# Trends of Substance Use in Southern Iran: A qualitative study

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## Citation

## Abstract

The purpose of this qualitative study was to explore the demographics of substance users in a rural area of Iran. Seventy-six semi-structured interviews were conducted with drug users who were referred to a treatment facility. Participants were primarily male (72/76), with a mean age of 28.4 years for all participants, and a range of 20 to 43 years. The most common drug of use was opium, followed by heroin, prescription medication, buprenorphine, and hashish. Over 91% of the respondents reported a history of illicit drug use in at least 1 family member. The first injection drug used was: Buprenorphine at 55% (12/22) and heroin at 45% (10/22). The sources of needles were reported to be pharmacies, and both pharmacies and close friends, 64% (14/22) and 36% (8/22) of the times, respectively. Also, 64% percent of IDUs stated they shared needles in the last month.

## INTRODUCTION

Using opium for medical and recreational purposes has a very long history in Iran. The first reports on opium use date back to the 17 th century, whereas heroin was introduced in Iran in the 1960s [1]. Iran has the highest rate of heroin and opium addiction per capita in the world. The rise of injection drug use, however, is still a relatively new phenomenon in Iran [2, 3]. According to the 2006 census, the total population of the country was estimated to be around 70,000,000, and the total number of substance users in Iran was estimated between 4 to 7 million, which is almost one out of every 7 to 10 adult people living in the country. Regardless of the actual number of injection drug users (IDUs), worrying trends suggest that, compared to non-injecting drug use, the prevalence of injecting drug use increased more rapidly during the past decade and will continue to rise in Iran [4]. The number of HIV/AIDS cases is increasing rapidly in recent years, and estimates in 2004 indicate there are 30,000 people with HIV in Iran [5]. Injection heroin use has emerged as the main contributor to the societal and general health problems in Iran, and is strongly associated with HIV risk. Sharing injection instruments is a common and complex behavior among Iranian IDUs and approximately 65% of all the recorded cases of HIV were transmitted through the sharing of needles, with the remainder being through sexual contact (10 percent), contaminated blood products (less than 10 percent), or from mother to infant [6].

The social dynamics surrounding the event of initiation of drug use and transitions from non-injection to injection drug use is lacking in the population of study. Social influence theory is a useful framework in understanding how the social environment affects individuals' behavioral choices [7]. Social influence usually occurs through social and cultural norms, and behavioral beliefs which have a potent effect on individuals' attitudes and behaviors [8]. In one of the only studies examining the event of first injection among 300 young IDUs, Crofts et al. found that 88% were injected for the first time by a friend. Prior studies on drug users in urban Iran, have demonstrated the influence of peer networks on individuals' health promotion and risk taking behaviors [4]. A growing body of literature utilizes social networks as a means to promote sustained behavior change among drug users [9, 10, 11].

## OBJECTIVES OF THE STUDY

To our knowledge there is no study to show the trends of substance abuse in Darab region of Iran. As such, there is a clear need to study the pattern of substance use and explore the demographics of substance users in rural areas of Iran. The main objective of this study was to increase the understanding of how and when people start to use substance. The sample was selected from a larger prospective cohort study of drug users. The qualitative study was conducted in an effort to obtain a deeper understanding of the environmental factors that influence the drug use

careers of the population of study.

## METHODS

## STUDY DESIGN AND PROCEDURE

Darab is a mid-size city with more than 200 villages; a total population of 300,000; and located in southern Iran. Data were collected using a semi-structured questionnaire which asked about an individual's family history; experience of first time drug use (non-injection and injection); the events and people surrounding their first time drug use; and needle sharing. Each interview was conducted individually by 2 trained general practitioners (first and fourth authors of this article), and lasted approximately 45 to 60 minutes. The interviews were conducted in Persian, and took place mainly in an outpatient treatment facility. The questionnaire was drafted based on the list of research questions. Each item of the questionnaire was discussed among the core team members and the second draft was then prepared.

The study was approved and sponsored by the Iranian National Center for Addiction Studies Review Board. All recruitments were done absolutely on a voluntary basis. Confidentiality was ensured and no names or identification information were recorded. Care was taken not to endanger the respondents because of participation in the study or refusal to participate. An informed consent form was read to all participants, who were allowed ample time to ask questions about it. Participants were also informed of their rights regarding voluntary participation in the study and were told that they could drop out of the study whenever they decided. If the participant agreed to participate, he/she was given further options regarding an agreement to be digitally recorded.

