

A COMPREHENSIVE REVIEW OF OPIATE ABUSE AND OPIATE ABUSERS
IN A DEVELOPING NATION

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Introduction

The Drug Problem in Iran and in particular opium abuse and addiction is relatively a recent phenomenon, dating back to about the third quarter of Nineteenth Century. Prior to that, while opium was available, opium addiction appears to have been relatively rare. During this period, the primary function of opium was quasi-medicinal. as a "panacea" drug the potent analgesic effects of opium was relied upon by many Iranians to obtain symptomatic relief of pains and somatic dysfunction associated with various illnesses and diseases. The drug scene in Iran, however, changed drastically by early Twentieth Century concomitant to its quasi-medical use, addiction to opium and its derivatives, especially "dross" (derived from the burnt opium), appeared at significant proportions. Based on government estimates, by 1950s, Iran had over 1.5 million drug addicts of which over 98% were opium and dross addicts. This figure represented an addict population which comprised about 7% of Iran's total population of 21 million.

In 1955, Iran decided to ban all poppy cultivation and as a direct result of this policy, Iran's addicts population was drastically reduced. This gain, however, proved to be shortlived as the steady rise in drug trafficking from neighbouring countries had led to addiction of

some 400,000 Iranians by the late sixties.

By 1969, a new drug policy was implemented. It called for a two-pronged plan for treatment and control of drug addiction. On the basis of this policy, Iran's addicts population was divided into two groups -- registered and illicit. The former included primarily the aged opium addicts (60 years and over) who were assumed to have little or no chance for treatment and rehabilitation. To meet the registered addicts' needs, there was a resumption of opium cultivation on a limited basis in government-supervised fields.* On the other hand, a comprehensive program for the treatment and rehabilitation of the illicit addicts throughout the country was simultaneously implemented.

Method

The turnabout from intermittent quasi-medical use of opium for centuries prior to the 1880s to a drug problem of epidemic magnitude in less than 75 years defies any available explanation. While historical analyses of this phenomena have yielded some useful clues about the probable reasons for the spread of opium among certain strata of population (especially simple laborers), they don't adequately explain widespread opium addiction as a post 19th century phenomena⁺ in Iran.

To a great extent, there is little by way of useful historical documents and records or even rudimentary data about basic population

*For a critical evaluation of Iran's opium maintenance program, see Spiro, Siassi and Fozouni (1977), and Fozouni and Siassi (1977).

⁺See McLaughlin 1976: 728-736.

characteristics which could be used to disclose information about the pattern of opium abuse in Iran. What remains are biographical accounts of foreign visitors and residents which are valuable and perhaps among the few sources that chronicle and illuminate "the spirit of the time". Such historical accounts, however, are not a substitute for the kind of information and data required in the explanation of complex socio-cultural and psychological phenomenon such as spread of drug addiction in modern Iran. At best, one can proceed with the task of historical reconstruction of drug phenomenon in this country by commencing the enquiry from the present, relying on ex-post facto research designs and retrospective generalization, one may attempt to generate information and data about the past which may help to explain the current drug phenomena and help to substantiate some of the historical conjectures about its genesis.

The proliferation of Iran's drug problem at the turn of a century, while intrinsically an important phenomenon in the epidemiology of Iran's drug abuse, nonetheless by itself is but one of the many factors which helps our understanding of the Iran's current drug problem. There is an urgent need to obtain information about the existing dimension of drug abuse in Iran. Such information are indispensable for Iran's comprehensive drug policy on prevention, treatment and control of drug trafficking.

It was with these tasks in mind that in the summer of 1976 an extensive research on drug addiction in Iran was undertaken at the National Iranian Society for Rehabilitation of the Disabled (NISRD)*.

The research aimed at the generation of comprehensive information

* NISRD is directly responsible for the treatment and rehabilitation of drug addicts.

concerning the demographic characteristics, typical patterns of drug abuse, beliefs and attitudes, nature of psychiatric disorders and social alienation of the Iranian addicts, both registered and illicit

This part of the country's profile presents some of the preliminary findings of demographic background of both registered and illicit addicts.*

Two different sampling strategies were used in the present study. The sample of registered addicts was derived from a nationwide multistage cluster sample stratified on the basis of size, geographical regions, age-groups and sex. There were a total 919 registered addicts who were interviewed. The sample of illicit addicts (N=382) on the other hand, consisted of total census sampling of all illicit addicts at given points in time, who were admitted at all the existing government drug treatment clinics throughout the country. Specifically, there were two centers in Tehran and a total of six other centers in Tabriz and Rezaieh (North and Northwest), Mashad (Northeast), Rasht and Sari (Caspian Sea region) and Isfahan (Central).

