

PATTERN OF DRUG USE IN INDIAN HEROIN ADDICTS

A. K. SHARMA¹, M. SAHAI²

SUMMARY

The pattern of drug use was studied in 215 heroin addicts, constituting 80.7% of the patient population attending ABHAY-II Deaddiction Cum Rehabilitation Centre. All heroin addicts were male and 98.6% of all had consumed or have been consuming other drugs concurrently. Tobacco, cannabis and alcohol were the drugs commonly used by the addicts. The mean age for beginning tobacco consumption was lowest and highest for medicinal drugs like sedatives, hypnotics and tranquilizers. The sequential pattern of drug use was tobacco, cannabis, alcohol, heroin, opium natural and medicines like sedatives, analgesics, hypnotics and tranquilizers. Most of the patients had been regular cannabis and alcohol users. Occasional use of opium or medicines was a result of substitution for heroin in an attempt to control the withdrawal symptoms.

Heroin is widely recognised as a serious national and international problem with severe psychological, social and physical consequences. The geographic location of India between the Golden Triangle (Burma, Laos and Thailand) and Golden Crescent (Iran, Afghanistan and Pakistan) made it a transit point for the trade of drugs like heroin and cannabis (Kumar, 1989).

Recent clinic based studies (Adityanjee et al., 1984; Munjal and Jiloha, 1986; Gupta et al., 1987) suggest the beginning of heroin epidemic in India from the year 1981. Consumption of white sugar (Diacetyl morphine) has been reported in early 1980's only and later the epidemic was of brown sugar. These studies not only present an increasing number of drug addicts in the deaddiction units but gradually increasing proportions of heroin addicts too.

Multiple substance abuse concomitantly or sequentially has been thoroughly studied and documented among adults but less so in youth (Chambers et al., 1970; Curtis and Simpson, 1976). The sequential or concomitant use of drugs has correlation with age (Kandel et al., 1976; Abelson and Fishburne,

1976) and reflect the increasing time and opportunity for contacts with drugs in older groups. As new drugs are tried, generally in sequential pattern over time, previously used drugs are often not abandoned (Gould et al., 1977). The present paper presents the study of the pattern of drug use in heroin addicts attending 'Abhay-II Deaddiction cum Rehabilitation Centre.'

Material and Method

Abhay-II Deaddiction cum Rehabilitation Centre is a fifteen bedded deaddiction centre located in North-East Delhi and run by a non governmental organisation and sponsored by Ministry of Welfare, Government of India.

The outpatient records of all the patients visiting the deaddiction centre from March 1989 to July 1989 were analysed for the primary drug of abuse, drugs used in past, age of first experience of drug used and the total duration of use of various drugs.

The primary drug is one which is causing most health, social and other problem to the person and has lead to the consultation with the treatment facility. The pa-

1. Project Director, 'ABHAY-II' Deaddiction cum Rehabilitation Centre, C-67/A & B, Bhajpa Pura, Delhi-93, Sponsored by Ministry of Welfare, Govt. of India.
2. Lecturer, Deptt. of Psychiatry, G.B.Pant Hospital, New Delhi.

tients presenting with heroin as primary drug of abuse constituted the present study sample. They had been occasional users of various drugs. Occasional use was considered when (a) the frequency of use of a drug is not more than once a week, (b) the drug use has not resulted in physical dependence, (c) the consumption of drug has no untoward physical effects.

Out of 277 cases visiting the deaddiction centre for treatment, thirteen cases with incomplete information were excluded from the study sample. 213 cases of heroin dependence constituted the study group.

Results

All heroin addicts were male and constituted 80.7% of the population attending the deaddiction centre. Table (1) shows the sequential or concurrent drug use pattern in heroin addicts. 1.4% of the addicts had never used any drug including tobacco, however 1.5% reported to have used other drugs except tobacco. Sequential or concurrent use of other intoxicants was present in 98.6% of the heroin addicts. Table (2) shows the age of first experience of various drugs. The sequential mean age of experiencing various drugs was lowest for tobacco (14.44, S.D. \pm 4.32 years) and highest for medicinal drugs (23.36, S.D. \pm 6.45 years). Table (3) shows the life time duration of use of various drugs. There were no occasional users of tobacco or heroin. Most of the heroin addicts were regular user of cannabis and occasional users of medicinal drugs and opium. The average duration of use was lowest for medicinal drugs and highest for tobacco.