## RESULTS

When interpreting findings of this qualitative study, it should be remembered that results are not based on quantitative statistical evidence, but rather on a small cross-sectional sample of 76 young adults. The demographics of participants are displayed in Table 1.

**Figure 1**

Table 1: Demographics of Study Participants

| Variable | N | % |
|---|---|---|
| Total | 76 | - |
| Gender | | |
|    Female | 4 | 5 |
|    Male | 72 | 95 |
| Age at interview (years) | | |
|    Mean (SD) | 29.4 (5.1) | - |
|    Median | 28 | - |
|    Range | 20 to 43 | - |
| Marital Status | | |
|    Single | 9 | 12 |
|    Married or common law | 65 | 86 |
|    Widowed/separated | 2 | 3 |
| Employment Status | | |
|    Unemployed | 21 | 28 |
|    Laborer | 41 | 54 |
|    Driver | 4 | 5 |
|    Self-employed | 4 | 5 |
|    Teacher | 2 | 3 |
|    Member of staff | 4 | 5 |
| Highest level of education | | |
|    None | 2 | 3 |
|    Elementary (up to Grade 6) | 43 | 57 |
|    Grades 7, 8, 9 | 11 | 14 |
|    Grades 10, 11 | 5 | 7 |
|    High school certificate | 12 | 16 |
|    College/University | 3 | 4 |

## INITIATION OF DRUG ABUSE

Mean age at onset of non-injection drug use was 29.4 years (SD=5.1: median= 20.8) with a range between 20 to 43 years. In fact, 51% (39) of participants first used drugs at an age between 15 to 20 years, while 45% (34) first used at an age between 21 to 25 years, and only 4% (3) tried drugs first at an age between 26 to 30 years. Mean (SD) age at start of injection drug use was 25 years (4.4) with a range between 19 to 34 years. All respondents (100%) were living with their families. The median number of people sharing the same residence was 6.6, with a range between 3 to 11 people.

All but one of the respondents reported opium to be the first drug of use, and smoking to be the first route of this drug use. The situations or places where drugs were used the first time were `in a garden' (67 %), at a party (16%) and at

`work' (11%). Other reported places were 'school' (1%) and 'home' (4%).

## DRUG USE AMONG FAMILY AND FRIENDS

Over 91% (n =69) of the respondents reported a history of illicit drug use in at least 1 family member. Parents (91%) and siblings (86%) were commonly reported to be the drug using family members. The most common drugs used in the family were opium (86%), alcohol (9%) and heroin (5%). The median number of people presenting with their first time substance use was 3.6 (range, 2-6) people. In fact, 41% of the subjects stated they were accompanied by 3 people during their first time substance use, 30% with 4 people and 11% with 2 people. Interestingly 20% of participants stated they were with 5 or more people during their first time of substance use, while none of them were alone at first substance use. People who were present at first time drug use were: friends 100% (76), siblings 12% (9), family members 24% (18), and drug dealers 8% (6).

Pattern of Drug Abuse during last one month of the interview

The common drugs of abuse reported by the respondents during the last month of the interview were as follows: opium 100%, heroin 27.6% (total 21; 13 smoke; 9 inject), prescription medication 18%, buprenorphine 9% (all inject), and hashish 9%. Only 9% reported to be using one drug and the rest of the sample reported using more than one substance in the last 1 month. Common routes of intake of drugs reported were smoking (71%) and injection (29%). Opium or opium residue was reported to be commonly smoked in opium pipes. Heroin was smoked, snorted or injected.

The mean length of drug abuse was 8.7 years with a range between 2 to 19 years. In fact, only 7% (5) were drug abusers for less than 3 years, 35% (25) for 4 to 6 years, 20% (14) for 7 to 10 years, 25% (18) for 11 to 14 years and 13% (9) for more than 15 years. Ninety-three percent (71) of participants stated they stopped substance use sometime in the past. The mean time of being drug free was 2 months with a range between 1 to 6 months. Only 7% (5) of subjects were drug free for more than 4 months.

