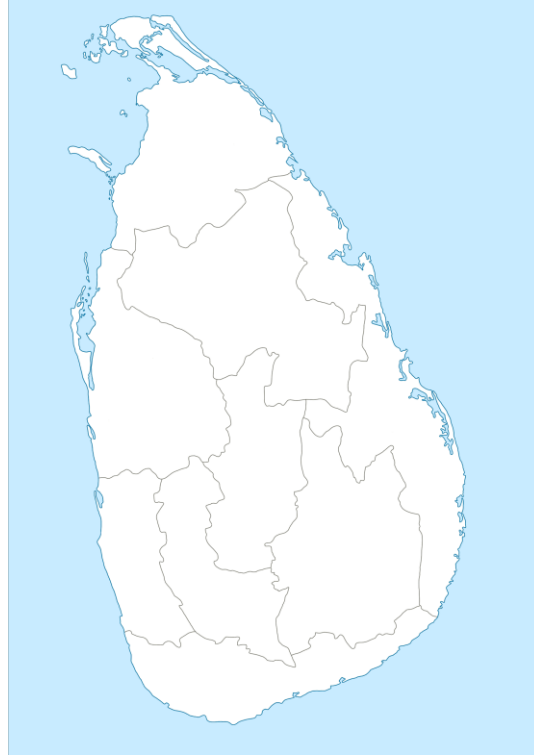


Rapid Assessment of Drug Use Patterns (RADUP) in Sri Lanka

To inform risk reduction interventions for People Who Use / Inject Drugs (PWUD/PWID)

REPORT

January 2018



National STD/AIDS Control Programme - Sri Lanka
Ministry of Health, Nutrition & Indigenous Medicine



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தேசிய அபாயகர ஔஷதங்கள் கட்டுப்பாட்டு சபை
NATIONAL DANGEROUS DRUGS CONTROL BOARD



**alliance regional
technical support hub**
SOUTH ASIA

Study at a glance

Title	Rapid Assessment of Drug Use Patterns (RADUP) among People Who Use and/or Inject Drugs (PWUD/PWID) in Sri Lanka
Duration	July – November 2017
Conducted by	National STD/AIDS Control Program, (NSACP), Sri Lanka National Dangerous Drugs Control Board, NDDCB, Sri Lanka
Technical Support	Alliance Regional Technical Support Hub/Alliance India, New Delhi
Ethics Clearance	Faculty of Medicine, University of Colombo
Funding Support	Global Fund for AIDS TB and Malaria (NFM Grant 2016-2018 budget line – 201)
Researchers	Dr Sathya Herath - Principle Investigator Consultant Community Physician, Activity coordinator Global Fund Grant, National STD/AIDS Control Program, Sri Lanka Dr. Atul Ambekar - Co-Investigator Professor, National Drug Dependence Treatment Centre, AIIMS, New Delhi, India

CONTENTS

EXECUTIVE SUMMARY	3
1. INTRODUCTION:	6
2. OBJECTIVES:.....	7
3. REVIEW OF LITERATURE.....	7
4. METHODOLOGY:	12
Study Design.....	12
Data Collection:.....	15
Data Analysis:.....	17
Implementation arrangements:	18
Ethical issues:	19
Training:	20
5. RESULTS	20
5.1. Reliability of data collected, response rate, and coverage	21
5.2. Socio Demographic profile of respondents	22
5.3. Drug use profile of respondents.....	24
5.4. Consequences of drug use of respondents.....	31
5.5. Sexual Practices of respondents.....	34
5.6. Legal problems among respondents.....	35
5.7. Treatment seeking and access.....	35
5.8. Results of KII.....	37
6. DISCUSSION	40
7. CONCLUSION & RECOMMENDATION.....	46

EXECUTIVE SUMMARY

Introduction:

Research on details of pattern of drug use among People Who Use Drugs (PWUD) and People Who Inject Drugs (PWID) in Sri Lanka is relatively scarce. In order to initiate interventions aimed at reduction of risks due to drug use in the country, adequate information about pattern of drug use is critical. Thus, the NSACP along with NDDCB has conducted this “Rapid Assessment of Drug Use Pattern (RADUP) in Sri Lanka to inform risk reduction interventions for PWUD/PWID”. The Alliance Regional Technical Support Hub South Asia provided technical support. The study was aimed at (i) understanding the pattern of drug use among the non-institutionalized PWUD and PWID in selected districts in Sri Lanka and (ii) recommending policies and programmes related to drug use issues in Sri Lanka.

Methods:

In this exploratory, observational, cross-sectional, mixed-method study, a combination of qualitative and quantitative methods was used. Quantitative data were obtained from non-institutionalized PWUD (n=283) and PWID (n=174), recruited through a snow-ball sampling strategy, from six districts of the country: Colombo, Gampaha, Kaluthara, Galle, Kandy and Rathnapura. These respondents were interviewed in one-to-one setting by trained interviewers from National Dangerous Drug Control Board (NDDCB), after obtaining informed consent. For the qualitative component, Key Informant interviews were conducted with a variety of stakeholders (PWUD / PWID; Treatment provider; Family member / Spouse / partner of PWUD/PWID; Law enforcement personnel; Total n=36) from these six districts. Ethics clearance was obtained from faculty of medicine, University of Colombo.

Results:

On the socio-demographic parameters, PWUD and PWID groups were strikingly similar. More than 95% were males and tended to be in their late 30s. Overall, a large majority (>90%) of PWUD / PWID were educated and employed.

Almost all the respondents in both the groups were poly substance users. In the last one year while more than 98% in both the groups used tobacco, 60% of PWUD and 45% of PWID also used alcohol. Among illegal drugs, about two-third in both the groups used cannabis and while 93% of PWUD used heroin with the ‘Chinese’ method, about 45% of PWID also reported so. About one-fourth respondents in both the groups also used sedative tablets. Most common drug of injecting among PWID was heroin (reported by 91%). It was also evident from the results that while a number of drugs are being used, the dependence or addiction is largely on Opioids (i.e. heroin); as many as 64% of PWID and 73% of PWUD had scores on WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) more than 26 (corresponding to opioid dependence). The data on onset of drug use displayed a specific pattern; while heroin smoking starts around 19-20 years of age, heroin injecting starts around 28 years of age. ‘Peer pressure’ and ‘curiosity’ were the most common reasons behind onset of drug use.

About 83% of PWID injected ‘daily’ with about 64% injecting ‘2-3 times per day’. As many as 85% had shared their injecting equipment ‘ever’, while 64% shared in the last one month. Indeed, about 68% of PWID shared their injecting equipment in the first instance of injecting.

A wide variety of adverse consequences of drug use (physical, social, psychological, familial and occupational) were reported. In terms of sexual behaviors, among those who reported sex with commercial sex partners (i.e. with female sex workers), 52% of PWID and 38% of PWUD reported unprotected sex.

While as many as 85% of PWID and 79% of PWUD reported receiving counselling in the past as an intervention for their drug use problems, just about 41-42% reported receiving any medical treatment (despite an overwhelming majority being opioid dependent). In contrast more than 90% had been apprehended by police and large majority (84% PWID and 78% PWUD) had been to jail.

The key informant interviews with a variety of respondents highlighted the deep-seated prejudices against drug use exemplifying widespread stigma and discrimination faced by PWUD / PWID. The widely prevalent misconceptions regarding harm reduction approaches were evident.

Conclusion and recommendations:

Among key vulnerabilities and challenges in Sri Lanka, results show that the country has young, productive men suffering from heroin dependence and its serious adverse consequences. While PWUD are at risk of transition to injecting, major concern is the High prevalence of risky injecting and sexual practices. The response to drug problems appears to be heavy skewed toward the criminal justice system (which appears ineffective) and there is poor access to effective, evidence-based treatment for opioid dependence with a virtual non-existence of specific harm – reduction interventions.

Regarding **Recommendations** from these results, there is an urgent need of Legal and Policy reforms aimed at a conducive environment for provision of evidence-informed services for affected communities. Similarly, promoting the involvement of civil society and affected communities in the decision-making process will be important. We need urgent and strong advocacy measures for initiating evidence-based treatment for drug dependence (Opioid Substitution Treatment) and harm-reduction interventions (including access to clean injecting equipment) for PWID. For building capacities, exposure visits and study tours to neighbouring countries for exposure to the programs for drug dependence treatment and harm-reduction and collaboration between academic institutes of Sri Lanka and other countries is highly recommended.

