



THE IMPACT OF NEEDLE AND SYRINGE EXCHANGE PROGRAM ON INJECTING DRUG USERS IN ALLAHABAD DISTRICT, INDIA

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ABSTRACT

Introduction: Traditional drugs like cannabis and opium has been used in India from long time. Injecting drug use entered into Indian sub-continent in 1980s. The Injecting of drugs started in Manipur, Mizoram and Nagaland and then spread to metropolitan cities of India. Injecting drug is one of the important factors responsible for the spread of Human Immuno-deficiency Virus (HIV) in India. As per the estimates, about one in every ten injecting drug users (IDUs) in India is HIV positive. New needle/syringe is provided and old ones are collected from IDUs under Needle Syringe Exchange Program (NSEP) Program. The Benefit of NSEP goes beyond this primary objective of providing new needle and syringes to IDUs.

Objective: To assess demand and supply and adequacy of needle and syringes being provided in an IDU TI. **Material and Methods:** The study was a descriptive study and respondents were taken from Allahabad TI by random table sampling method. Sample size was 170 (20% of the total active IDUs population registered (850) in the TI). In depth interviews were conducted. The study was conducted between January to February 2017. **Result:** In terms of needle and syringe adequacy, the study reported that the needle and syringes distributed by the TI is not sufficient to full fill the demand of the IDUs. It was reported that 72 percent needle and syringes were distributed by TI to IDUs.

Keyword1-Needle Syringe Exchange Program; **Keyword2-**Injecting Drug Users; **Keyword3-**Human Immuno-deficiency Virus; **Keyword4-** Target Intervention.

Introduction:

The history of drugs illuminates the history of humanity and explores the long relationship between mankind and mind-altering substances. Use of drug is as old as the history of mankind. India has a long history of traditional drug use, with opium and cannabis being the most popular traditional drugs available. Injecting drug use (IDU) was a rare phenomenon in the Indian sub-continent till the 1980s. The mid 1980s witnessed an epidemic of heroin injecting in the North-eastern states of Manipur, Mizoram and Nagaland, and in the metropolitan cities of India. According to the National AIDS Control Organization, there are approximately 96,463 to 189,729 male Injecting Drug Users (IDUs) and 10,055 to 33,392 female IDUs in India. Injecting drug use is one of the important driving factors in the spread of the HIV epidemic in India. As per the estimates, about one in every ten injecting drug users in India is HIV positive. Among IDUs, HIV prevalence of ≥ 5 per cent has been observed in 10 states and 23 districts in India. . The National Household Survey (Ray, 2004) has estimated 2 million opioid users in India and injecting drug use prevalence at 0.1% of the adult male population. Injecting drug users (IDUs) are among the highest priority subpopulations for HIV prevention identified by the National AIDS Control Organization (NACO) in India. The technical guide developed jointly by the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC), and the Joint United Nations Programme on HIV/AIDS (UNAIDS) for countries to set targets for universal access to HIV prevention, treatment and care for IDUs has recommended a comprehensive package of core public health interventions. The package includes needle syringe exchange programme (NSEP), opioid substitution treatment (OST) and provision of antiretroviral therapy (ART) for HIV positive IDUs as an essential package among the nine interventions suggested. In India, NACO has adopted a harm reduction (HR) strategy in NACP – III to prevent HIV amongst the IDUs through targeted interventions (TI) by non-government organizations (NGOs).

Justification of the study:

The research shows that Needle exchange programs not only benefit individual drug users by helping to prevent the transmission of blood borne diseases such as HIV and Hepatitis C, they also benefit the communities in which they operate by keeping discarded, used syringes off the streets, giving homeless or unstably housed drug users alternatives to street involvement, and serving as a gateway to engage difficult-to-reach individuals in services such as mental health and substance use counselling, housing, and case management. Syringe exchange programs typically deliver syringes via storefront programs, peer delivery programs, and outreach programs. Injecting drugs with contaminated injecting equipment is the main risk factor for HIV infection in the northeast (especially in the states of Manipur, Mizoram and Nagaland), and features increasingly in the epidemics of major cities elsewhere, including in Chennai, Mumbai and New Delhi (MAP, 2005; NACO, 2005) and in the state of Punjab. Products injected include legal pharmaceuticals (e.g. buprenorphine and diazepam), in addition to heroin. In the light of the above, it would be essential to study the demand and the provisions for supply of needles/syringes in IDU TIs. This would help in planning for adequate provision of needles/syringes in the context of an optimal HIV prevention and harm reduction among IDUs in Allahabad. Thus this research is conducted to collect information on the demand for needles and syringes in the IDU TIs.

Objective:

To assess demand and supply and adequacy of needle and syringes being provided in an IDU TI.

Material and Methods:

The study is a descriptive study among Injecting Drug Users (IDUs). Allahabad TI was selected because they have been running IDU TI since 2008 and till date they are finding out new IDUs in the district. Sample size is 20% of the total active IDUs population registered in the TI. Since active population of

registered IDUs at TI is 850, so 20% of 851 are 170. A random table sampling method was applied to study population of IDUs. A random list was prepared from the line listing register.

Analysis and interpretation of the data:

The collected data was compiled, coded into a specific analyzing computer software package called the Statistical Package for Social Sciences (SPSS) and MS Excel. Wherever required charts, graphs have been prepared for better interpretation. The statistical measures like Mean, Median, Standard deviation and Chi-square tests were applied on the basis of the nature of data.

Ethical considerations:

Approval was taken from T.I. authorities and concerned institutions. Respondents were fully informed about objectives of study and verbal consent was taken before data collection. The privacy and confidentiality was maintained.

Result

Table 1.1:- Injecting drug episode during the last month by the respondents.