A comparative questionnaire was administered by a team of 30 researchers (Bachelor's degrees) and 2 supervisors (Master's degree) all of whom had completed an extensive training by the authors for a period of 3 months. Face-to-face interviews were conducted at local health department for the registered addicts who had called for the mandatory biannual renewal of their opium coupons. Similarly, illicit

* Other dimensions of this research have already been presented at the World Congress of Psychiatry. For a critical evaluation of Opium Maintenance Program, see Spiro, Siassi & Fozouni (1977). For results on psychiatric disorders and alienation among addicts, see Turner, Siassi and Fozouni (1977). For a report on social deviance among Iranian addicts and the role of illicit opium, see Crocetti, Siassi and Fozouni (1977), and see Rosen, Siassi and Fozouni (1977).

addicts were interviewed at the various government clinics. The interview schedule included 160 questions which on the average required about ninety minutes to be administered.

Results

Table I presents the basic demographic characteristics for both the older registered opium addicts and the younger illicit addicts. The differences in the sex distribution between the registered and illicit addicts are an artifact since at the time women were accepted in government clinics at two intervals during the year for about one month each time. Currently, however, the largest center in Tehran (Yaftabad) has both male and female wards admitting female addicts throughout the year.

The median age for registered addicts is 55-64 while for the illicit addicts, it is 25-34. Over 50% of both registered and illicit addicts are married. There is no significant difference across the employment status of registered and illicit addicts, with over 85% in each group employed. The job categories cited here represented the responses of 10% or more for each occupation by either illicit or registered addicts. The totals therefore do not add up to 100%. The modal occupation for the registered addicts is farming, while for the illicit addicts is skilled work.

There appears a significant difference in religion between the two groups with non-Moslems constituting a greater proportion of the illicit addicts. There are also significantly greater number of Turks represented by the illicit group across the ethnicity variable*

*There are two drug treatment clinics at each of the two predominantly Turkish provinces of Iran.

Table 1
Demographic Characteristics
of Iranian Addicts

Variable	Response Category	Registered Addicts (N=906)	Illicit Addicts (N=382)	χ^2	df	C
Sex	females	16%	0%	70.50	1	0.23
	males	84%	100%			
Age	15-24 yrs	0%	22%	894.86	5	0.64
	25-34 yrs	1%	40%			
	35-44 yrs	3%	22%			
	45-54 yrs	19%	13%			
	55-64 yrs	38%	3%			
	65-74 yrs	39%	1%			
Marital Status	single	3%	37%	327.43 **	4	0.45
	married	78%	55%			
	widowed	16%	1%			
	divorced or separated	4%	7%			
Employment Status	employed	89%	87%	1.87	2	0.04
	retired	10%	9%			
	unemployed	1%	2%			
Type of job held	Farmer	16%	10%			
	Simple worker	15%	10%			
	Government—employee	2%	11%			
	Small shopkeeper	11%	5%			
	Skilled laborer	9%	22%			
	Driver	2%	16%			
Religion	Shiite Moslem	99%	97%	7.37 **	1	0.08
	Other	1%	3%			
Ethnicity	Fars	68%	57%	16.88 ***	2	0.11
	Turk	18%	28%			
	Other	14%	15%			
Education	illiterate	63%	30%	210.65 ****	5	0.37
	literate/attended primary schools	22%	16%			
	primary school certificate	7%	17%			
	attended high school	7%	18%			
	high school diploma/plus	3%	19%			

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Table 1 (contd...)
Demographic Characteristics
of Iranian Addicts

Variable	Response Category	Registered Addicts * (N=906)	Illicit Addicts (N=382)	2	df	C
Place of birth	Tehran	5%	19%	64.58	1	0.22
	Other	95%	81%			
Current Residence	Tehran	23%	22%	0.14	1	0.01
	Other	77%	78%			

*** p < .001

** p < .01

There were a total of 11 registered addicts with incomplete information on one or several of these items. They, therefore, have been excluded from this table, as well as table 2, and table 3.

Education is one of the variables across which there are significant differences between the two groups of addicts. Over 60% of registered addicts are either illiterate or their formal education at primary school level is incomplete. On the other hand, over 50% of illicit addicts have completed formal education at primary school or at higher educational levels.