Discussion

A much higher proportion (80.7%) of heroin addicts are represented in our deaddiction centre as compared to 37.8% and 72.1% of heroin addicts reported in other studies (Adityanjee et al., 1984; Munjal and Jiloha, 1986). These studies report a gradually increasing proportion of heroin de-

TABLE-1 Drug Use Pattern in Heroin Addicts

Substance	Number
Tobacco	207(97.2)
Cannabis	114(53.5)
Alcohol	114(53.5)
Opium natural	51(23.9)
Medicinal drugs (sedatives, hypnotics, analgesics and tranquilizers)	55(25.8)
Morphine/Pathedine/Pentazocine	4(1.9)

Figures in parenthesis indicate percentage

pendents from 1981, while there was not a single heroin addict registered in these deaddiction units before the year 1981.

A high proportion (98.6%) of heroin addicts during their life time had consumed or have been consuming tobacco and other intoxicants like cannabis, opium, alcohol and medicine and drugs like, hypnotics, analgesics and tranquilizers. The drugs commonly used in past by heroin addicts were tobacco, cannabis and alcohol. Other commonly used drugs were medicinal drugs and natural opium. In an earlier similar study (Munjal and Jiloha, 1986) the most preferred drug was cannabis (49.5%) followed by alcohol (45.7%) raw opium (20.9%), sedatives (14.0%) and stimulants (13.3%). Nonsmoker heroin addicts constituted 2.9% of the total patients (three patients only on heroin and three on multiple drugs). The route of heroin administration in these patients had been inhaling the fumes of heroin powder, popularly known as chasing. Most of the heroin addicts had been smoking tobacco earlier. In few of the patients cigarette smoking began concomitant to heroin abuse, when heroin was first smoked in cigarette.

The mean starting age was lowest for tobacco and highest for medicinal drugs. The sequential age pattern of drug use was

TABLE-2 AGE OF FIRST EXPERIENCE OF VARIOUS DRUGS

Substance	Age in years (Percentage in parenthesis)									Mean	s.d.
	< 10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-Above		
Tobacco (N = 207)	39(18.8)	84(40.6)	71(34.3)	11(5.3)	2(0.9)	-	-	-	-	14.44	4.32
Heroin (N = 213)	1(0.5)	23(10.8)	83(38.9)	55(25.8)	34(15.9)	8(3.7)	7(3.3)	1(0.5)	1(0.5)	21.77	6.52
Alcohol (N = 114)	3(2.6)	34(29.8)	56(49.1)	16(14.0)	4(3.5)	-	1(0.8)	-	-	17.47	4.51
Cannabis (N = 114)	8(7.0)	38(33.3)	42(36.8)	15(13.1)	8(7.0)	2(1.7)	1(0.8)	-	-	17.42	5.72
Opium natural (N=55)	-	7(13.7)	18(35.3)	14(27.4)	3(5.9)	7(13.7)	1(1.9)	1(1.9)	-	22.21	7.02
Drugs (N = 55)	-	3(5.4)	16(29.1)	22(40.0)	7(12.7)	4(7.3)	1(1.8)	2(3.6)	-	23.36	6.45
Morphine/Pathedine (N = 4)	-	1(25)	1(25)	1(25)	1(25)	-	-	-	-	20.5	1.11

TABLE-3 DURATION OF USE OF VARIOUS DRUGS

Substance	Duration in years							Median (months)	Q
	Occasionally Used	< 1	1 - 2	2 - 3	3 - 4	4 - 5	5 and Above		
Tobacco	-	6(2.9)	5(2.4)	5(2.4)	5(2.4)	17(8.2)	169(81.6)	103.5	3.67
Heroin	-	23(10.8)	5(2.3)	12(5.6)	26(12.2)	52(24.4)	95(44.6)	51.61	11.53
Alcohol	54(47.4)	8(7.0)	4(3.5)	2(1.7)	7(6.1)	3(2.6)	36(31.6)	61.5	13.64
Cannabis	39(34.2)	17(14.9)	6(5.2)	6(5.2)	6(5.2)	6(5.2)	34(29.8)	52.5	14.5
Opium natural	31(60.8)	10(19.6)	2(3.9)	1(1.9)	1(1.9)	1(1.0)	5(9.8)	12.5	26.5
Drugs	37(67.3)	10(18.2)	3(5.4)	4(7.3)	-	-	1(1.8)	11.3	9.55
Morphine/Pathedine/Pentazocine	2(50.0)	-	1(25.0)	-	-	-	1(25.0)	-	-