1. INTRODUCTION:

Use of Psychoactive substances (or ‘Drugs’) is a known phenomenon in Sri Lanka since the ancient time. However, while traditionally drugs were used largely for medicinal purposes, in the recent times, use of drugs for recreational purpose appears to be on the rise. A major reason for this could be the arrival of synthetic and potent drugs like heroin in the country. While traditional substances like Cannabis and opium are still being used for medicinal purposes under the traditional ‘Ayurvedic’ system of medicine, from the early 1980’s onward heroin use started surfacing among the Youth.

The Government of Sri Lanka has formulated an intensive programme to address the issues related to drug use in the country. The **National Dangerous Drugs Control Board (NDDCB)** is the principal government agency entrusted with the task of coordinating all the activities related to drug control in the country. In addition, the **National STD / AIDS Control Programme (NSACP)** spearheads the national response to HIV/AIDS in Sri Lanka, and is mandated to provide prevention as well as care and support services to the vulnerable populations. Since People Who Use Drugs (PWUD) and particularly, People Who Inject Drugs (PWID) are known ‘Key Populations (KP)’, issues related to the behaviours and practices of PWUD and PWID are extremely important to be studied.

Thus, the National STD/AIDS Control Program along with National Dangerous Drugs Control Board (NDDCB) has conducted this “Rapid Assessment of Drug Use Pattern (RADUP) in Sri Lanka to inform risk reduction interventions for PWUD/PWID” in the country. The Alliance Regional Technical Support Hub South Asia was selected to provide technical support/consultancy to NSACP and NDDCB for the study.

2. OBJECTIVES:

- 1. To understand the pattern of drug use among the non-institutionalized people who use drugs and people who inject drugs in selected districts in Sri Lanka**
- 2. To generate recommendations for policies and programmes related to drug use issues in Sri Lanka**

3. REVIEW OF LITERATURE

Drug use: Global & Regional situation

Use of psychoactive substances for recreational purposes is a global phenomenon and a major public health problem. An estimated quarter of a billion people, or around 5 per cent of the global adult population, used drugs at least once in 2015. Even more worrisome is the fact that about 29.5 million of those drug users, or 0.6 per cent of the global adult population, suffer from drug use disorders. This means that their drug use is harmful to the point that they may experience drug dependence and require treatment.

Among various types of drugs used globally, opioid use results in most significant problems. Global prevalence of the use of opioids is estimated to be 0.7% of the world's adult population (or 35 million users). The global number of opiate users (i.e., users of opium, morphine and heroin) continued to increase, although marginally, from 17.3 million in 2014 to 17.7 million in 2015. Opioid use disorders account for the heaviest burden of disease attributable to drug use disorders. In 2015, almost 12 million DALYs, or 70 per cent of the global burden of disease attributable to drug use disorders, were attributable to opioids. More worrisome in the trend of using drugs, particularly opioids, by injecting route. Almost 12 million people worldwide inject drugs, of whom one in eight (1.6 million) are living with HIV and more than half (6.1 million) are living with hepatitis C.¹

South Asia has a sizeable problem of drug use. The region is close to high opium producing areas, the *Golden Triangle* and *Golden Crescent*. United Nations Office on Drugs and Crime notes that, this unique location has increased the availability and use of illicitly produced opiates in South

¹ United Nations Office on Drugs and Crime (UNODC), World Drug Report 2017. Vienna: UNODC

Asia. Injecting drugs adds to the problem as the sharing of drug-taking equipment, particularly infected needles, is an extremely effective way of transmitting HIV to the general population.

Although cannabis is the most widely consumed drug, the most problematic group of substances for most South Asian countries are opiates. Increased use of synthetic and prescription drugs has also been reported in several countries of the region. In South Asia region, the following substances are most often used: Afghanistan and Myanmar-originated heroin; locally produced heroin; synthetic opioids and prescription drugs such as codeine-based cough syrups, diazepam and proxyvon produced mainly in India and Bangladesh; synthetic drugs originating from South East Asia; cannabis and alcohol. ²

The problem of drug use in most parts of the world, and specifically in South Asia is compounded by the Stigma and discrimination which are widespread. Moreover, existence of punitive laws make it difficult or even impossible for drug users to ask for help or access services. Under the prevailing legal provisions, many drug users may be arrested as they trade drugs to sustain their habit. Drug use and possession are a punishable offence in all countries of South Asia, contributing to a high number of inmates imprisoned for drug-related offences. ²

Drug use: Situation in Sri Lanka

Despite being talked about and discussed extensively in the general media^{3,4,5}, the exact dimensions and contours of the drug problem in Sri Lanka are not well known. While there have been certain surveys conducted to estimate the number of people who use drugs in Sri Lanka, an in-depth analysis of pattern of drug use is not available.

One of the important sources of information regarding drug use in Sri Lanka has been the data from people seeking treatment for their drug addiction. Reports of Drug Abuse Monitoring System (DAMS) are regularly compiled and published which provide a glimpse of profile of treatment seekers. For instance, the latest report of DAMS provides data from 2355 drug users who received treatment of drug addiction in various treatment centres in the country.⁶ Of these an

² UNODC ROSA. *Regional Programme for South Asia (2013-2015)*. New Delhi: UNODC, ROSA

³<http://www.dailymirror.lk/30046/narcotics-the-silent-killer-haunting-the-schools-in-sri-lanka>

⁴<http://www.ft.lk/article/527158/551-school-children-arrested-for-drug-abuse-since-2010>

⁵<http://groundviews.org/2009/08/13/illicit-drug-abuse-in-sri-lanka-shows-clear-signs-of-worsening/>

⁶National Dangerous Drugs Control Board. *Drug Abuse Monitoring System: Annual Report – 2016*.

overwhelming majority were men (98.5%), and almost equal proportion were married (48%) or single (49%). Proportion of young men was highest among treatment seekers; about 48% were in the age group of 25-39 years. Majority had some years of schooling with 54% having studied between grade 5 and 10. The largest proportion (92%) reported using heroin, followed by 68% of cannabis users. Notably, a very small proportion (1%) were injecting drug users. While the study report does provide some important data on profile of treatment seekers at Sri Lanka, there is no detailed information on behaviours and practices of drug use, nor is there data on consequences of drug use.

Another report also provides the similar data and confirms the trends. The handbook of DAMS (2016)⁷ compiles the data on treatment seekers for the years 2011 to 2016. For each year of reporting, the common and consistent trends are:

- Largest majority of treatment seekers report heroin use (75% to 86%);
 - Largest proportion report use of drug by smoking / inhalational method (67% to 78%);
 - A very small minority reports injecting route of drug use (1.6% to 4.3%);
- Drug users are overwhelmingly males (98% to 99%), educated (2.3% to 5.9% without schooling) and in their productive years of life (55% to 67% between the ages of 20 and 39 years).

However, an in-depth information on pattern of drug use is not available from this report either.

In addition to the large-scale DAMS reports, there have been other small-scale studies on treatment seekers, from Sri Lanka. De Silva and Fonseka (2008)⁸ reported data on 381 institutionalized drug addicts from Galle district and found the profile to be remarkably similar to that reported in the recent large-scale studies (i.e. DAMS). In other words, it appears that the profile of treatment seeking drug users in Sri Lanka has remained largely the same over the years.

Apart from these reports, which are based upon data collected from people seeking treatment for their drug addiction, there is a dearth of literature from Sri Lanka on people who use drugs, from the community settings (i.e. non-institutionalized population). Overall, in the country there are an

⁷National Dangerous Drugs Control Board. *Handbook of Drug Abuse Information 2016*.

⁸De Silva and Fonseka. *Galle Medical Journal*, Vol 13: No. 1, September 2008

estimated 45,000 heroin users. Four districts of the country – Colombo, Gampaha, Galle and Kandy – are believed to have higher prevalence of drug use.

Data on People Who Inject Drugs (PWID) is really scanty. Although available surveys as well as data from DAMS does confirm existence of Injecting Drug Use in Sri Lanka, many details of the behaviours and practices related to this phenomenon are not available. Senanayake et al (2005)⁹ reported data from an exploratory study and found that PWID in Sri Lanka could be broadly categorised into three groups: regular injectors, intermittent injectors and occasional injectors. Interestingly this study revealed that the crisis of not getting enough heroin for chasing (the ‘Chinese’ method) was cited as a reason for starting drug use through injecting route. Another indication of low prevalence of IDU in Sri Lanka came from the study on prison inmates by Niriella et al (2015)¹⁰, where among the 393 randomly selected inmates in two prisons of Sri Lanka, 167 (42.5%) reported drug use through non-injecting route, but only 17 (4.3%) were PWID. Fortunately, the Prevalence of HBV and HCV was found to be very low in the study. In yet another study on incarcerated drug users, Dissabandara et al (2009) reported the prevalence of IDU to be 15% among 278 drug users interviewed in three prisons.¹¹

Across various studies, the estimated numbers of PWID in Sri Lanka is small and very low as compared to the number of PWUD (i.e. non-injectors). The size estimation of Most At Risk populations (MARPs)¹² reported the number of PWID to be 218 ‘on a usual day’ to about 423 ‘on a peak day’. This was in contrast to the estimated number of PWUD, an average of 12,618 PWUD ‘on a usual day’, to, 17,459 ‘on a peak day.’

