Changing patterns of drug dependence in two WHO Regions

Second WHO Interregional Workshop on Prevention and Treatment of Drug Dependence

The second of five WHO interregional workshops on the prevention and treatment of drug dependence was held in Bangkok, Thailand, in November 1979. It was attended by 21 participants from nine countries or areas belonging to the South-East Asia and Western Pacific Regions, and by a number of experts, observers, and representatives of international and nongovernmental organizations. The following article is based on its report.

Early history

For centuries opium has been widely cultivated and used over large areas of the Asian continent, and the opium trade has been a powerful force shaping the destinies of many countries and supporting the rise of empires. Apart from its medicinal properties, opium was used as an escape from difficulty and worry, or simply for pleasure, and had little association with social deviance. In the nineteenth century, however, opium addiction became a grave problem in China and parts of South-East Asia and the Western Pacific stretching as far south as Java, but efforts to control it were of no avail and were generally thwarted by trading interests. Many governments established monopolies and profited from the production and sale of opium. Opium consumption increased further during the first half of the twentieth century, as did the use of morphine and heroin.

International efforts to introduce control of the opium trade and opium production began in 1909 and continued, with varying success, until 1925 when an Opium Conference at Geneva, attended by China, France, Japan, the Netherlands, Portugal, Thailand and the United Kingdom recommended a system of official sale, with registration and rationing, and the control of opium cultivation and traffic. As a result of continuing international pressure, opium cultivation and exports were reduced in a number of countries. Legalized opium dens and shops were closed and opium smoking prohibited in Hong Kong and Singapore in 1946, in Thailand in 1959 and in Burma in 1965. Some students of drug abuse trends believe that the prohibition of opium led to the more serious abuse of heroin.

It was not until later that international conventions and treaties covering other narcotic drugs were signed. The most important are the Single Convention on Narcotic Drugs (1961) and the Convention on Psychotropic Substances (1971).

Ganja (cannabis) cultivation and use

Ganja grows wild throughout South-East Asia. It was used in traditional medicine for a number of illnesses and its psychoactive effect was well known. Ganja curry was a delicacy, promoting a joyous atmosphere. In some places, such as the hills of Thailand and old Japan, its fibres were used to weave cloth but it was not used for either recreational or medicinal purposes. Although the

1 See article in WHO Chronicle, 33: 343-346 (1979).
2 Australia, Burma, Hong Kong, Indonesia, Japan, Malaysia, Philippines, Thailand and Viet Nam.
cultivation of ganja and its trade are illegal in all South-East Asian countries, the demand for it has increased since 1965. In Thailand its widespread use began in 1966, preceding the heroin epidemic by several years. Cultivation was stimulated by the demand by American soldiers during the Viet Nam war.

The epidemics of drug abuse of the 1970s

In the majority of the countries represented at the workshop, the first cases of heroin dependence were reported during the 1960s, and veritable epidemics of abuse of heroin and other drugs broke out in the 1970s, especially among young people.

In Burma, heroin addiction began in 1971, involving mainly young males with an average age of 24 years, of whom 90% lived in urban areas. In 1975, heroin was smoked by 90% of abusers, but in 1979 half used intravenous injections. In 1979 there were 32,705 registered drug addicts, of whom 24,247 (74.1%) were taking opium, 4,227 (12.9%) heroin, 117 (0.4%) ganja (cannabis), and the remaining 4,114 (12.6%) were taking other drugs. Opium is illicitly cultivated in the Shan and Kachin states where opium dependence is prevalent. Opium is taken both orally and by smoking.

In Hong Kong, heroin abuse was first discovered in 1950 and heroin subsequently replaced opium as the leading drug problem. The Central Registry of Drug Addicts was set up in 1972, and reports were published in 1974 and 1975 outlining the characteristics of local drug addicts and the enrolment in different treatment and aftercare programmes. The Registry was reviewed and computerized in 1976, and a system for updating case records was devised with satisfactory safeguards of confidentiality. Three reports, published subsequently, showed that there were between 35,000 and 50,000 drug dependents in Hong Kong, which is much less than earlier estimates based on indirect indicators. Multiple drug use is minimal. Of the known drug dependents, only 4.6% are under 20 years of age and 34% are in the 20-29 years age group. Over 90% of registered addicts are dependent on heroin. Opium smoking is limited to the older age groups.