Often injecting drug episode	Frequency	Percentage
Everyday	130	76.5
Every second day	18	10.6
Every third day	08	4.7
Once in a week	13	7.6
Once in a month	1	0.6
Total	170	100.0

Table 1.1 shows majority of the respondents 76.5 percent had their injecting episode everyday whereas 10.6 percent had their injecting episode every second day, 7.6 per cent had their injecting episode once a week, 4.7 percent had their injecting episode every third day and remaining 0.6 per cent had their injecting episode once in a month.

Table 1.2: - Injecting Episodes of the respondents in the last week.

Injecting Episodes in last week	Frequency	Percentage
21 times(3 times per day or more)	24	14.1
14 times(2 times per day)	75	44.1
7 times(1 time per day)	35	20.6
3 times(1 time every second day)	15	8.9
2 times(1 time every third day)	7	4.1
1 time(once a week)	14	8.2
Total	170	100.0

Table 1.2 shows 44.1 percent respondents inject drugs 14 times i.e two times per day in a week, 20.6 percent inject drugs 7 times i.e. one time per day in a week, 14.1 percent inject drugs 21 times i.e. three times per day in a week, 8.8 percent inject drugs 3 times i.e. one tome every second day in a week, 8.2

percent inject drugs 1 times i.e once in a week and remaining 4.1 percent inject drugs two times i.e. one times every third day in a week.

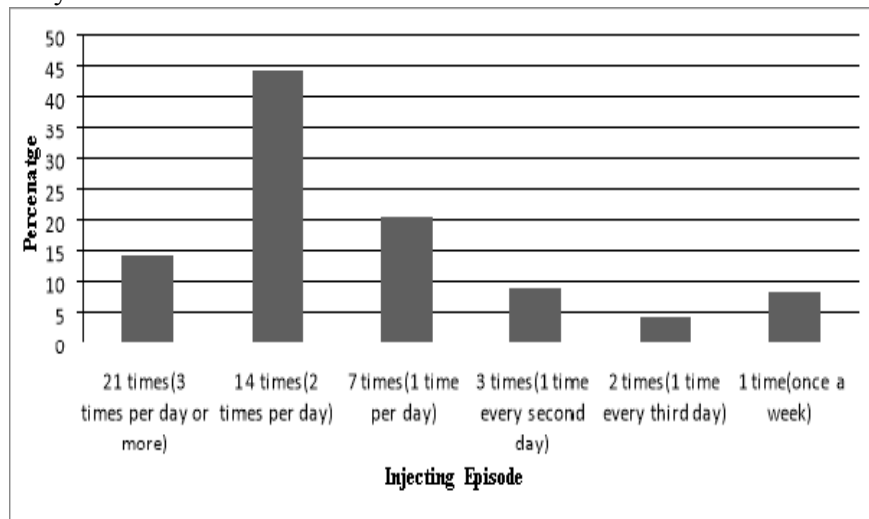


Fig 1: - Injecting Episodes in last week of the respondents.

Table 1.3:- Use of TI for needle and syringe by the respondents.

Use of TI often	Frequency	Percentage
Always	93	54.7
Frequently	45	26.5
Sometimes	12	7.0
Hardly Ever	11	6.5
Never	09	5.3
Total	170	100.0

Table 1.3 shows majority of the respondents 54.7 per cent use TI for acquiring needle and syringe, 26.5 use TI frequently, 7.1 percent use TI sometimes, 6.5 percent use TI hardly ever and 5.3 percent never use TI for acquiring needle and syringe from TI.

Table 1.5 Demand of the IDUs and supply of N/S by the TI.

	Mean	Std. Deviation	Sum
Demand of IDU per week	11.0118	6.23123	1872.00
Distribution by TI	8.0529	5.50660	1369.00

Table 1.5 shows that the mean for the demand of IDU per week is 11.01 and mean distribution of needle and syringe by TI is 8.05. So the mean gap between demand and distribution is 2.96.

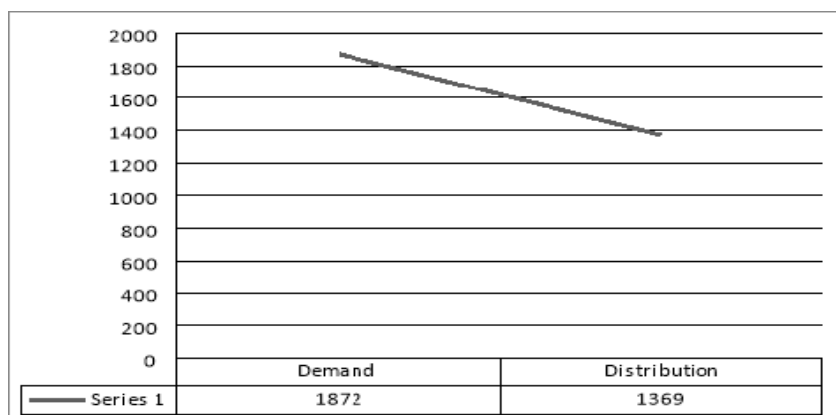


Fig 2 Demand of the IDUs and supply of N/S by the TI.

Discussion

In terms of needle and syringe adequacy, it was reported that the needle and syringes distributed by the TI is not sufficient to full fill the demand of the IDUs. It was reported that 72 percent needle and syringes are distributed by TI to IDUs. So new strategies and macro and micro plan should be made to cover 100 percent demand of IDUs to prevent sharing of needle and syringe among them.

Conclusion

In terms of needle and syringe adequacy, it was reported that the needle and syringes distributed by the TI is not sufficient to full fill the demand of the IDUs. It was reported that 72 percent needle and syringes are distributed by TI to IDUs.

Recommendation

New strategies and macro and micro plan should be made to cover 100 percent demand of IDUs to prevent sharing of needle and syringe among them.

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