



Injection Drug Users (Idus) and their Drug Injecting Behavior

Dr. Bhavna Puwar

Assistant Professor, Community Medicine Department, AMC MET Medical College, Maninagar, Ahmedabad

Dr. Vaibhavi Patel

Assistant Professor, Community Medicine Department, AMC MET Medical College, Maninagar, Ahmedabad

Dr. Sheetal Vyas

Professor and Head, Community Medicine Department, AMC MET Medical College, Maninagar, Ahmedabad

ABSTRACT

NACO reports an estimated 1.77lakh IDUs in India. This cross sectional study was done in Ahmedabad Municipal Corporation during April–May (2010). All IDUs were males, median age was 34.5 years and drug injection practices were initiated at median age of 25 years. Half of them were illiterate. Withdrawing practice was more in IDUs who were literate, young, married, doing group practice and with >10 years addiction whereas recapping was higher in illiterate, adult, single and having ≤10 yrs addiction. Quitting was tried by literate, young, married, opting group practices and with ≤10years addiction. In 95% IDUs, friend was influencer, 40%IDUs spent >Rs.400/day for the habit and relation between duration and frequency of drug intake was statistically significant. Summary: To prevent and control HIV among IDUs withdrawing, recapping and group practice should be discouraged.

KEYWORDS: IDUs, withdrawing, recapping

Introduction:

As per the UNAIDS 2000 report, it is estimated that between 5 and 10 per cent of HIV infections have resulted from injecting drug use globally, and in central Asia more than 80% of new infection of HIV are related to IDU. An estimated 12.5 million people inject drugs across the globe, most being between the ages of 15 to 30.[1] Estimation of IDU population in India is 1.77 lakh as per annual report 2010-11 by NACO. [2] It has been established that young people share injection equipment more often than older drug users. [2] A study on IDUs in five north eastern states in India revealed that sharing of needle and syringes was reported in all the states by large proportion of IDUs, more with close friends and also with stranger [3]. Thus the present baseline study was done to understand the behavior of IDUs of Ahmedabad city with regard to their drug injecting practices.

Methodology:

It was a Cross sectional descriptive type study done in Ahmedabad Municipal Corporation area during April–May, 2010. The only NGO working for targeted interventions amongst IDUs in Ahmedabad city was National Medicos organization (NMO). The total IDUs registered with NMO were 400 and 10% of them were included, thus 40 IDUs were selected by systematic random sampling. A pre-designed and pre-tested Proforma was used for data collection. The Proforma was prepared and field tested. After that the final version of the Proforma was prepared and used. The data collectors were trained to collect information by personal in-depth interview after taking informed consent. Data were analyzed with Epi info version 3.5.1. and appropriate test were applied

Results:

All the IDUs were males. 27% IDUs belonged to 35 to 39 years age group. Median age of IDUs was 34.5 years. Majority of them initiated drug injection practices in 25 to 29 years age group with median age of 25 years and almost 23% were into this practice in 15 to 19 years age group. Almost 50% IDUs had no formal education and 33% were educated up to primary level. 65% (26) IDUs were married and one third

were unmarried. Majority were employed as house servant. (Table 1)

Table 1. Socio demographic profile of IDUs

Variables	Frequency(n=40)(%)
Age(years)	(n=353) (n=353)
20-24	7(17.5)
25-29	5(12.5)
30-34	8(20)
35-39	11(27.05)
40-44	3(7.5)
>45	6(15)
Age at starting drug(yrs) abuse (years)	
15-19	9(22.5)
20-24	10(25)
25-29	18(45)
>30	3(7.5)
Education status	
Illiterate	20(50)
Just illiterate	5(12.5)
Primary	13(32.5)
Secondary and above	2(5)

Withdrawing before injection was practiced by 15(37.5%) IDUs, recapping needles were done by 12(30%) IDUs and 14(35%) IDUs had tried quitting the habit. The withdrawing practice was observed proportionately more among those IDUs who were literate, young, married, doing group practice and with more than 10 years addiction. Recapping needles was higher among those IDUs who were illiterate, adult, single, taking drugs in group. It was also higher among IDUs having short time (≤10 yrs) addiction. Quitting the habit was commonly found among IDUs who were literate, young, married, involved in group practices and with ≤ 10 years of addiction. However there was no significant association between factors like literacy, age, marital status, administration mode with withdrawing, recapping and quitting practices. (Table 2)

Table 2: Association between socio- demographic variables and various practices

Variables(n=40)	Withdrawal practice		Recapping practice		Tried to Quit	
	Yes (%)	No (%)	Yes(%)	No (%)	Yes (%)	No (%)
Literacy						
Illiterate(25)	9(36)	16(64)	10(40)	15(60)	8(32)	17(68)
Literate(15)	6(40)	9(60)	2(13.3)	13(86.7)	6(40)	9(60)
OR (CI) (P value)	0.84 (0.22-3.14) (0.5)		4.33 (0.79-23.48) (0.07)		0.70 (0.18-2.67) (0.4)	
Age(yrs)						
≤25(7)	3(42.9)	4(57.1)	2(28.6)	5(71.4)	3(42.9)	4(57.1)
> 25(33)	12(36.4)	21(63.6)	10(30.3)	23(69.7)	11(33.3)	22(66.7)