Significantly, greater proportion (nearly 20%) of illicit addicts were born in Tehran compared to no more than 50% of the registered addicts. However, there was significant difference in the status of their current residence between the two groups

Table 2 presents some basic information about the pattern of drug use by the registered and illicit addicts. The median years of addiction for registered addicts is nearly 30 years while for the illicit addicts it is 4 years. Nearly 94% of the registered addicts identify opium as the drug to which they are addicted, while slightly over 50% of illicit addicts mention heroin as the drug to which they are addicted. Smoking is the dominant mode of administration for both groups, although nearly 50% of registered addicts eat either their own entire opium ration or some part of it. Over 90% of the registered addicts identify their home as the place where they usually consume drugs while the same figure for the illicit addicts is slightly more than half.

Over 80% of addicts did not specify the income source(s) out of which they paid for their drug habit. Therefore, no meaningful comparison can be made with respect to this variable.

Table 2
Drug Use Patterns
of Iranian Addicts

Variable	Response Category	Registered Addicts (N=906) +	Illicit Addicts (N=382)	χ^2	df	C
1. Years addicted	Mid Range	29 years 0-73 yrs	4 years 0-30 yrs			
2. Type of addiction	opium/drugs heroin combination	94% 1% 5%	24% 53% 23%	704.2 ^{***}	2	0.59
3. Method of use	eating smoking both the above other	13% 52% 35% 0%	13% 68% 14% 5%	99.00 ^{***}	1	0.27
4. Where used	home other	93% 7%	56% 44%	260.04 ^{***}	2	0.41
5. How paid for	no response personal family other	85% 9% 4% 2%	87% 8% 2% 3%	4.11	3	0.06
6. Reasons for addiction	nodal responses	13% rheumatism 8% undisclosed illness	30% bad friends 11% psychological problems			
7. Use of other Drugs	<u>hashish</u> past use present use intend to use in the future	- - 0%	- - 4%	34.45 ^{***}	1	0.16
	<u>opium</u> past use present use intend to use in the future	81% 80% 51%	83% 37% 4%	0.08 232.84 ^{***} 498.08 ^{***}	1 1 1	0.02 0.39 0.53
	<u>drugs</u> past use present use intend to use in the future	17% 6% 6%	67% 23% 1%	301.26 ^{***} 81.91 ^{***} 13.72 ^{**}	1 1 1	0.43 0.24 0.10
	<u>heroin</u> past use present use intend to use in the future	3% 1% 1%	68% 60% 2%	670.30 ^{***} 626.13 ^{***} 8.19 ^{**}	1 1 1	0.58 0.57 0.08

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Table 2 (contd....)
Drug Use Pattern
of Iranian Addicts

Variable	Response Category	Registered Addicts (N=906) [†]	Illicit Addicts (N=382)	χ^2	df	C
8. Expressed desire to use other drugs if readily available for legal use.	marijuana	2%	12%	62.33	1	0.21
	hashish	0%	4%	38.58	1	0.17
	cocaine	0%	1%	4.77	1	0.06
	LSO	0%	3%	24.00	1	0.13
	opium	91%	22%	612.35	1	0.57
	drugs	1%	6%	37.49	1	0.17
	heroin	0%	22%	213.90	1	0.38
	methadone	0%	1%	7.16	1	0.07
	valium	0%	4%	38.58	1	0.17
other	6%	0%	25.50	1	0.14	
9. Number of other addicts you know who do not get coupons and have not come for detoxification.	Mid	1 other	11 others			
	Range	1-11 others	1-11 others			

*** p < .001

** p < .01

* p < .05

† See note on table 1

The primary reasons mentioned by the addicts for their addiction shows a sharp contrast between the two groups. In table 2, modal responses of over 10% are reported for both groups. While the modal response for the illicit addicts is socio-psychological, for the registered addicts it is physiological.

With the exception of opium, there were highly significant differences on the part of drug use between the two groups, with over 65% of the illicit addicts admitting to have used cross and/or heroin. Hashish was one drug that less than 1% of addicts in either group admitted to have used in the past. The percentage on "present use" represents both primary and other drugs concurrently used. It is significant that 1% of the registered addicts admitted to using heroin while on opium maintenance. The "intended use" figures for the illicit addicts must be interpreted with caution, since all of these individuals were in the process of detoxification.

When asked which one of the above drugs they would purchase if its sale was legal and available at a general store, the illicit addicts gave significantly different answers than the registered addicts. In particular, 22% of illicit addicts mentioned purchase of opium and/or heroin, while only 1% mentioned methadone as their drug of choice.