As per a recent report by NDDCB¹³ involving 721 PWID, almost 99% were males, with about 81% between the ages of 26 to 50 years. A large majority (89%) reported injecting ‘regularly’ and

⁹Senanayake, B., Kandiah, R. and Ratnayake, Y., 2005. Injecting Drug Users in Sri Lanka, In: *Proceedings of the 10th International Conference on Sri Lanka Studies*, University of Kelaniya, pp 158.

¹⁰ M A Niriella, A Hapangama, H P D P Luke, A Pathmeswaran, K A L A Kurupparachchi, H J de Silva, Prevalence of hepatitis B and hepatitis C infections and their relationship to injectable drug use in a cohort of Sri Lankan prison inmates. *Ceylon Medical Journal* 2015; 60 18-20

¹¹Dissabandara LO, Dias SR, Dodd PR, Stadlin A. Patterns of substance use in male incarcerated drug users in Sri Lanka. *Drug Alcohol Rev* 2009;28:600–607

¹² National STD/AIDS Control Programme (NSACP) 2013. *National Size Estimation of Most at Risk Populations (MARPs) for HIV in Sri Lanka*.

¹³National Dangerous Drugs Control Board (2015). *Trend, Patterns and Prevalence of Injecting Drug Users in Sri Lanka*.

a large proportion (44%) reported sharing injecting equipment. However most of the details of pattern of drug use and actual practices of injecting were not available in this study.

Thus, the available literature indicates the following about drug use pattern in Sri Lanka:

- Heroin use, through chasing (or Chinese method) is established in Sri Lanka
- Most drug users coming in contact with treatment providers or the criminal justice system report heroin use followed by cannabis use
- Drug use is overwhelmingly male phenomena
- Injecting Drug Use does exist in Sri Lanka and its prevalence is much lower as compared to use of drugs through other routes. There is a possibility that PWUD switch to the taking drugs through injecting route, for certain reasons, which are not understood well.

However, the following issues remain unanswered through the existing data in Sri Lanka.

- *What is the pattern of drug use (in terms of frequency of drug use) by PWUD?*
- *Do people who use drugs also suffer from drug use disorders (such as harmful use of drugs or Drug dependence)?*
- *What are the consequences of drug use?*
- *What are other risk-behaviours, PWUD and PWID engage in?*
- *To what extent the profiles of PWUD and PWID, similar or different in Sri Lanka?*
- *What is the drug use pattern among PWID? How frequently do they inject? What are the behaviours and practices surrounding injecting drug use? Are there specific adverse consequences of injecting?*

It is important to find the answers to these questions, in order to help formulation of evidence-based policies and programmes to address the issue of drug demand reduction and harm reduction in Sri Lanka. Thus, answers to some of these questions were sought from this study.

4. METHODOLOGY:

Study Design

In this exploratory, observational, cross-sectional, mixed-method study, a combination of qualitative and quantitative methods was used for data collection. The quantitative data formed the main basis of assessment of drug use pattern. The qualitative data was collected to enrich the data obtained through quantitative methods and provides a descriptive and narrative account of drug use practices, behaviors and issues surrounding them which would help in informing formulation of appropriate intervention strategies.

Study locations:

The study was conducted in six districts in Sri Lanka. These districts were selected considering the available data which indicates that these six districts carry higher risk than that to the other district in Sri Lanka and are known for a high prevalence of drug use / injecting drug use; namely Colombo, Gampaha, Kalutara, Galle, Kandy & Rathnapura.

Sample Size - Quantitative Survey:

In spite lack of information on same type of community based cross sectional research in drug use patterns, according to the WHO Practical Manual on, Sample size determination on health studies, an estimate of 0.5 was used for the population proportion, since the sample size required is largest and safe when population proportion is 0.5. The estimate of 50% was therefore used as prevalence of drug use to calculate the sample size of the present study.

The following formula was used to calculate the sample size.

$$n = Z^2 p (1-p) / d^2$$

n – Sample size, p – Preliminary estimation of proportion of a characteristic,

Z – Critical value of specified confidence. Usually we need 95% confidence level, and

Z = 1.96 (approximate to 2),

(1-p) = Proportion without the characteristic.

If one work in percentage, (1-p) will be (100- p),

d = Acceptable amount of absolute error.

$$n = 1.96^2 \times 0.5 \times 0.5 / 0.05^2$$

$$n = 3.84 \times 0.25 / 0.0025$$

$$n = 0.96 / 0.0025$$

$$n = 384.$$

The sample size was 384. Non-participation rate of 5% was added to the sample.

Non-participation = 5%

$$= 5/100 \times 384$$

$$= 19$$

$$= 403$$

The ideal sample would have been approximately 400 according to the sample size calculation. However, considering the available funds, other resources and the purpose of the study (to provide valid information to the policy and program implementation to drug use in Sri Lanka) it was decided to go for larger sample than this.

Hence, the sample was decided considering the likely prevalence of drug use. Since credible data on drug use prevalence does not exist, drug use arrest was taken as a proxy to calculate the sample. Out of total number of drug arrests, 1% of the arrests in 2016 was considered as sample size, amounting to 600. Again, for reporting quantitative data on both non-injections and injections it was decided to go for equal number in both groups: 300 PWUD and 300 PWID. The sample size was proportional to the population; thus, sample was high from high prevalence districts and low from low prevalence districts. The Table 1 explains the sample size in each district.

Table 1: Sample size calculation by proportionate to population

District	Drug related arrest for the year 2016	Sample size based on drug related arrest (about 1% of the arrests)	PWUD study sample	PWID study sample
Colombo	35,572	366	183	183
Gampaha	11,185	115	57	58
Kaluthara	2718	28	14	14
Galle	2811	29	15	14
Kandy	3143	32	16	16
Rathnapura	2834	30	15	15
Total	58,263	600	300	300

Sampling technique

The PWUD and PWID are hidden population in Sri Lanka. Therefore, for reaching out to the study population (PWUD or PWID) a chain referral (also called snow balling technique) was followed; this sampling technique was decided considering the nature of target population and operational aspects of conducting this rapid assessment.

For the purpose, initially seeds of the snowball were selected from each district. Thereafter the seeds were requested to facilitate inclusion of other respondents from their network into the study. Those thus, reached and interviewed were asked to help in recruitment of others and so on.

However, as stated earlier, despite the best attempts by the trained interviewers, the desired sample size could not be reached. Still, the available sample is adequate to make important inferences about the drug use pattern among PWUD / PWID in Sri Lanka.

Sample Size – Qualitative Interviews:

At every district, at least eight -twelve KIIs were planned to be conducted with informants of a varied profile (one- two each of: PWUD/PWID; Treatment Provider; Family member / Spouse / partner of PWUD/PWID; Law enforcement personnel depending on the size of the drug user population) as listed in the table 1. A total of 48 qualitative interviews were decided.

Table 2: List of planned sites and sample size

Site	Quantitative Survey		Qualitative Interviews (KIIs)			
	PWUD	PWID	PWUD / PWID	Treatment provider	Family member / Spouse / partner of PWUD/PWID	Law enforcement personnel
Colombo	183	183	2	2	2	2
Gampaha	57	58	2	2	2	2
Kaluthara	14	14	1	1	1	2
Galle	15	14	1	1	1	2
Kandy	16	16	1	1	1	2
Rathnapura	15	15	1	1	1	2
Total	300	300	8	8	8	12
Grand Total	Quantitative Survey: 600 Qualitative Interviews (KIIs): 36					

Inclusion and Exclusion criteria – Quantitative component

Inclusion Criteria:

- Age: more than 18 years
- History of having taken any psychoactive drug¹⁴ in a non-medical context at least once in preceding one month
or
- History of having injected any psychoactive drug in a non-medical context at least once in preceding one month
- Willing to participate and provide informed consent

Exclusion criteria

- Not able to communicate
- Currently receiving treatment in a residential treatment setting
- Current residing in a custodial setting (like jail)

Inclusion criteria – Qualitative component

Informants for the qualitative survey were chosen if they were

- Believed to possess the relevant information about the phenomena of drug use in the locality
- Willing to participate in the interview process

Data Collection:

Entire data collection was conducted by field researchers who work at the NDDCB. They were recruited on part-time basis and underwent thorough training for data collection on the study (described under the heading ‘training’).