OR(CI)(P value)	1.3 (0.25-6.87) (0.53)	0.92 (0.15-5.56) (0.65)	1.5 (0.28-7.91) (0.4)
Marital status			
Single(26)	9(33.3)	18(66.7)	4(30.8)
Married(13)	6(46.2)	7(53.8)	8(29.6)
OR (CI) (P value)	0.58 (0.15-2.25) (0.3)	1.05 (0.25-4.44) (0.6)	0.43 (0.09-1.95) (0.2)
Administration practice			
Group(13)	5(38.5)	8(61.5)	6(46.2)
Alone(27)	10(37)	17(63)	6(22.2)
OR(CI)(P value)	1.06 (0.27-4.15) (0.9)	3 (0.72-12.39) (0.15)	3.33 (0.83-13.37) (0.15)
Duration of drug intake(yrs)			
≤ 10(18)	6(33.3)	12(66.6)	7(38.9)
> 10(22)	9(40.9)	13(59.1)	5(22.8)
OR(CI)(P value)	0.72 (0.19-2.64) (0.4)	2.16 (0.54-8.56) (0.2)	1.36 (0.36-5.02) (0.4)

20(50%) IDUs were injecting the drug ≤ twice a day and 20(50%) IDUs were injecting >twice a day. In 38(95%) cases friend and in 2(5%) cases relative influenced the habit of drug injection. 16(40%) IDUs were spending more than Rs.400 in a day for the habit and relation between duration of drug injection practice and frequency of drug intake per day was statistically significant with odds ratio 0.26(0.06-0.88) (p<0.05). Thus withdrawing and recapping was higher in those doing group practice. (Table 3)

Table-3: Association between drug injection practice and other variables

Injection practices(Yrs)	Intake/day		Influencer		Expenses(Rs.)	
	>2	≤2	Friend	Relative	> 400	≤400
>10(22)	7(31.8)	15(68.2)	22(56.8)	1(50)	6(27.3)	16(72.7)
≤10(18)	12(66.7)	6(33.3)	16(43.2)	1(50)	10(55.6)	8(44.4)
Total (40)	20	20	38	2	16	24
OR(P value)	0.23 (0.06-0.88) (0.02)		0.76 (0.04-3.13) (0.6)		0.3 (0.08-1.12) (0.6)	

Discussion:

27% IDUs were in 35-39 years age group. Median age of IDUs was 34.5 years in our study and similarly it was 35 years in a study by Ivdity Chikovani et al [4], while it was 29 years in a study by Neilane Bertoni et al. [5] Ivdity Chikovani et al reported 19 years as the median age at first use. [4] and whereas in our study median age was 25 years. Almost 23% were into this practice in adolescence. Almost 50% IDUs had no formal education and 33% were educated up to primary level and in one of the study the median education level was 8 years of formal education [5]. Majority were married and similarly Ivdity Chikovani et al reported 49.7% of respondents were married [4], but contrary to this Neilane Bertoni et al found that most IDU's were single (56.8%).[5] but one third were unmarried in our study. Withdrawing practice was done by 37.5% IDUs and recapping needles was done by 30% IDUs and 35% IDUs had tried quitting the habit of drug injection. These practices influence the risk of acquiring infections like HIV/AIDS and STI. IDUs who were young, literate, married and doing group practice with more than 10 years addiction were found to be withdrawing higher and adult IDUs who

were literate, single and having short term addiction, involved in group practice were recapping more. Young, literate, married IDUs involved in group practice were trying to quit the habit in higher proportion. We observed that 55% IDUs were injecting drug since >10 years and in Imphal, 60% IDUs were injecting since at least 6 years.[6] 32.5% IDUs in our study were involved in group practice whereas needle sharing was 41% in IDUs of Delhi and 60% in IDUs of Imphal. [6] In our study 50% IDUs were injecting the drug more than two times in a day, 61% IDU from Delhi and 27% IDUs from Imphal reported multiple injections per day.[6] However relation between duration of practice and frequency of intake was significant.

Conclusions:

Efforts must be made to discourage practices like withdrawing, recapping and taking drugs in groups among IDUs which facilitates HIV transmission. Health education programs for prevention of HIV in IDUs should begin in early age and also focus on adults. Efforts to identify and register female IDUs must be carried out.

REFERENCES

1. UNITED NATIONS (2004), HIV Prevention, among young injecting drug users global youth network, New York, UNITED NATIONS PUBLICATION, This publication has not been formally edited. || 2. Annual report 2010-11, retrieved on January 2013 from www.nacoonline.org/publication/HIV_data/annual_report_2010-11 || 3. Gajendra K Medhi, Jagadish Mahanta, Rajatashuvra Adhikary, Brogen S Akoijam, Bruno Liegise, Kalpana Sarathy, Chelliah J Thomas and Bhupen Sarmah, (2011), Spatial distribution and characteristics of injecting drug users (IDU) in five Northeastern states of India, BMC Public Health, 11:64 doi:10.1186/1471-2458-11-64 || 4. Ivdity Chikovani, Ketevan Gogvadze, Sudit Ranade, Mollie Wertlieb, Natia Rukhadze and George Gotsadze, (2011), Prevalence of HIV among injection drug users in Georgia, Journal of the International AIDS Society 2011, vol-14:9 doi:10.1186/1758-2652-14-9 retrieved on December 2012 from <http://www.jiasociety.org/content/14/1/9> || 5. Neilane Bertoni, Merrill Singer, Cosme MFP Silva, Scott Clair, Monica Malta and Francisco I Bastos (2011) Knowledge of AIDS and HIV transmission among drug users in Rio de Janeiro, Brazil., Harm Reduction Journal, vol-8, 5 doi:10.1186/1477-7517-8-5, retrieved on December 2012 from www.harmreductionjournal.com/content/8/1/5 || 6. Injecting drug users in India: Understanding sexual behaviors and sexual networks to design effective behavior change strategies. (2007) Population council, update, retrieved on December 2012 from <http://www.popcouncil.org> || ||