In Indonesia, the epidemic of drug abuse began in 1969 and reached a peak in 1973. The great majority of patients were males under 30 years of age, and very few were of Islamic faith. Opium use has been traditional and can still be found among Chinese in rural fishing villages. Opium and its derivatives (including heroin) were the drugs of abuse in only 42.8% of patients admitted to hospital in 1977. Hypnotics and sedatives were used by about half the patients, and ganja (cannabis) by 4.8%.

In Malaysia the drug abuse epidemic began in 1968. A National Drug Dependence Monitoring System was set up in 1977. It is a computerized registry of data on drug dependents reported by Government agencies. In 1979 it was estimated that about 250,000 persons were abusing drugs, including 42,000 registered narcotic users. An analysis of 4,000 cases in 1970 showed 90.5% under 30 years of age. The majority of patients seen at treatment facilities were abusing heroin. Among 6,174 drug dependents whose cases were followed up, 78.8% were using heroin, 8.0% morphine, 1.7% opium and 2.9% cannabis. Only 0.3% were abusing amphetamines and barbiturates.

In the Philippines, drug abuse rapidly increased in the early 1970s. At one point it was estimated that 150,000 young people were using heroin, morphine and other psychotropic drugs, but the epidemic was equally rapidly suppressed by stringent measures after 1972. Of patients admitted to rehabilitation centres during the years 1973-75, 98.4% were under 30 years of age. Most users took multiple drugs. In a recent survey of a secondary school population of 110,786, it was found that almost all of a random sample of 7072 had tried using drugs. The most commonly used drugs were alcoholic drinks (30%), tobacco (25.62%), inhalants (11.57%), amphetamines or stimulants (8.64%), sedatives (6.65%), tranquilizers (6.25%), opiates (5.15%), hallucinogens (4.96%), cannabis (4.53%) and opium (3.9%).

In Singapore the number of heroin abusers arrested rose from four in 1972 to 2263 in 1975, and by 1976 about 475 were being arrested each month. In the first nine months of “Operation Ferret” in which 7725 drug dependents were subjected to compulsory treatment and confinement, 90% of those treated were under 30 years of age. The 20-24 years age group was the largest. Of all treated persons, 20% were unemployed, 52% had criminal records, and 58% had not completed primary school.

In Thailand the first small rise in heroin use was in 1959 following the prohibition of opium smoking, but it was only in 1968 and 1969 that it began to rise to a high level. Surveys showed that the use of most drugs except tobacco increased between 1972 and 1976, although the proportion of “never users” remained constant at 34%. The greatest increase was in the use of opium, morphine, heroin, barbiturates and tranquilizers,
mainly among young people (mean age 23.2 years). Of heroin dependents, 38% were unemployed and only 13% were students. Hill tribes in the northern provinces continue to cultivate the opium poppy and to smoke opium. Opium dependence is found in between 6% and 38% of the village populations over 10 years of age.

Variations in drug use with time

The main drugs of abuse vary with time; the drug scene is dynamic and changes continuously. At the beginning of the 1970s, heroin appeared to be the drug mostly used by the young, and there were also many old opium users. Recently, in certain parts of Thailand, the use of morphine, amphetamine and diazepam has been on the increase. In contrast, in Indonesia and the Philippines, cough syrup, tranquillizers and marijuana have largely replaced narcotics. The route of administration of heroin has also varied, apparently with the degree of seriousness of addiction. Thus, in Hong Kong only 33% of registered addicts used intravenous injections, while in Burma 50% did so, and more than 70% in Thailand.

Two countries which break the pattern

The drug abuse scene in Japan is to a large extent different from that in China and South-East Asia. Between 1946 and 1954, abuse of stimulant drugs (mainly amphetamines) was a major problem among the young, with an estimate of more than one million habitual amphetamine users. In 1951, 17,528 persons were arrested for offences against stimulant control laws. A survey of approximately 11,000 addicts showed that 28.5% were female, 80.2% were under 30 years of age, and the reasons for use were mainly social.