For finding the potential respondents a variety of methods and approaches were employed:

- Contacting the known PWUD and PWID from the community and asking for their friends

¹⁴Use of only Tobacco as a psychoactive drug, not considered.

- Contacting the PWUD and PWID currently receiving treatment services and asking them to refer their friends
- Contacting key opinion leaders in the community and asking them to refer PWUD / PWID known to them
- Contacting key opinion leader in the community and asking them to facilitate the interviews of non-drug-using respondents like Treatment providers, law enforcement officers and family member(s) of PWUD / PWID

Data collection from PWUD / PWID already inside the institutional settings (Hospitals / treatment centers / prisons / detention centers) was avoided since such data may not reflect the true situation in the community.

Data Collection - quantitative component

A specifically developed Interviewer Administered questionnaire (IAQ) was administered in a one-to-one setting, ensuring adequate privacy.

Semi-structured questionnaire for quantitative survey. The quantitative data was collected with a semi structured questionnaire, developed specifically for the study. This questionnaire is an adaptation of the multiple questionnaires used in similar studies conducted elsewhere^{15,16,17,18}.

Thus, the questionnaire has been by-and-large, validated and field tested. The questionnaire has instructions for the data collection team as well and thus serves the purpose of booklet / manual. This questionnaire was translated into local languages (Sinhalese / Tamil). Then both translated Sinhala & Tamil IAQ were back translated into English by an independent person to test the translation validity and the IAQ was pilot tested among drug users of both language who are not included in the study to prove feasibility in local context.

¹⁵Ambekar et al (2016) [Punjab Opioid Dependence Survey](#). New Delhi: SPYM and NDDTC, AIIMS

¹⁶Ambekar et al (2015). “Pattern of drug use and associated behaviours among female injecting drug users from northeast India: a multi-centric, cross-sectional, comparative study”, Substance Use and Misuse

¹⁷Ambekar et al (2014), [Drug Use Patterns among Clients Receiving Services from Targeted Interventions for People Who Inject Drugs: Findings from Bihar, Haryana, Jammu and Uttarakhand](#), New Delhi: India HIV/AIDS Alliance.

¹⁸Ambekar et al (2014). “Type of opioids injected: Does it matter? A multicentric cross-sectional study of people who inject drugs”, Drug Alcohol Rev.

Data Collection –qualitative component

The qualitative interviews were conducted by the trained field researchers using the Interview guides especially prepared for the qualitative survey which were also translated into local languages. The qualitative interviews were audio recorded. Then the audio recorded interviews were transcribed in Sinhala and translated into English for analysis purpose.

Guides for key informant interview. The qualitative data was collected through Key Informant Interviews (KIIs) with a variety of key informants (as listed in table 2 above), using specially prepared interview guides, based on the previous experiences (Annexure 2).¹⁵ These guidelines were in the form of open ended questions which were asked during the interview. Detailed responses were audio-recorded. The same interviewers were responsible for transcription and translating the responses into English for which they received training.

Data Analysis:

All the data from the quantitative survey was entered into the data entry formats designed using MS Excel, by the identified and trained staff of NSACP. Similarly, the interviewers for the qualitative data collection were tasked with, listening to the audio recording of the interviews, and making transcripts of it in the English language (as MS Word documents).

All the data so entered (in MS Excel and MS Word) was sent through internet to the team responsible for analysis.

Analysis of Quantitative Data:

The quantitative data has been analyzed using SPSS (V.21.0), in terms of frequency distribution and measures of central tendency.

Analysis of Qualitative Data:

Qualitative data is analyzed on the principles and approaches of content analysis. Major themes emerging from the data have been identified. Finally, triangulation of data collected from

quantitative and qualitative data has been conducted to derive conclusion and to formulate recommendations.

Implementation arrangements:

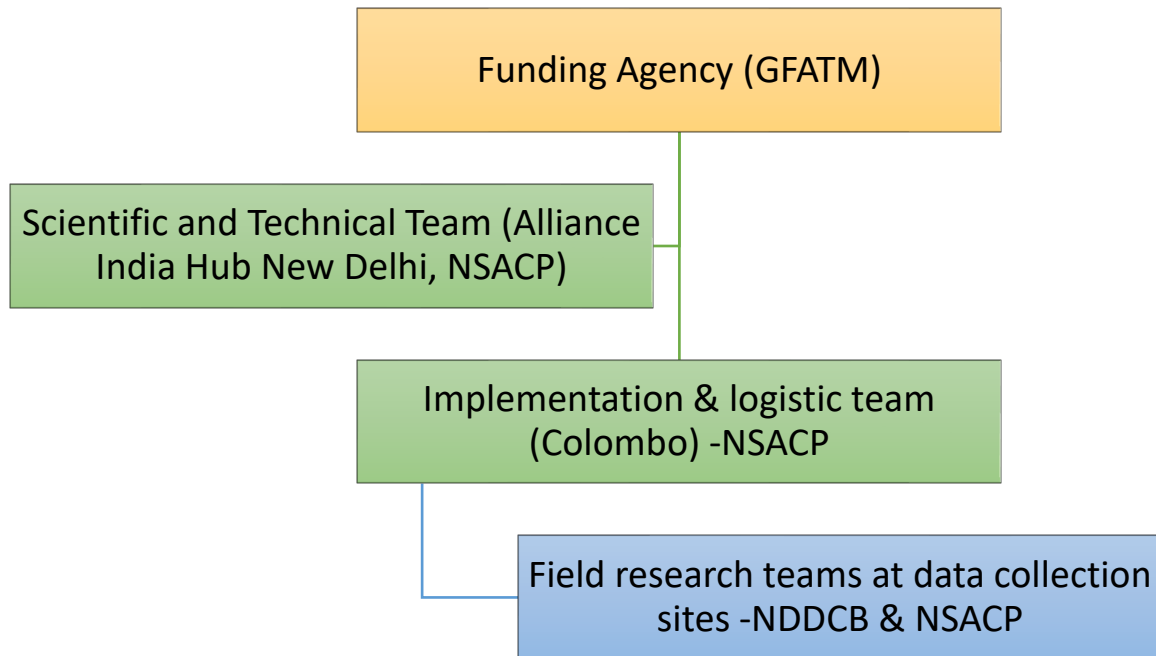
The source of funding for this research was the Global Fund to Fight AIDS TB and Malaria (GFATM), which has been funding various high impact HIV projects since past many years in Sri Lanka. .

The scientific and technical aspects of the study were led by a team of researchers from Alliance Regional Technical Support Hub, New Delhi, India. The ground-level implementation of the survey was governed and managed by the NSACP and NDDCB. Responsibilities and tasks of both teams (Technical and Logistics) are listed in the table 3.

Table 3: Responsibilities and tasks of both teams.

Scientific and Technical team (New Delhi)	Implementation and Logistic team (Colombo)
<ol style="list-style-type: none"> 1. Drafting the protocol and methodology 2. Developing the data collection tools 3. Conducting the training for data collection and data entry 4. Monitoring and supporting the data collection team during the initiation 5. Data Analysis 6. Drafting the report 7. Presenting the report 	<ol style="list-style-type: none"> 1. Provide feedback and inputs to the protocol and methodology 2. Translation of data collection tools 3. Applying and obtaining the Institute Ethics Clearance 4. Identifying / nominating the data collection team 5. Organizing the logistics of training and subsequent data collection 6. Data Entry and transmission of data for analysis 7. Inputs to the draft report and dissemination of the final report

Figure. Flow-Chart depicting implementation arrangements



Ethical issues:

- Informed consent was obtained from respondents for participating in this study and the name and personal identity related questions were not asked to maintain the confidentiality.
- Data collection took place in locations of respondents' choice to ensure privacy and confidentiality.
- Decision to participate was purely voluntary and had no bearing on receipt of services from the service provider agencies.
- It was ensured that the Information collected during the study was not utilized to penalize the respondents in any way, even if the information pertains to an act which may be construed as illegal.
- All the field researchers signed a confidentiality agreement
- Ethical clearance was obtained from ethics committee / review board at faculty of Medicine, University of Colombo, Sri Lanka.

Training:

A five -day intensive training comprised of 3 days class room and 2 days field was conducted for the team of field researchers works at the NDDCB in Colombo. Lead researchers from the scientific and technical team were the facilitators for the training. This training provided orientation on

- (a) Objective of this study,
- (b) Methodology
- (c) The tools for data collection including interview techniques (incorporating ethical aspects),
- (d) Transcription of audio recording to the text format and
- (e) Data entry, including the translation of audio scripts from local language to English.

The detailed training involved hands-on experience of using the data collection tools with the aid of role-play techniques. In addition to this hand on field experience was provided during the field training.