Finally each addict was asked to give the number of addicts he has personally known (no names) who are neither registered, nor have ever been treated. The median for the registered addicts as 1 person while for the illicit addict it was more than 10.

Table 3 presents the self-report criminal history of registered and illicit addicts. On all the dimensions reported here, there are significant differences between the two groups (the exception being months spent in jail prior to addiction), with the illicit addicts evincing a far more delinquent behavior, especially after addiction. The results of this table, however, must be interpreted with caution since interviews with the registered addicts were conducted at the local health departments where the addicts had come for the renewal of their opium coupons. Therefore, there probably was some under-reporting of their criminal activities by these addicts.

Table 4 shows sex difference across some of the variables studied. The comparisons are somewhat misleading since the males consisted of both older registered and the younger illicit addicts, while the females were all older registered addicts. Nevertheless, the females contend that they have abstained from alcohol and all the other drugs mentioned here with the major exception of opium and/or dross.

Table 5 shows the relation of age with drug use. There are clear relations between age and type of addiction. Over 70% of those addicted to opium are in the 35 and over age group, while 65% of the heroin addicts are in 15-34 age range. Dross on the other hand, is consumed mainly by the 15-34 and 35-54 age groups. The difference between median years prior to first use of drug and median years since addiction to drug is greatest for the 35-54 age group, with the median lag addiction time of about 4 years. For the 15-34 age group of which about 65% are heroin addicts, the median lag time between first use and addiction is 1 year. This information,

Table 3
Criminal History of Iranian Addicts

Variable	Response Category	Registered Addicts (N=909)	Illicit Addicts (N=392)	χ^2	df	C
1. Have you committed any crimes?	yes no	7% 93%	34% 66%	154.65	1	0.33
2. Time elapsed since first crime was committed.	Md Range	57 yrs 17-60 yrs	27 yrs 0-39 yrs	-	-	-
3. Crimes Before Addiction.	yes no	1% 100%	7% 96%	25.98***	1	0.14
4. Crimes After Addiction.	yes no	7% 97%	28% 77%	75.09***	1	0.23
5. Arrests Before Addiction.	yes no	0% 100%	2% 98%	14.47***	1	0.11
6. Arrests After Addiction.	yes no	2% 98%	13% 87%	59.85***	1	0.21
7. Months in jail Before Addiction.	Md Range	0 months 0-13 months	0 months 0-20 months	-	-	-
8. Months in jail After Addiction.	Md Range	1 month 0-148 months	3 months 0-132 months	-	-	-

*** $p < .001$

See note on table 1.

Table 4
Sex Differences in Drug Use Patterns of Iranian
Addicts

Variable	Response Category	Males + (N=1151)	Females (N=148)	χ^2	df	C
1. Type of addiction	opium	70%	93%	39.61***	3	0.17
	cross	4%	3%			
	heroin	18%	0%			
	other	8%	4%			
2. Length of addiction	Md Range	17 yrs 0-73 yrs	25 yrs 1-73 yrs			
3. Concurrent Drug Use						
Frequency of alcohol use	daily use	4%	0%	29.68***	2	0.15
	occasional use	13%	0%			
	not at all	83%	100%			
Amount of daily alcohol use	heavy use (5 or more shots)	7%	0%	29.68***	2	0.15
	moderate use (1 to 4 shots)	10%				
	not at all	83%	100%			
Ever used	yes	3%	0%	4.63**	1	0.06
Ever used Cocaine?	yes	4%	0%	6.13*	1	0.07
	not at all	96%	100%			
Ever used LSD?	yes	6%	0%	9.37**	2	0.08
	no	94%	100%			
Ever used Methadone?	yes	5%	0%	0.08	1	0.01
	no	95%	100%			
Ever used Valium?	yes	14%	1%	21.29***	1	0.13
	no	86%	99%			

*** p < .001

** p < .01

* p < .05

+ Two cases with no responses were excluded from this table.

Table 5
Age Differences in Drug Use Patterns
by Iranian Addicts

Variable	Response Category	Age Group			
		15-34 (N=254)	35-54 (N=333)	55-74 (N=255)	75-94 (N=115)
1. Type of Addition	opium	14%	71%	94%	95%
	cross	8%	7%	2%	0%
	heroin	65%	14%	0%	1%
	other	13%	8%	4%	4%
2. Years elapsed since first use.	Md	4 yrs	17 yrs	32 yrs	35 yrs
	Range	0-20 yrs	0-47 yrs	0-59 yrs	0-73 yrs
3. Years elapsed since addiction.	Md	3 yrs	13 yrs	30 yrs	33 yrs
	Range	0-19 yrs	0-45 yrs	0-59 yrs	0-73 yrs

however, is not very reliable for the older addicts in the 55 and over age group since many do not recall with any exactitude these dates .