Between 1955 and 1962 stimulant drugs were effectively controlled but there was a rise in narcotic abuse, especially heroin. In 1955, 1753 narcotic addicts were arrested, of whom 54.3% used heroin. This number increased to 2,442 in 1961, of whom 92.7% were heroin users. It was estimated that at the peak of narcotic addiction in 1961 there were about 40,000 addicts and 60,000 habitual users. In 1963 the Narcotic Control Law was amended and compulsory hospitalization established. Nine specialized institutions for treatment of narcotic addicts were established in addition to the facilities at 900 existing mental hospitals. A compulsory notification system was established by the Ministry of Health and Welfare to register addicts. Consequently the problem subsided and few narcotic addicts have been reported since 1966.

Spray inhalation and glue sniffing began in 1963 and increased explosively in 1967; 20,000 youngsters came into contact with police for this behaviour in 1968 and 110 deaths were attributed to it. In 1971, it was estimated that 50,000 youngsters were abusing inhalants. To this problem has been added a resurgence of stimulant use, often in combination with "sniffing", and increasingly including the injection of stimulants. It appears that there are now about 35 times more stimulant users than there were in 1969. The main attack on this problem is directed towards breaking up smuggling syndicates. Cannabis use seems to have increased since 1967 but it is still not a serious problem.

Drug-related problems in Australia centre on tobacco, alcohol, minor analgesics and the combined use of sedatives and alcohol, often to excess, which has characterized Australian life ever since the white settlement in 1788. Although opium was used by a substantial Chinese population and by the whites in readily available patent medicines, narcotics have never presented any major problems in Australia. Since heroin was prohibited in 1955, there has been a gradual increase of illegal narcotic use, particularly among young adults. Cannabis use among the young has also increased steadily over the last ten or more years.

Alcohol and tobacco are freely available as commercial products, although they have been identified as the major factors in 3500 deaths annually. Average consumption of alcohol increased by about 50% between 1964 and 1974 but has since declined slightly. Tobacco is implicated in about 1500 deaths annually. Tobacco use is declining among adults but is still increasing among youth. Minor analgesics are widely misused, resulting in a relatively high incidence of kidney failure. By recent legislation, compound analgesics are available only on prescription. Sedatives and minor tranquillizers are misused by both young and old, with a tendency to over-prescription and considerable trade in non-prescription items. Amphetamines and hallucinogens were problems at different times in the last twenty years, and glue sniffing seems to be a growing episodic problem among some groups of schoolchildren.

Strong action is taken to control the illegal import of drugs, and to monitor the distribution of legal drugs. Relatively harsh penalties are applied to drug traffickers, but there is a treatment orientation towards drug abusers.
Official measures for drug abuse control

The threat represented by drug abuse epidemics among the young has led to a heightened public awareness of the dangers of drug dependence, and this has shaped the responses of governments to the problem in recent years. A number of governments in the South-East Asia and Western Pacific Regions have accorded a high national priority to drug abuse control. In Burma, Indonesia, Malaysia, the Philippines, Singapore and Thailand new laws have been enacted since 1972 to replace outdated drug and narcotic control laws. In these countries the death sentence is imposed for those convicted of manufacturing or trafficking in heroin, while in Hong Kong the maximum penalty for these offences is life imprisonment. Harsh laws are in force also in Japan and Australia. In all these countries, a central policy-making and coordinating body exists with special authority and responsibility in respect of drug abuse control.

Attitudes to drug problems

Most countries of the two Regions view drug abuse as a serious social illness with severely detrimental effects. Those who traffic for financial and other benefits are punished, although the Thai attitude towards hill-tribe opium growers is much milder. Addicts are usually considered as the victims, who should be helped. Treatment is usually available voluntarily and, although consumption of a prohibited drug is an offence, punishment is usually suspended if the addict seeks treatment. Addicts who are convicted of crimes are usually offered treatment, rehabilitation and re-education while in prison.

In Singapore, the approach is harsher. “Operation Ferret” was launched in April 1977. All users of heroin (both addicts and non-addicts) are imprisoned. A system of urine analysis identifies heroin users. Addicts are put through “cold turkey” withdrawal, to serve as a lesson. Institutional rehabilitation includes intensive re-education, a military form of training, and inculcation of work discipline. There is prolonged close supervision and after-care with a probation system. It is believed that the problem has been reduced by this intensive effort.

