of living [11-15]. About 87 percent of the respondents lived in urban area before relapsed, but this result had come from the study areas which are both urban [16-17]. These indicators can have a direct or indirect effect on an individual for his/her behavior of drug addiction and relapse.

Among the age group of above 25 years, universally relapsed among the 73 respondents. Lowest number of respondents was seen in the age group above 25 years which of them total respondents were relapsed. p- value is more than 0.05. This provides the insufficient evidence for the statistically significant result. But the study of IBBS and CBS shows that there is more chance of drug use in the group of adolescent age group

[18-19]. Among the lower education than SLC level 88 percent respondent were relapsed and among the educational level above than SLC was universally relapsed. There is statistically significant association between educational level and drug relapse (p= 0.004).

Lack of good data and absence of community based studies in wholesome level had made it difficult to estimate the real burden and conditions of drug relapse on Nepal. Steps towards overcoming it is being taken by Ministry of Home affairs and health issue is taken by the Ministry of Health and Population as it has made a political declaration on the prevention and control of drugs use[18-20].

## Conclusion

Mainly the youth population is involved in drug use and youth age groups are the most vulnerable for drug relapse if there is low educational status of the people then there is high chance of them being involved in drug use. But if there is higher educational level then there is more chance to be relapsed. The Age group above 25 years is has more chances of relapse than lower age group. The mean age of first intake of the drugs is 17.04 years and relapse is associated with the age of initiation of drugs. Age of the drug user is associated with the drugs relapse. Peer pressure and the family relation is the main and together with the curiosity of the users is cause of the drug relapse.

If one is involved in some kind of occupation or is busy in some other works, then there are less chances of being involved in drugs abuse and in relapse case there is more chances of breaking the drugs abstinence in the people of occupation other than the jobless/student. There is increased chance by increasing the economic status of the family of the drug user. Higher the economic status provides the greater chances for the drug relapse than the lower economic status but it is statically not significant.

# References

1. WHO Expert Committee on Drug Dependence. WHO Expert Committee on Drug Dependence: thirty-third report. *World Health Organization, Geneva* 2003; (33): 1-2.
2. United Nations Office on Drugs & Crime. World Drug Report. 2004 (Vol. 1). *United Nations Publications; Vienna, Austria;* 2005.
3. Parajuli (pathak) M. Drug Addicts and Rehabilitation: A case study on Naulo ghumti, Kathmandu, Nepal. *Family Health International (FHI).* 2004; 21-25.
4. Gautam BD. Laagu aushadhko badhdo prayog ra jokhim nyunikaran ka prayash haru: Surakshit jeeban. Kathmandu, Nepal. 2012; (9):5-10.
5. Kauer J. Learning mechanisms in addiction: synaptic plasticity in the ventral segmental area as a result of exposure to drugs of abuse. *Annual Reviews.* 2004; 66: 447-475.
6. Ranganathan S. Relapse management, thematic pamphlets. *UNODC regional office for south Asia;* 2005.
7. Rai LB. Socio Economic status and Drug Use Behavior of IDUs in Kathmandu Valley, Tribhuvan University, Kathmandu. *National Health Reseach Council* 2000; 25-27.
8. Maehira Y, Chowdhury EI, Reza M, Drahozal R, Gayen TK, Masud I, Azim T. Factors associated with relapse into drug use among male and female attendees of a three-month drug detoxification–rehabilitation programme in Dhaka: a prospective cohort study. *Harm reduction journal, Dhaka, Bangladesh.* 2013; 10(1):14.
9. The Health. Policy initiatives for drug control in Nepal. 2011;2(2): 66-68. Retrieved from *www.thehealthj.com/may_2011/drug_control_in_Nepal .pdf*, accessed on 2014 November 10.
10. Pun C and Niraula P. A study on drug abuse relapse and treatment in Kathmandu valley. *NHRC: Katmandu, Nepal* 2001.
11. Li et al. Factors associated with pretreatment and treatment dropouts: comparisons between Aboriginal and non-Aboriginal clients admitted to medical withdrawal management. *Harm Reduction Journal.* 2013; 10:38.
12. Kant CK and Plummer D. Unpacking drug detoxification in Nepal: in-depth interviews with participants to identify reasons for success and failure. *International Journal of Psychosocial Rehabilitation.* 2012; 16(2):50-61.
13. Kulsudjarit, Kongpetch. Drug problem in southeast and southwest Asia. *Annals of the New York Academy of Sciences.* 2004; 1025(1): 446-457.
14. Shrestha, Nirakar Man. Alcohol and drug abuse in Nepal. *British journal of addiction.* 1992; 87(9):1241-1248.
15. Tang, Wai-Man. Examining the relationship between ethnicity and the use of drug-related services: An ethnographic study of Nepali drug users in Hong Kong. *Substance abuse and rehabilitation.* 2014; 5:53.
16. Groves, Parama Bandhu. Buddhist Approaches to Addiction Recovery. *Religions.* 2014; 5(4):985-1000.
17. Ghimire, Bhagabati et al. Vulnerability to HIV infection among female drug users in Kathmandu Valley, Nepal: a cross-sectional study. *BMC public health.* 2013; 13(1):1238.
18. Government of Nepal CBS. Survey report on hard drug users. *GON, Kathmandu, Nepal.* 2010.
19. NCASC and ASHA Project. Integrated Biological and Behavioral Surveillance (IBBS) Survey among Injecting Drug Users in Kathmandu Valley, Nepal. Round-V. *NCASC, Kathmandu, Nepal.* 2011.
20. New ERA and Intrepid Nepal. Integrated Biological and Behavioral Surveillance (IBBS) Survey among Injecting Drugs in Kathmandu Valley, Nepal Round V-2011. *NHRC Kathmandu, Nepal.* 2011.

*All correspondences to: Mr. Samir Bhandari, Project Officer, Adventist Development and Relief Agency (ADRA) Nepal, Sanepa, Lalitpur, Nepal. E-mail: samirguru@gmail.com