HEROIN DEPENDENCE: THE NEW DELHI EXPERIENCE

ADITYANJEE*
D. MOHAN*
S. SAXENA*

SUMMARY
Sociodemographic and clinical profile of the first one hundred and five patients attending a de-addiction clinic of New Delhi for heroin dependence is presented. It reveals a sudden rise of heroin use in young educated males, probably because of its easy availability and its decreasing prices in the last few years. This trend is likely to be observed in the other metropolitan cities of India as well. Need for strengthening of preventive, curative and rehabilitative services is emphasized.

Though the precise history of the introduction of the opium use in India is uncertain, it is believed that its use began in the 9th century A.D., after its initial import into the country by Arab traders. The earliest mention of opium as a product of India was by traveller Barbosa in 1511 and in 1516 (Sharma, 1981). Opium used to be the narcotic drug of choice in Asia until the post World War II era (Westermayer, 1976). The pro-heroin effects of antio-pium laws reported in South East Asian countries have been attributed to overzealous implementation of the simplistic model of the economic “Supply and Demand” (Mohan et al., 1983). Westermayer (1976) suggested a cause and effect relationship between anti-opium laws and increased heroin use in traditional opium using Asian countries.

However, in India, a strictly legalistic approach in narcotics use was never practised. Instead a policy of gradual systematic drug demand reduction using a step wise withdrawal technique was implemented (Bayer, 1981). Despite this, heroin started making its presence felt in India. In early eighties (Mohan et al., 1983; Saxena and Mohan, 1984). Heroin use/dependence which was conspicuous by its absence in all epidemiological surveys on substance abuse done in general and student populations carried out prior to 1980's, made a dramatic and sudden appearance in the metropolitan cities of India that even the popular press did not fail to miss the phenomenon (Saxena and Mohan, 1984).

The present paper reports clinical data from the de-addiction services of a psychiatry department in Delhi on patients with heroin dependence.

METHOD
All the out patient and in patient records of the de-addiction services of the AIIMS Hospital, New Delhi for the period of January 1980 to May 1984 were reviewed. These were analysed for relevant sociodemographic information, the details of the dependence pattern and the treatment procedure adopted. The total number of patients consuming heroin was 105.

OBSERVATIONS AND RESULTS

Table I gives the distribution according to the year in which they presented to the department. There were no cases prior to 1980.
**Table I.** Number of Heroin Patients according to the year of presentation.

| Year | Number | Percentage |
|------|--------|------------|
| 1980 | 0      | 0.0%       |
| 1981 | 9      | 12.0%      |
| 1982 | 20     | 17.2%      |
| 1983 | 41     | 25.0%      |
| 1984 | 35     | 37.8%      |

(* Percentage of patients form to total attendance of de-addiction clinic).

As is evident both the absolute numbers and the proportion of patients with Heroin dependence has been increasing steadily since 1930; prior to which no case of Heroin dependence was registered with our de-addiction services.

**Table II.** Socio-demographic Profile. 
(N=105)

| Age (in completed year) | N  | %  |
|------------------------|----|----|
| up to 20               | 10 | 9.5|
| 21-25                  | 56 | 53.3|
| 26-30                  | 26 | 24.8|
| 31-35                  | 6  | 5.7|
| More than 35           | 7  | 6.7|

| Education              | N  | %  |
|------------------------|----|----|
| Less than primary      | 6  | 5.7|
| upto Middle school     | 12 | 11.4|
| upto Higher secondary  | 36 | 34.3|
| upto College           | 48 | 45.7|
| Not known              | 3  | 2.9|

| Occupation             | N  | %  |
|------------------------|----|----|
| Hotel/Restaurant business | 17 | 16.2|
| Other business         | 25 | 24.8|
| Salaried Employees     | 18 | 17.1|
| Student (currently)    | 13 | 12.4|

| Marital Status | N  | %  |
|----------------|----|----|
| Married        | 31 | 29.5|
| Unmarried      | 71 | 67.6|
| Not known      | 3  | 2.9|

All the patients except one were males. Seven patients (6.6%) were foreign national (Four Afghans, Two Iranians and one British). Most of the patients from Delhi were residing or working in a few specific areas which are known for easy availability of drugs. Majority of the users were in the age group 21-30 years (78.1%), had studied upto either the final year of school (34.3%) or dropped out of college (45.7%). Occupationally young businessmen and those connected with tourism and hotel trade were the commonest. A little less than one third were unemployed at the time of contact with de-addiction services. Majority (67.6%) were unmarried.