The impact of governmental measures

In Indonesia and the Philippines the narcotic abuse problem has diminished. However, it is being replaced by abuse of psychotropic substances diverted from licit sources. In Singapore, “Operation Ferret” appears to be effective in controlling the heroin epidemics. There is however some indication of a shift to alcohol and other drugs. It is hoped that, in a well-defined area like Singapore, strict control efforts may bring about a more lasting effect than elsewhere.

In Hong Kong the heroin epidemic seems to be coming under control. From the Hong Kong experience it is obvious that estimates of numbers of addicts tended to be high until more scientific assessment was made. Balanced efforts in treatment, prevention and law enforcement seem to have contributed significantly to problem reduction since 1974.

The other countries are also beginning to see some results from comprehensive efforts. The problem however is far from being controlled. In Thailand, abuse of psychoactive substances such as amphetamines, diazepam and inhalants is on the increase.

The assessment of drug dependence problems

The methods of assessment of drug dependence problems in the different countries represented at the workshop included the use of surveys, central registries, statistical, social and health indicators and mental health case reporting. The objectives of assessment and the advantages and limitations of each method were discussed. It was agreed that no one method of data collection was entirely reliable and that the information yielded by any type of reporting system needed validation. It was important to consider the costs and benefits of the various systems.

Central registries of various sorts were considered very valuable, but their relevance varied from country to country. If properly maintained they were expensive. Their usefulness depended on consistent reporting, and this was unlikely if private hospitals and medical practitioners were used as sources. Surveys were fairly simple to conduct but, at best, results were only relatively reliable and not fully accurate for drug use patterns. Moreover, their reliability decreased as questions became more emotionally laden. Social and health indicators, although they presented problems of accuracy, could provide timely information on changing trends; participants should use them therefore to monitor changes in drug abuse even when there were well equipped central registries. Regional and international assessment was handicapped by inadequate technology and lack of agreement on diagnostic and demo-
graphic classifications; WHO's initiative and pilot studies were expected to provide some guidance in those matters.

Prevention, treatment and rehabilitation

Prevention

The prevention of drug abuse has been influenced by international treaties which oblige countries to control the distribution of narcotics and psychotropic substances. Drug information and preventive education is an integral part of the drug abuse control efforts in all countries. The general public and the schools are the usual targets. Various campaign methods are used for specific groups. The mass media are also used. Drug education is incorporated into health education programmes and school curricula. Indirect approaches such as the provision of positive and constructive alternatives for young people, guidance and counselling services, and primary health care are also counted as drug abuse prevention. Treatment also constitutes a form of prevention.

Treatment and rehabilitation

Assessment, detoxification, rehabilitation, resocialization and after-care are the steps described in the treatment programmes in many countries. The organization of the programmes varies considerably. Special institutions for the exclusive treatment of drug addicts have been established in Burma, Hong Kong, Indonesia, Malaysia, the Philippines, Vietnam and Australia. Outpatient treatment facilities are available in Burma, Malaysia, the Philippines, Thailand and Australia.

Methadone and other treatment modalities are tried in Burma, Australia, Hong Kong and Thailand; in Malaysia, methadone is used only in exceptional cases. Treatment in Thailand is centred around the detoxification process. In Malaysia comprehensive rehabilitation centres have been set up throughout the country by the Department of Social Welfare.

An interesting programme of voluntary detoxification followed by spiritual rehabilitation is being carried out at the temple, Tam Kroborg, near Lopburi City in the Saraburi Province of Thailand. A follow-up study of patients showed that voluntary abstinence from narcotics following discharge is higher among those who return to rural districts than among those living in the Bangkok area and highest in the minority who are ordained Buddhist monks after therapy. On the whole, the study indicated that simple and economic detoxification by indigenous methods is at least as effective as modern medical techniques.

Discussions

Treatment methods were the principal focus of the discussions at the Bangkok workshop. It was agreed that alternative forms of treatment should be offered in each country with a major problem of drug abuse to ensure flexibility and treatment to suit individual needs. Participation by nongovernmental agencies was advocated, because they may be more flexible than public services and more economical. Patients’ motivations and their rights should be respected, and they should be able to choose forms of treatment that suit them.