Thus, this report includes data from quantitative assessment, qualitative assessments and a triangulation of qualitative and quantitative data.

5. RESULTS

A total of 283 PWUDs and 174 PWID respondents were reached during the data collection in all the districts through the snow balling sampling.

Results of the study are presented under the following headings:

5.1 Reliability of data collected, response rate, and coverage,

5.2 Socio Demographic profile of respondents,

5.3 Drug use profile of respondents,

5.4 Consequences of drug use of respondents,

5.5 Sexual Practices of respondents

5.6 Legal problems among respondents

5.7 Treatment seeking and access

5.8 Results of KII

5.1. Reliability of data collected, response rate, and coverage

Measures were taken to ensure the quality of data by adhering to each step described under methodology (section 3). Test – retest reliability was checked by administering Sinhala and Tamil IAQs to eight Sinhala speaking and seven Tamil speaking drug users who complied with the inclusion criteria. The IAQs were re- administered to the same people after one week for repeatability. The level of agreement between the test and re-test for selected variables were very closer to Kappa value 1.00 (means test- retest reliability is good).

Similarly, overall agreement with the Principal Investigator (PI) & data collectors were tested and found to be in agreement with Kappa value closer to 1.00 for common socio-demographic, drug use variables. However, some variation was seen in the information collected on certain sensitive questions regarding sexual practices.

The PI randomly checked 5% (n=30) of filled IAQs for completeness and cross checked with the study sample. This procedure also yielded high agreement.

Respondents and Non-respondents

Of the 600-sample decided (300 each PWUD &PWID), 283 PWUD were successfully interviewed giving rise to 95% sample achievement and 174 PWID (58% sample achievement). This rate cannot be considered non-response. The main reason that can be given for this low rate than that of the decided sample is sample selection procedure. The study would have been easily done with 400 drug users taking into consideration of true prevalence of PWUD 99% and PWID 1% in Sri Lanka. The prime objective of the study would have been not achieved. Although the sample size of PWID is 58% of the sample decided to recruit, according to the true prevalence of PWID in Sri Lanka this is the maximum number that could be reached (174) due to low prevalence of injection drug use. Among the PWUD 4 people did not complete the IAQ, therefore these uncompleted investigations were not included in the analysis. The other three did not want to participate due to lack of time.

5.2. Socio Demographic profile of respondents

The data was analyzed for a total of 283 PWUDs and 174 PWIDs. Out of these, while there were 11 females in PWUD group, there was only one female in the PWID group.

On many socio-demographic parameters, PWUD and PWID groups were strikingly similar. The age of respondents was almost same in both the groups, [mean = 38.7 (SD 11.3); median = 37 years in PWUD] [mean = 39.4 (SD 9.2); median = 39 years in PWID]. Such similarity was evident on other demographic parameters too, as can be seen in the adjoining figures. However, there were some minor differences; as compared to PWUD, a larger proportion of PWID were separated or divorced, worked as transport workers or as self-employed, and were living in a joint family.

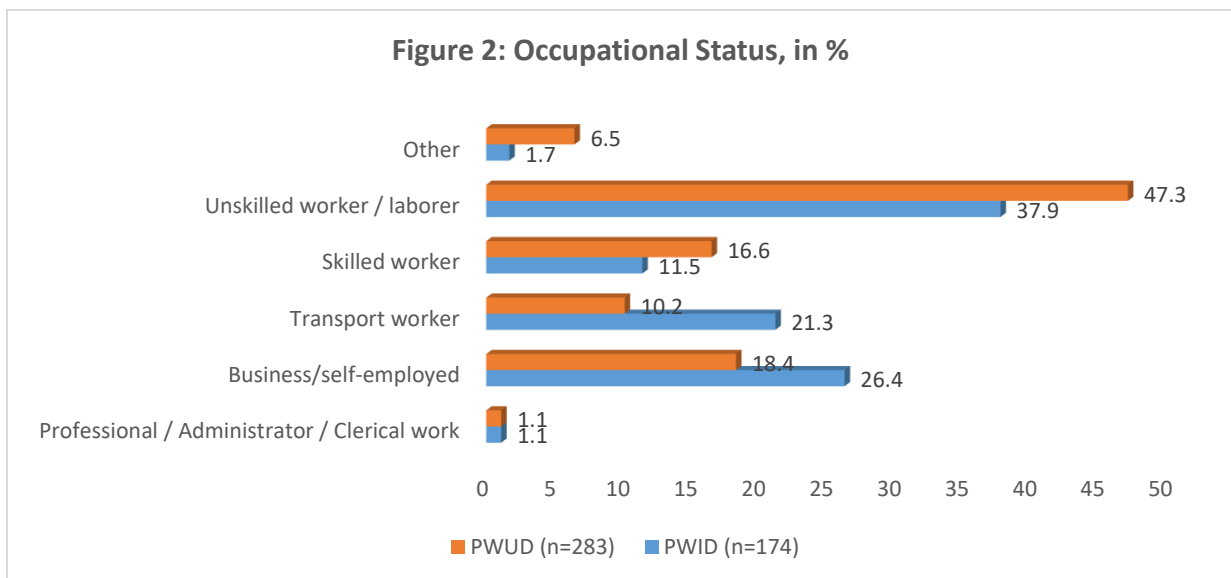
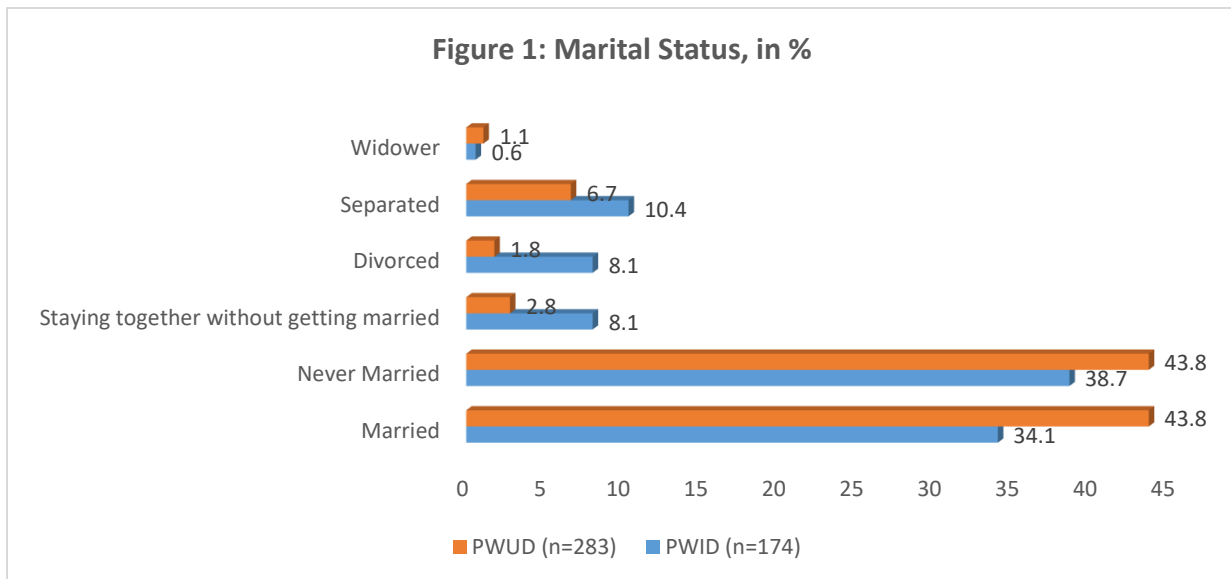