**Table III.** Duration of heroin intake at the time of Presentation. 
(N=105)

| Duration          | N  | %  |
|-------------------|----|----|
| Less than 6 months| 25 | 23.8|
| 6 months to 1 year| 42 | 40.0|
| 1 to 2 years      | 18 | 17.1|
| 2 to 3 years      | 9  | 8.6|
| 3 to 4 years      | 2  | 1.9|
| More than 4 years | 7  | 6.7|
| Not known         | 2  | 1.9|

Majority i.e., 80.9% has been taking it for less than 2 years. Very few were seen consuming it longer than two years.
TABLE IV. Distribution of Patients according to Quantity of Heroin consumed:

| Quantity/day          | Distribution of pts. for max. quantity consumed (N = 103) | Distribution of pts. for quantity in previous 24 hrs. (N = 105) |
|----------------------|------------------------------------------------------------|---------------------------------------------------------------|
|                      | N   | %   | N   | %   |
| 0-to quarter gm.     | 7   | 6.7 | 24  | 22.8|
| between quarter to half gm. | 21  | 20.0| 25  | 23.8|
| between half to one gm. | 31  | 29.5| 33  | 31.4|
| between one to two gm. | 20  | 19.0| 5   | 4.8 |
| More than two gm.    | 17  | 16.2| 3   | 2.9 |
| Not known            | 9   | 8.6 | 15  | 14.3|

Majority of the consumers took 1/4-gm. per day of street level heroin.

Route of Heroin administration

Most of the patients started with smoking and only one fourth of them graduated to inhaling (known as chasing popularly).

TABLE V. Distribution of patients according to the route of Consumption

| Route of Consumption (N = 120) | N   | %   |
|--------------------------------|-----|-----|
| Sniffing                       | 5   | 4.8 |
| smoking                        | 78  | 64.3|
| Inhaling                       | 18  | 14.8|
| Intravenous                    | 10  | 8.5 |
| Not known                      | 7   | 6.7 |
| Intramuscular                  | 2   | 1.9 |

* Because of multiple routes.

Some patients used multiple routes. Abuse of other drug(s) is given in Table VI. Multiple drug combinations were used.

TABLE VI. Combination of other drugs used along with Heroin (N = 160)

| Substance        | Other Drugs(s) Abused No. of patients |
|------------------|--------------------------------------|
|                  | N   | %   |
| Alcohol          | 48  | 45.7|
| Other opiates    | 22  | 21.4|
| Cannabis         | 52  | 49.5|
| Sedatives        | 15  | 14.4|
| Stimulants       | 14  | 13.3|
| Hallucinogens    | 9   | 8.6 |

Most of the patients also consumed drug other than heroin. The most preferred was cannabis (49.5%), followed by alcohol (45.7%) and raw opium (20.9). However, approximately one fifth of the patients used Heroin alone.

A detailed history and mental status examination revealed that 9 patients (8.5%) had an additional diagnosis of psychosis—(Schizophrenia—7 and MDP—2). The rest had no psychiatric illness at the time of index visit or in the past.

MANAGEMENT:

After the initial assessment, the goal of total abstinence was uniformly advised in all the patients and the treatment programme explained. Total withdrawal was attempted in all the patients who agreed to leave the drug completely. Fifty (47.6%) patients dropped out after initial assessment while the remaining fifty five (52.4%) entered the programme willingly. Out of the later 21 patients were treated as inpatients and 34 as outpatients for management of acute withdrawal effects. There were no
specified criteria for hospitalization except distance though in later half of the four year period majority were treated as out patients. This is in keeping with observations of Gossop and Connell (1983), who maintain that more often than not the decision to hospitalize the addict is based on the personal 'theories' held by each clinician. Initially withdrawal was gradual, which was subsequently changed to abrupt and sudden. There was again a change in this policy regarding the type of withdrawal, after initial experience; out of the 55 patients who entered the programme, 44% were abstinent after one week. Whereas only 26 (24.8%) were totally abstinent after one month follow-up. Majority of our patients (89.4%) were taking heroin for less than three years, indicating recent onset of this problem. The favourite route of administration was smoking although parenteral route was used by 12 patients (11.4%). Another common route was 'Chasing' or inhaling which accounted for 17.4% of the patients. In terms of quantity some patients had consumed even up to 4 to 5 grams every day, however, most (56.2%) were taking less than one gram at the time of index visit. Maximum quantity observed was 12 grams per day taken for last 11 years by an Afghan National. All this data was based on self report, and bi reliability checks were made keeping in view the observation made by Ben-Yehuda (1980).

DISCUSSION

This recent increase in the incidence and prevalence of heroin dependence is an ominous sign and should be taken seriously. Although clinic population is not a time representative of general population but it gives a fair idea of the extent of problem. Thus there is a need for use of triangulated investigation techniques in order to have a reliable
estimation. Adequate planning for prevention, curative and rehabilitation services are also essential.

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