Table 6 provides some information about multiple drug use by the primary drug categories for all the addicts. Whereas 92% of opium addicts claim to have never used alcoholic beverages, 41% of heroin addicts admitted to using alcohol either daily or occasionally. Among the alcohol users, only 2% opium addicts said to be heavy users, in contrast to the 21% heavy users for heroin addicts.

With respect to history of use of other drugs, heroin addicts consistently had higher proportion of users for valium and LSD with at least 35% of heroin addicts admitted to have used these drugs.

Finally, the median length of addiction for heroin addicts is 4 years, while for the opium addicts it is 27 years. This difference arises largely from the fact that nearly 80% of the opium addicts consists of the older registered addicts for whom the median years of addiction is 29 years.

* Many of these addicts-answers to these two questions showed a tendency towards a responding in "rounded" figures e.g. 30 years ago, 40 years ago etc

Table 6
Multiple Drug Use Patterns of Opium,
Heroin and other Iranian Addicts

Variable	Response Category	Type of Addiction		
		Opium (N=947)	Heroin (N=213)	Other (N=141)
1. Frequency of alcohol use	daily use	2%	6%	6%
	occasional use	6%	37%	20%
	not at all	92%	57%	74%
2. Amount of daily alcohol use.	heavy use	2%	21%	9%
	moderate use	6%	21%	16%
	not at all	92%	58%	75%
3. Ever used barbiturates?	yes	1%	14%	6%
	not at all	99%	86%	94%
4. Ever used LSD?	yes	6%	36%	15%
	not at all	94%	64%	85%
5. Ever used Methadone?	yes	1%	16%	11%
	not at all	99%	84%	89%
6. Ever used Valium	yes	4%	55%	19%
	not at all	96%	45%	81%
7. Length of Addiction	Med	27 yrs	4 yrs	19 yrs
	Range	0-73 yrs	0-24 yrs	0-48 yrs

Comments and Conclusions

The preliminary results reported here indicate several important differences between the older registered and the younger illicit addicts. As may be expected, these differences are greater across age-related variables such as education and marital status. A significantly greater proportion of illicit addicts were born in Tehran. Since majority of these individuals are addicted to heroin, the data provides some support about the relation of urbanization and heroin addiction. A more vigorous analysis of this phenomenon is currently underway.

Over 85% of registered and illicit addicts are currently employed. This may indicate that the out-patient mode of detoxification and treatment is perhaps more suitable to the needs of these addicts than in-patient treatment programs.

When asked how many other addicts you know who are neither registered nor have ever been admitted to government clinics, there was major difference between the two groups of addicts. The median for the registered addicts was 1 addict while for the illicit addicts, it was 10 or more. This is somewhat expected result since 93% of registered addicts mentioned their home as the usual place of their drug use while 44% of the illicit addicts cited places other than home as the usual habitat for their drug use.

The comparison of criminal history of registered and illicit addicts shows the former to be significantly more delinquent. However, as it was mentioned before, the registered addicts may have under-reported their criminal activities in fear of government reprisal.

Comparisons of addicts across sex reveals that registered female addicts rarely experiment with other drugs compared to their male counterparts. However, no firm conclusion may be drawn from this finding since the females in the sample consisted of older registered addicts. Moreover the male category also included the illicit addicts who do experiment with other drugs significantly more than the male registered addicts. Research is at present underway to obtain information about the drug habits of illicit female addicts.

The most significant result from the comparison of age groups is the finding that there is about a 4 year lag between median time of first use and time of addiction in the 35-54 age group. Over 70 percent of these individuals are opium addicts. One important policy implication of this finding is that prevention program should not be restricted to youth only but should also place special emphasis on middle aged intermittent opium users.

Finally the rate of alcohol abuse and minor tranquilizers (valium) among the heroin addicts is alarming. The finding from our other research on psychiatric disorder of these addicts indicates the highest distress levels, exceeding even those of psychiatric outpatients.

In sum, the preliminary information defines Iranian addicts as more or less a unique population who are sufficiently different from addicts population elsewhere. To what extent cultural idiosyncracies and historical tradition have affected the drug use patterns in Iran is difficult to determine. Nevertheless, the findings suggest emergence of new trend in drug addiction by the

illicit addicts who are significantly different from the registered addicts across all the major demographic dimensions of drug abuse patterns.

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