## PROFILE OF IDUS

A total of 22 subjects (29%) had a history of injection drug use in the previous month. The mean (SD) age at onset of IDUs was 25 years (4.4) with a range between 19 to 34 years. The setting of the first injection was stated to be: the garden at 68% (15), a party at 5% (1), the workplace at 5% (1), and the house at 23% (5). The first injection drug used was: Buprenorphine at 55% (12/22) and heroin at 45% (10/22). Of injection drug users 77% (17) stated they were with friends when they first injected, and 23% (5) were with family members. The reason for first injection was reported as: liked getting high at 55% (12), help to withdraw from other drugs at 41% (9), and curiosity at 5% (1). Only 32% (7) of participants were fixing on a regular basis and 68% (15) had stopped and started. The longest period of time stopped was: 1 week in 7% (1), 2 weeks in 33% (5), 3 weeks in 7% (1), 1 month in 7% (1), 2 months in 33% (5), and 3 months in 13% (2) of subjects. The average length of stopping injection drug use was 1.4 months for all participants. All participants stated they were moderate IDUs, injecting 1 to 3 times using a day during the last 6 months. Sixty-eight percent (15) of participants stated they usually (over 75% of the times), 14% (3) sometimes (26-74 % of the times) and 14% (3) occasionally (under 25% of the time) used drugs with others. The participants stated they have fixed with close friends 73% (16), with family members and close friends 18% (4), and with a regular sex partner and close friend 9% (2) of the times during the last 6 months.

## NEEDLE SHARING

The sources of needles were reported to be pharmacies, and both pharmacies and close friends, 64% (14/22) and 36% (8/22) of the times, respectively. The total syringes bought during the 30 days prior to the interview were: 20 needles 23% (5), 25 needles 5% (1), 30 needles 45% (10), and 40 needles 27% (6). Fourteen percent (3/22) of the IDUs had access to drug stores within 5 minutes of walking, 40% (9/22) within 5-15 minutes of walking, 14% (3/22) within 15-30 minutes of walking and 32% (7/22) with more than 30 minutes of walking. Although only 18% (4) stated that pharmacies refused to provide them with syringes during the 6 months before inquiry, a high proportion of IDUs (63%) stated it was difficult for them to get needles when needed. Therefore, they had to reuse their needles, or borrow or buy them from a friend when they did not have unused syringes. Sixty-four percent of IDUs stated they shared needles in the last month. Cleaning of syringes was stated to be plain water by 28% and hot water by 14% of IDUs. Over 50% of people admitted to sharing needles with a person whom they were unsure about his/her HIV status.

## ATTEMPTS TO GIVE UP DRUGS

All of the participants in the study had a prior history of

giving up drug use. Most had given up drug use more than once. Over 83% (63) of drug users had been to an outpatient center for treatment in the past and 17% (13) had been to both an outpatient center and a methadone program. All participants stated they had no problem with accessing the treatment plans during the 6 months before inquiry and interestingly, all of the 76 participants stated they were currently trying to enter a treatment program. The longest period of being drug free was 6 months only in 7% (5) of participants, while 46% of participants had been drug free only for 1 month, 31% for 2 months, 14% for 3 months, and only 1 person stated he had been drug free for 4 months. The main reasons for leaving the treatment plan were stated as: did not want to participate in it any more because they suffered from withdrawal symptoms (84.6%), or could not afford the time to stay in treatment (15.4%). All 13 drug users who had entered the methadone program had been in the treatment for less than 1 month.

## CRIME AND INCARCERATION OF DRUG ABUSERS

Of all participants, 12 (16%) reported being in prison during the 6 months prior to the study. Of them, 10 were in prison for 6 months, while 1 subject was in prison for less than 1 month and another subject was in prison for only a few days. All arrests were because of drug possession or use and none were for other illegal activities (eg. theft, assault). Although only 9% (7) of participants stated police activities prevented them from acquiring drugs, all participants stated that police activities affected the price and quality of drugs they used in the past 6 months. Interestingly, none of the participants believed that police activities affected the location where they bought drugs.

## DISCUSSION

Using a qualitative research approach, this study not only provides the general categories of factors related to substance users' initiation, transition, and relapses but also lays out the specific multiple dimensions underpinning each category and provides their own words to support each dimension. Such more in-depth and specific information may help policy makers more precisely target regional needs when designing prevention and/or treatment programs and providing other treatment.