Figure 3: Educational Status, in %

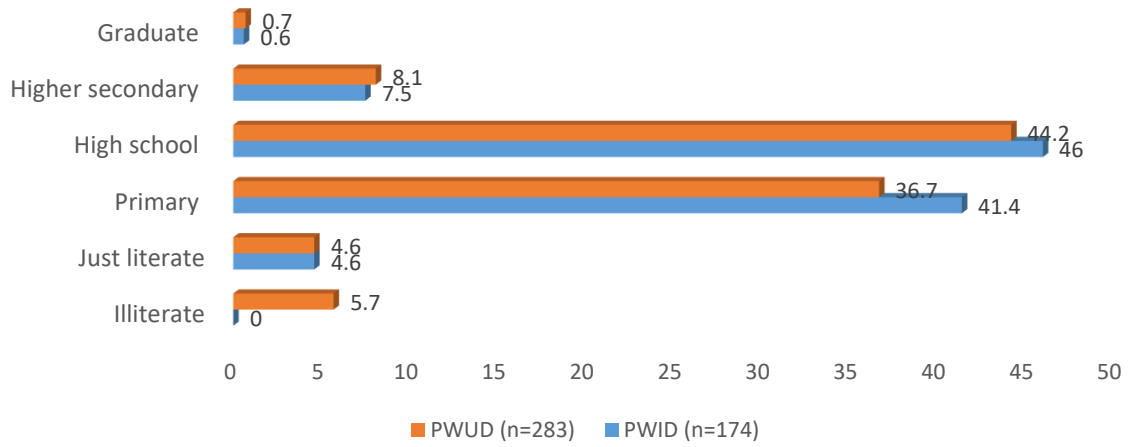
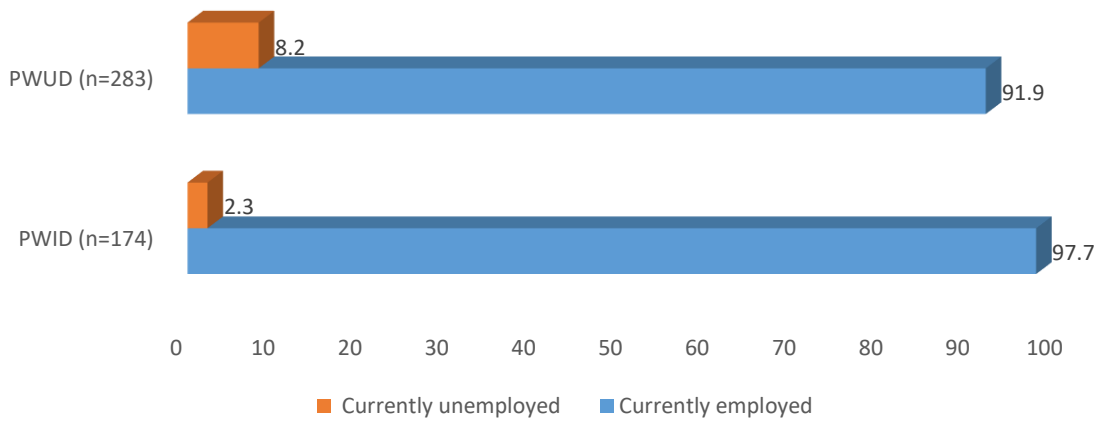
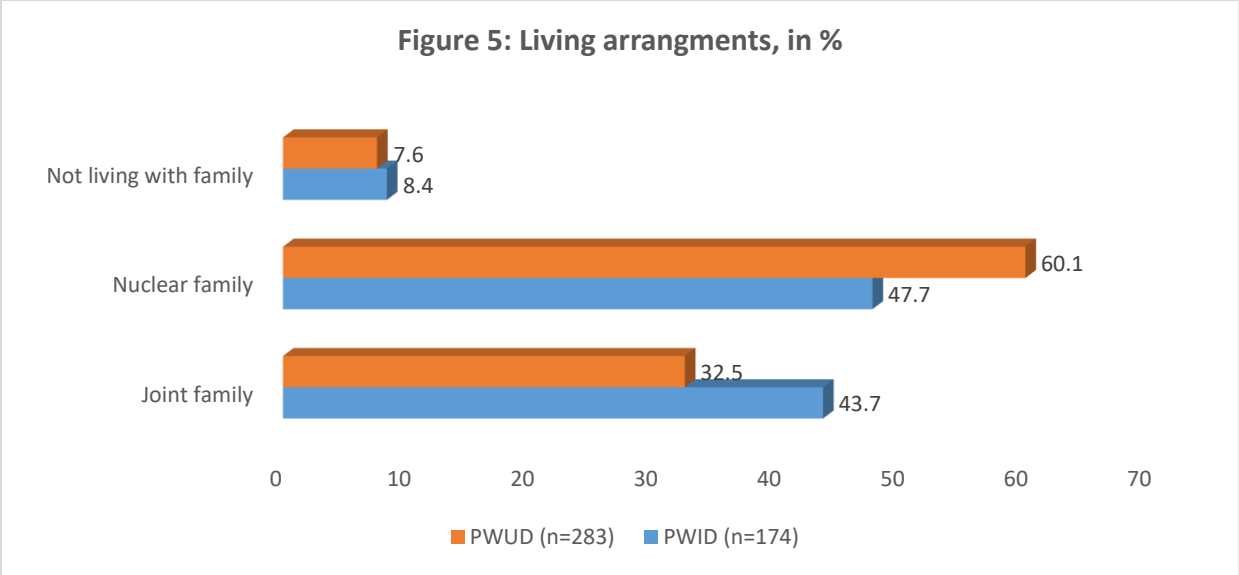


Figure 4: Employment Status, in %



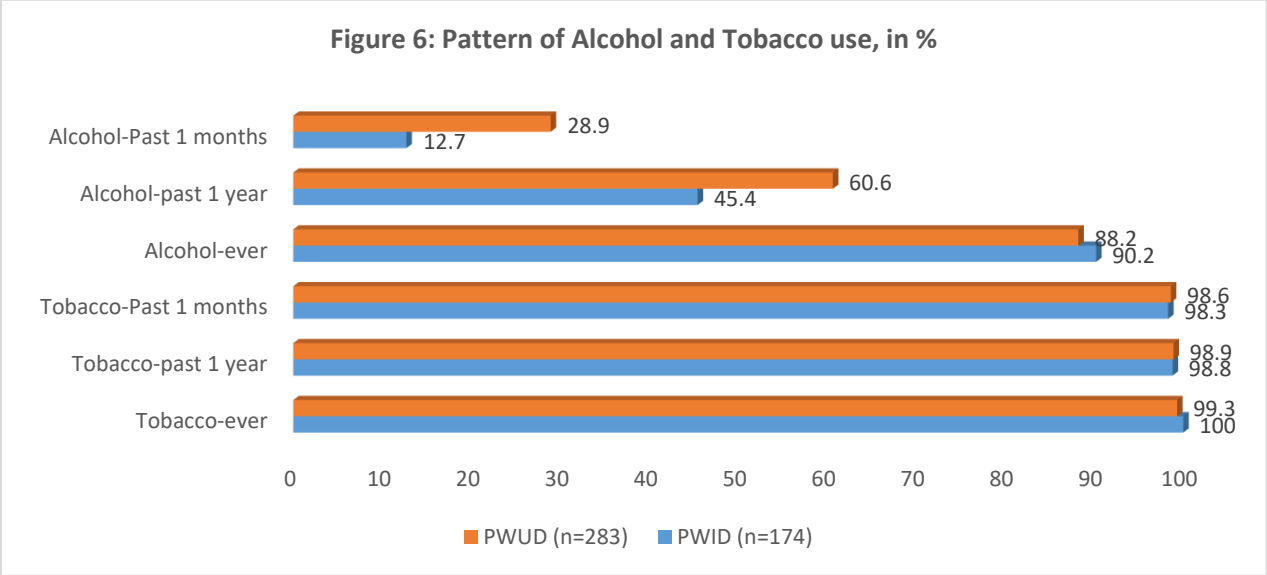


Overall however, it is evident that a sizable proportion of drug users in Sri Lanka (whether PWUD or PWID) are educated, employed, and living with their families. The median family income was exactly the same, (Rs. 60000 per months) in both the groups.

