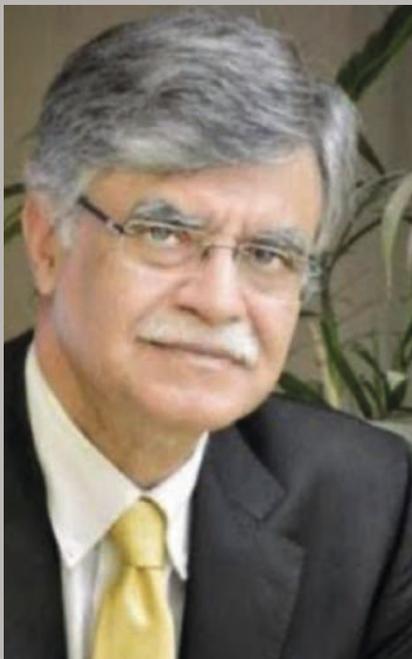


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SUBSTANCE USE DISORDER IN PAKISTAN: HARM REDUCTION STRATEGIES



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Substance use disorder is a cluster of cognitive, behavioural, and physiological symptoms associated with the individual continued use. An important feature of substance use disorders is an underlying change in brain circuitry that may persist beyond detoxification, specifically in individuals with severe disorder, and can lead to decline in social and occupational functioning. The behavioural effects of these alterations are exhibited through repeated relapses and intense craving for the substance of abuse when the individuals are exposed to drug related stimuli. These persistent

drug effects benefit from long-term approaches to treatment.

With around 180 million people, Pakistan is the sixth most populous country in the world. Approximately six per cent of the population, or 6.7 million people had used any controlled substance including misuse of prescription drugs, in 2012. Cannabis is the most commonly used drug, with a prevalence of 3.6 per cent of the population, equivalent to four million users nationwide. Poly-drug use is common, with one in five reporting more than one controlled substance in the past-year. An estimated 860,000 or 0.8 per cent of the population are regular heroin users. Pakistan sits on one of the world's busiest drug trafficking corridors, largely due to the cultivation of opium poppy and cannabis in neighbouring Afghanistan. According to UNODC estimates 40 per cent of the drugs (Heroin & Cannabis) produced in Afghanistan are routed through Pakistan.

This generates a considerable opiate supply for export but also for domestic use. Other than cannabis and opium poppy, available data points to an emerging supply of amphetamine-type stimulants (ATS), ecstasy, and cocaine. Law enforcement authorities in Pakistan have confiscated consignments of methamphetamine in the last few years, as well as identifying irregularities around the import of related precursor chemicals such as ephedrine. In 2012, a comprehensive national study of drug use was conducted in Pakistan, providing reliable baseline information on the prevalence and patterns of drug use among the population aged 15 to 64. To generate these results, a series of surveys was conducted throughout the four provinces and Pakistan-administered Kashmir. Among drug users detected in these surveys, dependence and severity of dependence were high. Of the 6.7 million past-year

users of any illicit substance, 4.25 million are considered to be drug dependent. For those who are dependent, there is an overwhelming need for treatment and care interventions including low-threshold services, both of which need to be upgraded. Three-Fourth (76%) of the regular

opiate users interviewed reported a desire for treatment, but were dissuaded either due to a lack of access or financial reasons. Opiate users demonstrate very high levels of drug dependence nationally, which is higher in areas with no reported treatment services.

| Drug Type/Class | Annual Prevalence (%) | | | Number |
|--|-----------------------|--------------|---------------|-----------|
| | Estimate | Low Estimate | High Estimate | |
| Individual Drug Categories (Sum will not reflect above totals due to Polydrug Use) | | | | |
| Cannabis (resin or herb) | 3.6% | 3.1% | 4.0% | 4,000,000 |
| Opioids | 2.4% | 2.0% | 3.1% | 2,700,000 |
| <i>Opiates</i> | 1.0% | 0.7% | 1.5% | 1,060,000 |
| Heroin | 0.8% | 0.5% | 1.3% | 860,000 |
| Opium | 0.3% | 0.2% | 0.6% | 320,000 |
| Prescription opioids | 1.5% | 1.3% | 1.6% | 1,600,000 |
| Tranquilizers/Sedatives | 1.4% | 1.1% | 1.7% | 1,500,000 |
| Cocaine | 0.01% | 0.0001% | 0.02% | 13,000 |
| Amphetamine-type stimulants | 0.08% | 0.04% | 0.2% | 93,000 |
| Prescription amphetamines | 0.07% | 0.04% | 0.1% | 75,000 |
| methamphetamines | 0.02% | 0.0001% | 0.11% | 19,000 |
| Solvents/Inhalants | 0.03% | 0.0001% | 0.08% | 35,000 |

Annual Prevalence of use of controlled substances, by type, 2012.

In addition to drug use, there are the warning signs for a rapid spread of the HIV epidemic. Survey results highlighted a very significantly rising prevalence of HIV risk behaviours among people who inject drugs. Because the majority of HIV infected people who inject drugs are not aware of their status, they also do not take precautions to prevent further transmission. The knowledge regarding HIV transmission is extremely insufficient in the general population, which leads to missed opportunities in preventing infection.