From the various forms of treatment such as therapeutic community, methadone maintenance, spiritual rehabilitation, and acupuncture with or without electric stimulation, that which best suits the patients’ needs, the type of community, the nature of the drug problem, and the availability of resources for sound programme management should be used. The policy decision to provide programmes with various forms of treatment was assumed to rest on a continuing assessment of the problem. Continued assessment provides the reason for ensuring that treatment is made available and used under the most useful circumstances and at convenient places.

An outstanding question was how to determine the cost-effectiveness of each type of treatment, how to compare different types with each other, and how to make them compatible with one another without wasting limited resources in unnecessary duplication or competition. Another issue discussed was the comparative merits of compulsory and non-compulsory treatment. Compulsory treatment has definite advantages and disadvantages but, if treatment and after-care supervision are compulsory, coercion should be as short as possible and care should be based instead on a health, social welfare or rehabilitation model. The policy issue is not whether treatment ought to be compulsory or voluntary but to what extent voluntary and compulsory treatment can be used in the same community. The source of compulsion is as important a variable as the legislative and regulatory framework which authorizes sanctions and prohibits excessive or abusive coercion—e.g., hill tribes can be encouraged but not forced to accept treatment when
opium is practically the only medicine available to deal with many illnesses.

In reviewing country reports, the participants noted a tendency in different countries towards multiple drug use and a growing dependence on psychoactive drugs including alcohol. Also, whenever the narcotic supply is drastically reduced, whether because of crop failure in opium-producing areas or effective law enforcement, narcotic dependents tend to switch from opium or heroin to any substitutes that are available. It was therefore recommended that planners, policy-makers, and their technical advisers, in defining a country's problem, should take into account all existing and possible drugs of dependence, although differential priorities may be attached to the different substances.

Conclusions

Among the conclusions reached by the workshop were the following:

- All intervention programmes should adhere to professional ethics and respect the principles of confidentiality.
- Whenever possible, a continuous process of detoxification (withdrawal treatment), rehabilitation and after-care should be made available to every drug dependent. However, the lack of these resources should not deter a community from organizing a network of social support to help the treated person in his reintegration with the mainstream of society. When rehabilitation services are made available no effort should be spared in organizing and mobilizing social support networks, to encourage self-help and mutual help in the communities or neighbourhoods where treated persons live.
- Relapse to drug use following detoxification (either inpatient or outpatient) does not necessarily mean total failure. If large numbers of dependents are treated, the demand for drugs will be reduced. Detoxification should be regarded as a useful, simple, and economical treatment, and dependents should be encouraged to seek such treatment, repeatedly if necessary, even with the limited aim of lengthening the period of voluntary abstinence from drugs following each course of detoxification.
- Where limited resources do not allow for treatment or rehabilitation services for drug dependents, existing social service and primary health care systems should be used to care for and assist them. The integration of drug dependence treatment services with the general health and welfare systems should also be considered in the interests of improved cost-effectiveness.
- Community participation in programme planning, implementation and evaluation should be promoted to stimulate sound policies to mobilize both public and private resources and to make programmes more accountable to the community. Flexibility is needed for the formulation and revision of programme goals based on evaluation findings or the outcome of operational research.
- Ideally planning should be preceded by thorough study and problem assessment, but often it is hurried to respond to a crisis and planners are subject to political pressure. In such circumstances they should consider recommending a pilot project to avoid waste of public resources. In no circumstances should planning be carried out in isolation by a few experts alone; it should include policy-makers and experienced and knowledgeable persons from both public and private sectors.
- Manpower must be the first type of resource to be considered because it takes time to develop expertise. Intercountry exchange and inservice training have proved helpful for countries initiating programmes but lacking experienced staff. WHO should organize field training for direct service and middle-level management staff within the region. The interregional WHO training course in the management and treatment of drug dependence, being conducted in Hong Kong, was considered an important event, and the workshop recommended that such courses take place at regular intervals for multidisciplinary and multisectoral staff engaged in the control of drug abuse.
- WHO should promote collaboration with the countries concerned and select and expand its worldwide network of collaborating centres on drug abuse to meet the needs of Member States for epidemiological studies, clinical and operational research, manpower training, and information exchange on drug abuse and related problems.