5.3. Drug use profile of respondents

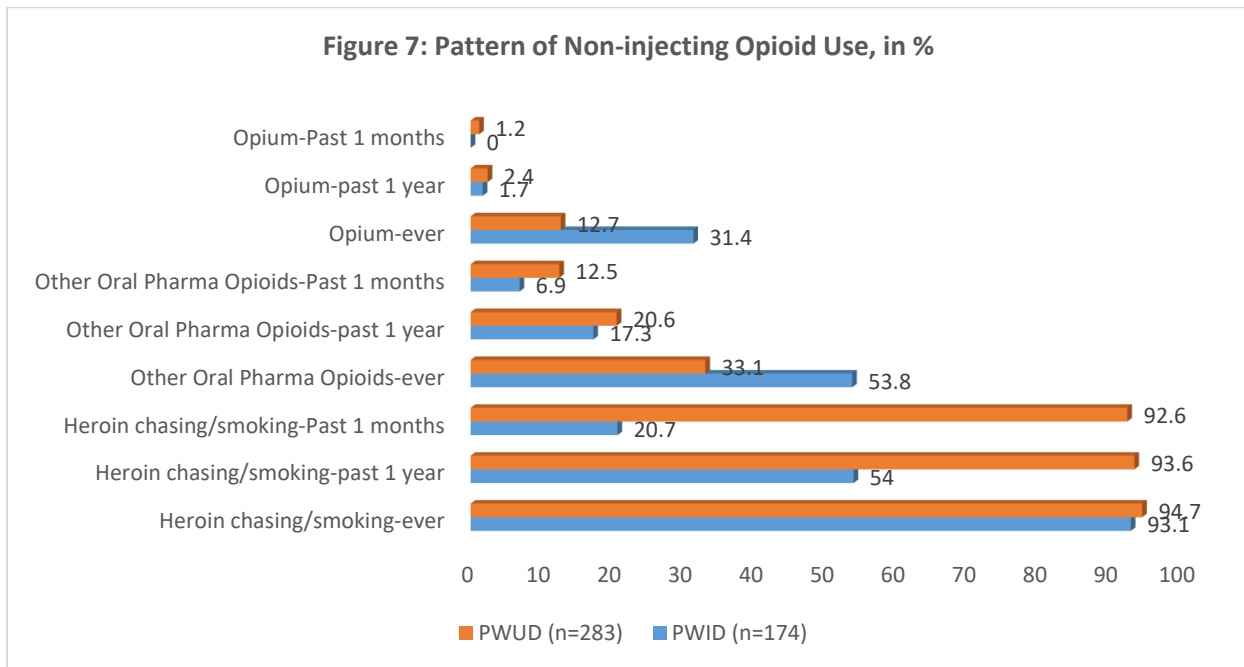
Legal substances

Almost all the respondents in both the groups were poly substance users. Prevalence of past one-year use of legal substances – tobacco and alcohol – was high, and almost same in both the groups.

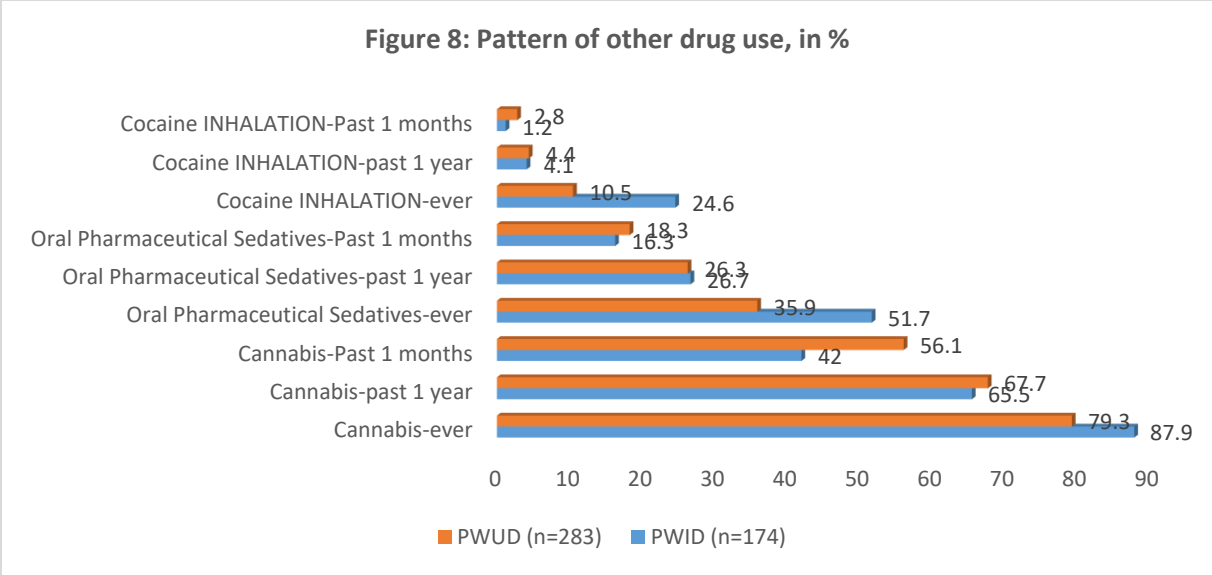


Illegal substances

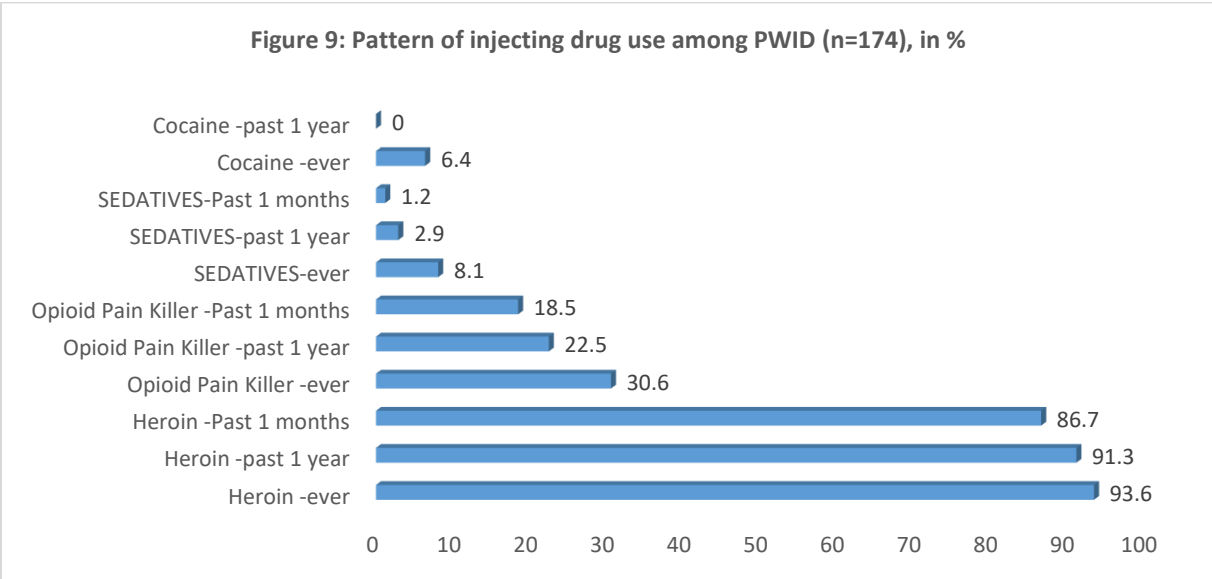
Among opioid group of drugs, it was interesting to note that even among the PWID a sizable proportion continue to use opioids drugs through non-injecting route. The commonest opioid drug used by PWUD and PWID in Sri Lanka appears to be heroin, followed by oral pharmaceutical opioids (obtained illegally without prescriptions). A negligible proportion use oral opium.



Among other drugs, cannabis use was reported by the largest proportion of respondents in both the groups, followed by oral pharmaceutical sedatives. A small proportion also reported use of cocaine. It was also interesting to see that 'ever' use of cannabis and sedatives was reported by more PWID as compared to PWUD. However, the proportion reporting current drug use was lower, indicating that probably, with the switch to injecting route of drug intake, usage of other drugs goes down.



Among PWID, most common drug injected is heroin. A small proportion report injecting other opioids, while a miniscule have reported injecting cocaine, ever. Currently no one was injecting cocaine.



Thus, looking at figure 9 and figure 7, it is evident that some PWID, continue to use heroin through chasing too, besides injecting it. A large majority of PWID however, appear to use heroin only through injecting route. Besides these drugs, a miniscule proportion (PWUD – 6.9%; PWID – 8.8%) also reported using amphetamines, ever.