The highest prevalence of opiate users was found in Balochistan, where 1.6 per cent of the population uses either heroin, opium, or both. Due to its large share of the population, Punjab has the highest number of drug users and people who inject drugs (PWID) with 2.9 million people using illicit substances in the past year, and approximately 260,000 people who currently inject drugs. Approximately 80 per cent of PWID in Punjab share syringes regularly, whereas two-thirds report doing so in Sindh and Balochistan, and half in Khyber Pakhtunkhwa. The severity of dependence among opiate users is highest in Khyber Pakhtunkhwa and Balochistan, indicating a significant need for long-term treatment and care for drug use disorders. The highest prevalence overall of any form of drug use is in Khyber Pakhtunkhwa where 10.9 per cent of the population had used an illicit substance in 2012. Almost all regular users of opiates report having no access to drop in centres or low threshold services in their area in KPK (93%) and Balochistan (95%). Only 14% reported such access in Punjab. Respondents from Sindh reported the highest access, where services were available to a third of opiate users (33%).

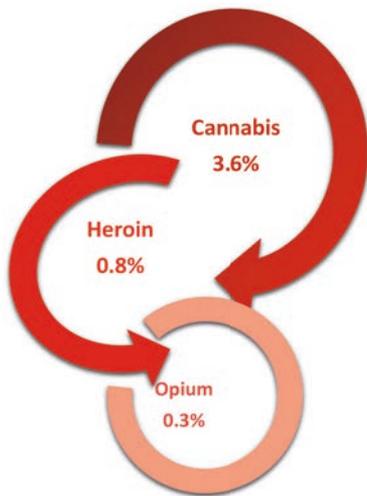
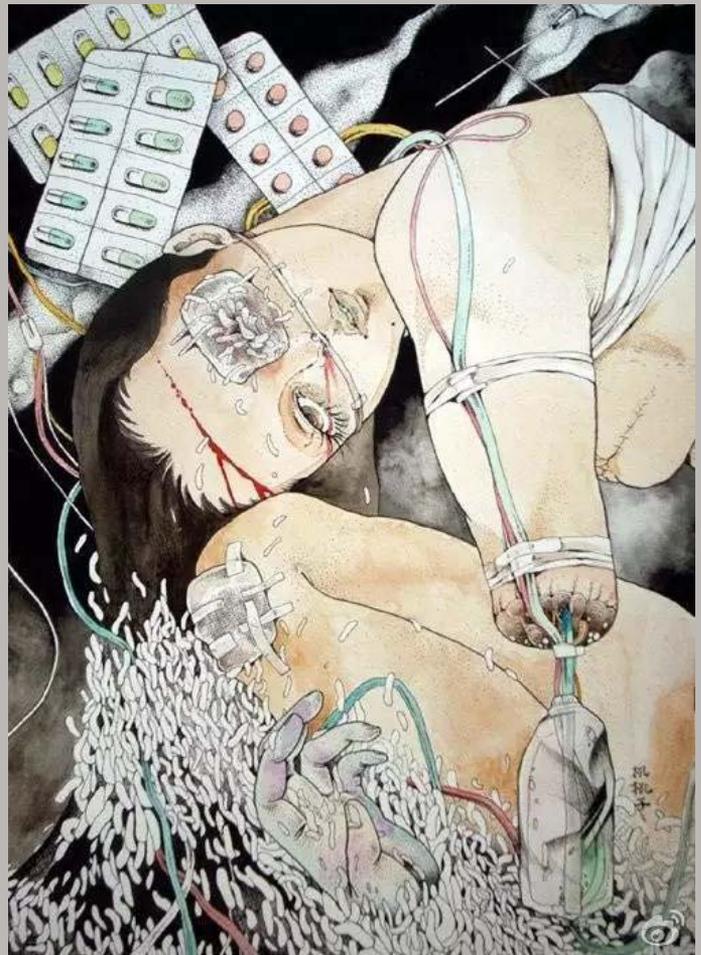


Figure 1. Depiction of poly-drug use between cannabis and opiates.

Because treatment is difficult, considerable effort should be given to prevention of substance use. For many drugs, important preventive measures such as restricting the availability and lessening the social deprivation depend on the government and its concerned departments, not medical policy. However, the reduc-

tion of overprescribing by doctors is important, especially with regard to benzodiazepines and other anxiolytic drugs and opiates. Education programs by themselves do not seem to be effective in prevention, but it is important that information about the dangers of drug misuse should be available to young people in the school curriculum and through the media. Another aspect of prevention is the identification and treatment of family problems that may contribute to drug taking. Family therapy and parental skills training are able to decrease the uptake of illicit drugs in young people.



Identification of young people at risk of drug misuse should be followed by specific psychosocial interventions that are designed to divert them away from drug use (National Institute for Health and Clinical Excellence, 2007).

When drug misuse has already begun, treatment is more effective if it is given before dependence is established. At this stage, as at later stages, the essential step is to motivate the patient to control their drug taking. This requires a combination of advice about the likely effects of continuing misuse, and help with any concurrent psychological or social problems. The stages of change model described by Prochaska and DiClemente (1986) can help the clinician to encourage motivation effectively.