The results of the current study were similar to the findings of the "Rapid Situation Assessment" (RSA) which was conducted by [12]. That study revealed that narcotics were the main drugs of use in Iran and opium was abused during the

month before inquiry in 73% of the respondents. Heroin use was ranked second by 39% of participants and cannabis use was present in 13 % of the sample. Cocaine and stimulant use was negligible. On average, 62% of the respondents were single drug users during the period. A history of alcohol consumption was present in 63% of the cases. The recent 2004 World Bank and the Ministry of Interior Local Development Fund Project field study preliminary findings from visits to 9 villages in Hamedan Province, 11 villages in Khorasan Province, 8 villages in Khuzestan Province, and 6 villages in Tehran Province, revealed opium abuse is spreading rapidly to such an extent that in every single gathering of relatives and friends, opium is expected to be offered especially from those who can afford it as a part of the gathering ritual [13].

An overwhelming majority of the respondents in the sample (95%) were male. There were only 4 women respondents in the sample. Most studies in Iran indicate that drug users in treatment centers are largely male (up to 95%) [4]. Many participants believed that the extent of drug use among the women in their community must be much higher than what we observed in this study. Substance using women are stigmatized in Iran, as they are, by and large, rejected by family and society because of the patriarchal structure of families and illegal nature of their behaviour. These attitudes and misconceptions are resulting in a variety of harms, including public apathy, undiagnosed mental illness, and inaccessible treatment and rehabilitation programs for women. Lack of resources and family and social support, often put female substance users in a poor environment - physically and psychologically - which, in turn, contributes to interpersonal conflicts, as well as being abused and assaulted.

A thorough and sustained assessment must be conducted to determine the focus for women substance users when providing prevention and treatment interventions. Policy-makers and program administrators need to be informed of the significance of the research results and subsequently allocate more resources and funding for staff training and provision of gender-specific treatment. More female-centered treatment facilities which take into the account the specific needs of women in rural areas with particular consideration of the socio-cultural sphere of participants, are needed to better diagnose and absorb this highly stigmatized and marginalized group.

Despite the cheap price and availability of subsidized syringes and needles in Iran, the actual injection of drugs

may take place in an unsafe environment. Findings of the current study are consistent with results of national studies that report high needle-sharing practices among IDUs. Findings of the Rapid Situation Assessment Study [6] revealed that more than 50% of participants of the study and more than 70% of participants recruited from streets shared needles with peers. In some countries, supervised injection sites are provided to decrease these risks. Although they can be controversial, supervised injection sites are legally accepted in some countries, and medically supervised facilities have been designed to provide people who use drugs by injection with a safer and more hygienic site where they can inject drugs. They are provided in order to reduce the hazards of unsafe injection practices such as needle sharing, and also to counteract the public order problems associated with illegal injection drug use. As well, they are considered to be a low threshold service usually embedded within a harm reduction strategy. There are some positive evaluation data from countries that have tested and implemented supervised injection sites. Some results show decreased rates of overdose, increased uptake into detoxification programs and addiction treatment, a decrease in needles found in the environment, fewer people injecting in public, and a reduction in crimes.

The results of our observations indicate that opium was the most commonly used substance at home, parties, or socializing events because it is being regarded as a way of expressing respect to their guest. It is important to note that the main reason for using opium in the garden is to use this place as an environment to socialize with friends or families, while this is not the case among IDUs. In fact, IDUs try to find a remote area in the neighborhood to fix their injections.

There is a need to provide a framework for multi-level strategies and action plans to reduce the harm associated with drug use in rural areas of Iran. Although injection drug use is a countrywide problem that requires a comprehensive, collaborative and consistent response, intervention strategies and activities should be conducive to the local needs of populations. The public health and social impacts of substance use in Iran are extensive, complex and devastating, and the costs and other health, social, and economic consequences are growing daily.

## LIMITATIONS OF CURRENT STUDY

One limitation of the study is the low participation rate of women in the study, thus any underestimation of the extent of substance abuse among women and generalization of the results of the current study to the general population should be avoided. A second limitation is that the study included mostly men, making it impossible to directly compare and contrast women with men. A more thorough description of the participants' backgrounds - e.g., their internal and external strengths/resources/limitations and types of roles they have to play in their family and community contexts - would have also helped us better understand how women adapt daily. Another issue that must be taken into consideration is inaccuracy of self-reports leading to social desirability bias, which could lead to underestimation or misclassification of drug use, particularly among hard drug and injection drug users. Finally, because the findings were based on a qualitative study, future quantitative studies are needed to further differentiate the importance and priorities of the various identified components. Nonetheless, the study revealed many themes and sub-themes/dimensions that help practitioners better understand the specific issues, dilemmas, and needs related to women's recovery.

## ACKNOWLEDGMENTS

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