tobacco, cannabis, alcohol, heroin natural opium and medicinal drugs. The mean age of experiencing various drugs in Indian patients is higher than reported in other studies (Gould et al., 1977) where the average age for starting alcohol, marijuana, inhalants and hashish was 12.2, 12.9, 13 and 14 years respectively. Alverca et al. (1989) reported that earliest consumed were inhalants (15.3 yrs.) followed by tranquilizers (16.08 yrs) cannabis (17.3 yrs), amphetamines, opiates (18.78 yrs), psychedelic drugs and cocaine. The gateway to heroin abuse in our patients had been a habit of tobacco use and indulgence in cannabis and alcohol. A higher mean age for beginning opium and

medicinal drugs is largely due to consumption of opium and other medicines to control withdrawal symptoms of heroin.

Tobacco though producing psychological dependence and heroin chemical dependence have been regularly used by all patients. Cannabis and alcohol are the drugs most commonly and regularly used by the heroin addicts sequentially and concurrently. In case of non availability of heroin during the drug free period after treatment, cannabis or alcohol has been used to control physical withdrawal, craving or feeling of emptiness. Opium and medicinal drugs have been used mostly as a substitute of heroin or in an attempt to give up heroin.

Several factors contribute to the misuse of medicinal drugs used for detoxification viz. free availability of these medicines in the out patient department of all the deaddiction centres; an easy over the counter availability; relapsed patients becoming conversant with the names of medicines used. Nitrazepam, combination of diazepam and diphenhydramine hydrochloride, chlorpromazine and dextropropoxephene are the commonly used medicines.

An unusual phenomenon of chasing dextropropoxephene powder has been observed in the admitted patients. A recent use of buprenorphene in some deaddiction centres for heroin detoxification is also making its use common.

REFERENCES

- Abelson, H.I and Fishburne, P.M. (1976). Non medical use of psychoactive substances. 1975-1976, Nation wide study among youth and adults. Princeton: Response Analysis Corp.
- Adityanjee, Mohan, D. and Saxena, S. (1984). Heroin Dependence: The New Delhi Experience. *Indian Journal of Psychiatry*, 26, 312-316.
- Alvarez, F.C., Queipo, D., Delrio, M.C. and Garcia, M.C. (1989). Pattern of drug use by young people in the rural community of Spain. *British Journal of Addiction*, 84, 647-652.
- Chambers, C.D. and Moldes, T. (1970). The evolution of concurrent opiate and sedative addiction. In: (Eds.) J.C. Ball and C.D. Chambers, *The Epidemiology of opiate addiction in the United States*. Thomas: Springfield Ill.
- Curtis, B. and Simpson, D.D. (1976). Demographic characteristics of groups classified by patterns of multiple drug abuse: a 1969-71 sample. *International Journal of Addiction*, 11(1), 161-173.
- Gould, L.C.; Berberian, R.M.; Kasl, S.V.; Thompson, W.D. and Kleber, H.D. (1977). Sequential pattern of multiple drug use among high school students. *Arch. Gen. Psychiatry*, 34, 216-222.
- Gupta, A.K.; Jha, B.K. and Devi, S. (1987) Heroin addiction: Experience from general psychiatry out patient department. *Indian Journal of Psychiatry*, 28, 81-83.
- Kandel, D.; Single, E. and Kessler, R.C. (1976). The epidemiology of drug use among New York state high school students: distribution, trends, and changes in rates of use. *A.J. P.H.*, 66, 43-53.
- Kumar, B.V. (1989) Drug Trafficking-A historical perspective. *Indian Journal of Social Work*, Vol. L, No.1, January 1989.
- Munjal, G.C. and Jiloha, R.C. (1986). Drug abuse in Delhi: Experience of a deaddiction unit in a general hospital. *Indian Journal of Psychiatry*, 28, 87-88.