Motivational interviewing (MI) is an effective counselling method



that enhances motivation through the resolution of ambivalence. It grew out of the Prochaska and DiClemente model described above and Miller and Rollnick's work in the field of addiction medicine, which drew on the phrase 'ready, willing and able' to outline three critical components of motivation. These were:

- the importance of change for the patient (willingness)
- the confidence to change (ability)
- whether change is an immediate priority (readiness).

The ultimate aim of treatment of the drug-dependent patient is a good personal and social adjustment in the absence of drug use. However, drug withdrawal (or detoxification) by itself has no effect on long-term outcome, so this process should be part of a wider treatment program. If withdrawal cannot be achieved, continued prescribing of certain drugs (e.g. opioids) may be considered as part of a harm reduction program.

A model of shared care in which drug misusers are managed jointly by the GP and specialist services is being replaced by a system with a wider range of care providers. In secondary care and in specialized drug treatment services, patients continue to be

managed by a multidisciplinary team using the key worker system. Inpatient care is provided in psychiatric hospitals, in psychiatric units in general hospitals, or in a small number of specialist inpatient units. Individual counselling, group therapy, and therapeutic communities are provided by a variety of charitable organizations. Harm reduction covers all the interventions aiming to reduce the problematic effects of behaviours (Marlatt, 1998). Most frequently associated with substance use, harm reduction may apply to any decisions that have negative consequences associated with them. For e.g., harm reduction may aim to reduce the risk of HIV transmission by supporting needle exchange programs. Basically harm reduction supports any steps in the right direction. Abstinence may be the ultimate goal, and is eventually the only way to avoid all the negative consequences associated with substance abuse, the harm reduction practitioner aims to meet the client where they are in regards to their level of motivation. The clinician's goals are secondary to what the client wants. This does not mean that the clinician should have no opinion; rather, he respects the client's decisions both for and against change. The harm reduction physician frequently uses non-judgmental but directive techniques, including motivational interviewing (MI; Miller & Rollnick, 2002), to allow the client to explore reasons for change. Within a cognitive-behavioural framework, the practitioner may also assist in setting reasonable goals, practicing refusal skills, identifying alternative behaviours, and considering relapse prevention.

Harm Reduction Strategies for Nicotine and Opioid Use:

The well-documented deleterious health effects of smoking cigarettes, combined with the legal status of nicotine, has led to the creation and testing of multiple alternatives designed to lower health problems and risks associated with nicotine. Consumers have multiple

options, both over-the-counter and by prescription, including patches, lozenges, gum, spray, inhaler, and tablets. Dozens of studies on nicotine replacement have shown an increase in cessation rates by 1.5 to 2 times compared with placebo or no additional aid and can improve moderation attempts as well. Opioid substitution therapies have been developed for drugs such as heroin, oxycodone, oxycontin, and morphine. The therapies (agonist pharmacotherapy and methadone maintenance) were identified to provide a less harmful opioid (e.g., methadone) or an opioid-receptor agonist (e.g., buprenorphine) under medical supervision in both specialty and outpatient clinics. Several reviews have identified opioid substitution therapy as effective in reducing illicit opioid use, HIV risk behaviors, criminal activity, and opioid-related death. Yet, they remain controversial and under strict government regulation, which limits accessibility.

Needle Exchange Programs And Safe Injection Sites:

Needle and syringe exchange programs were developed to reduce the spread of blood-borne diseases (e.g., HIV and hepatitis) among injection drug users. These programs have been around since the mid-1980s, often include drug treatment referrals, peer education, and HIV prevention, and were implemented in Amsterdam, Australia, Canada, United States, and many parts of Europe. Regarding their effectiveness, a thorough review of 45 studies from 1989 to 2002 concluded that these programs are effective, safe, and cost effective with no evidence of deleterious effects. There are several governments that provide safe injection sites. In these countries—Spain, Norway, Germany, Switzerland, the Netherlands, Luxembourg, Canada, and Australia, among them— injection drug users can inject their own



drugs using clean equipment in the presence of medically trained personnel. Over 25 studies have been published documenting significant reductions in needle sharing and reuse, overdoses, injecting/discarding needles in public places, reduced fatalities due to overdose, and increased enrolment in detoxification and other addiction treatments. Practical assistance with benefits and information about services can also be provided. All patients should be aware of self-help and mutual aid groups such as Narcotics Anonymous, which can be of great benefit to many individuals. Some patients are helped by treatment in a therapeutic community in which there can be frank discussion of the effects of drug taking on the person's character and relationship within the supportive setting of the group. The aim of psychological treatment is to increase recreational and personal skills so that the patient becomes less reliant on drugs and the drug culture as a source of satisfaction. Involvement of the patient's partner and family in structured couple and family therapy is often helpful. Many drug takers have difficulty in establishing themselves in normal society. The aim of rehabilitation is to enable the drug-dependent person to leave the drug subculture and to develop new social contacts. Unless this can be achieved, any treatment is likely to fail. Rehabilitation needs to be undertaken after the initial treatment.

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