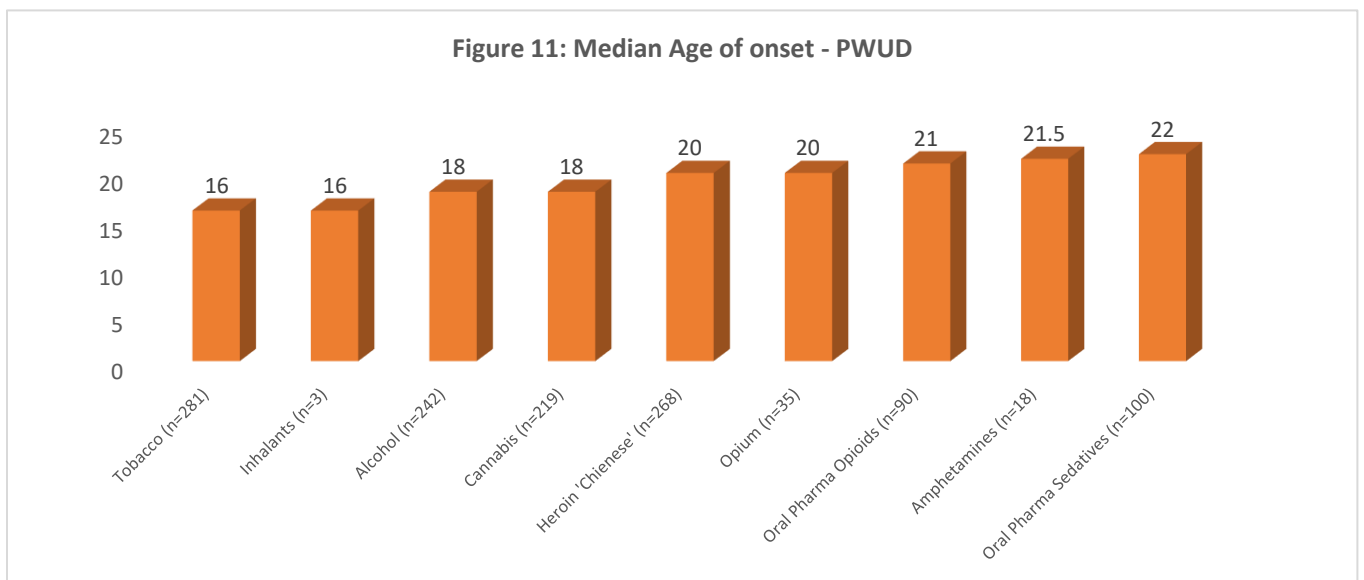
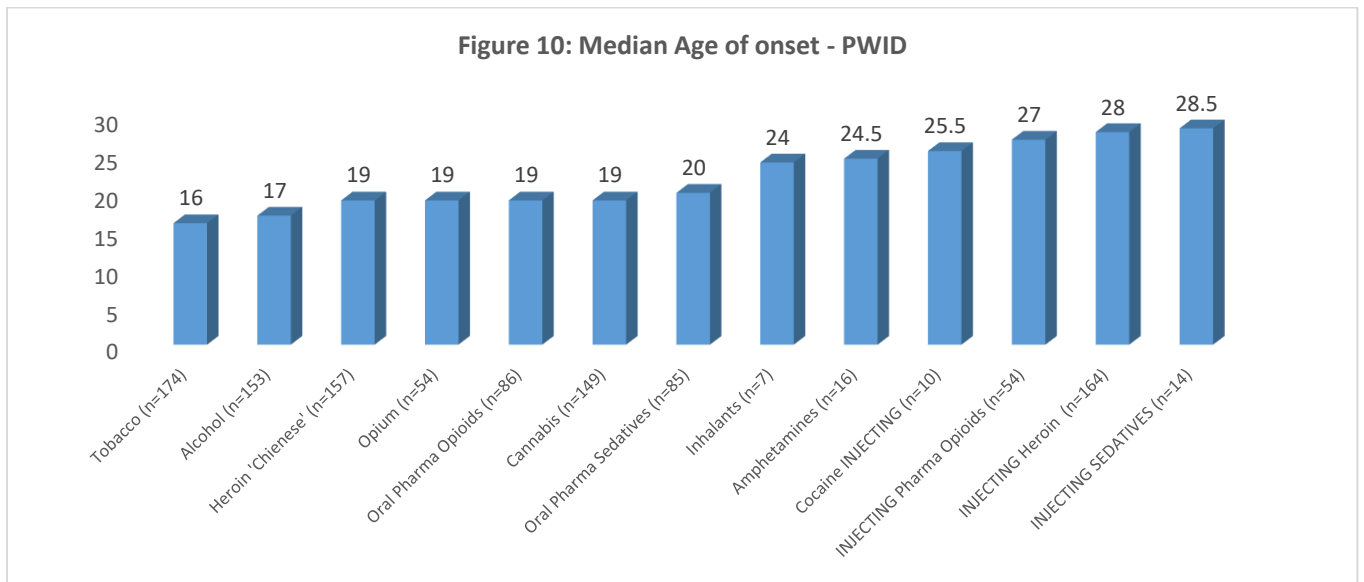
Important findings emerged from the data on WHO – ASSIST. As stated earlier, this tool provides score taking into account the recent pattern of drug use. Scores more than 26 indicate presence of ‘dependence’ or addiction to that particular drug. The table below shows the mean (SD) scores on WHO ASSIST for various drugs. In majority of respondents (63%), for opioids the WHO ASSIST scores are more than 26 indicating presence of Opioid dependence. In other words, most people who use / inject drugs in Sri Lanka use opioid drugs in a dependent pattern. This is further substantiated by the fact that among PWID and PWUD both, Opioids was the category for which the majority of respondents has ASSIST scores, >26. Proportion of respondents with ASSIST Score >26 for other substances were relatively small.

Substance	Number of <u>PWID</u> using	Median ASSIST score	% of respondents with scores >26
Tobacco	174	25.0	43
Alcohol	154	3.0	
Cannabis	157	12.0	16
Opioids	162	30.0	63.8
Sedatives	85	3.0	2.9
Cocaine	33	3.0	0
ATS	174	0.0	0
inhalants	1	3.0	0
Hallucinogen	1	17.0	0

Substance	Number of <u>PWUD</u> using	Median ASSIST score	% of respondents with scores >26
Tobacco	281	25.0	48.1
Alcohol	240	8.0	
Cannabis	228	21.0	24.4
Opioids	261	32.0	73.1
Sedatives	105	10.0	4.2
Cocaine	31	6.0	0
ATS	283	0.0	0.7
inhalants	1	10.0	0
Hallucinogen	2	15.5	0.4

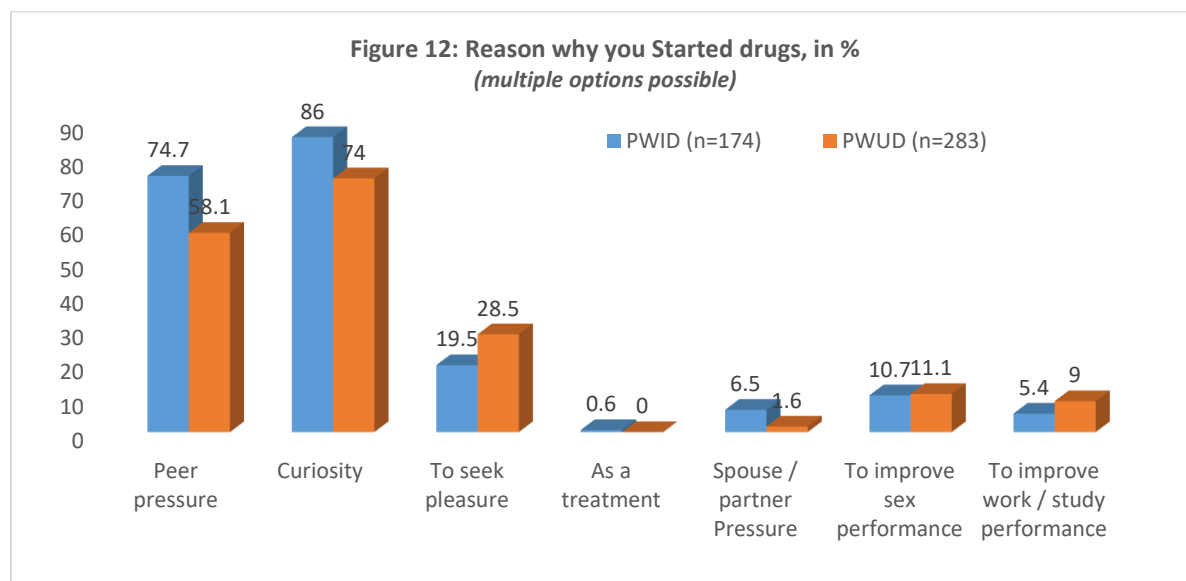
Onset of drug use

Data on *age of onset* of drug use showed that in general, use of legal substances started earlier in late adolescence, followed by illicit drugs in young adulthood. Indeed, among PWID, use of drugs by non-injecting route started much earlier than injecting drugs.



Among *reasons behind starting drug use*, the most common reason cited by majority of respondents in both the groups were “curiosity” and “peer pressure”. Other reasons were cited by

a small proportion of respondents. It should be noted that respondents had the option to report more than one reason for starting drug use. Among PWID, when asked about the situation regarding their first injection, a majority (78%) reported that “A friend / spouse / sex partner / client injected them”. Only 22% reported that they were alone at the time of first instance of injecting.



Injecting Practices

Among PWID, an overwhelming majority (83%) reported injecting ‘daily’ among whom, about 64% reported injecting ‘2-3 times per day’. Almost all of them (94%) reported injecting ‘heroin with or without mixing it with other sedatives’. The common methods used for mixing were “Mixing in ampoules / vials and then loading in syringes with needle” – 45% and “Mixing in a separate container with or without ‘cooking’” – 44%. There was variation in terms of size of syringes used for injecting. About 28% reported using a 1 ml Syringe, and the same proportion reported preferring a 10-ml syringe. Rest reported using syringes of other sizes with varying proportions.

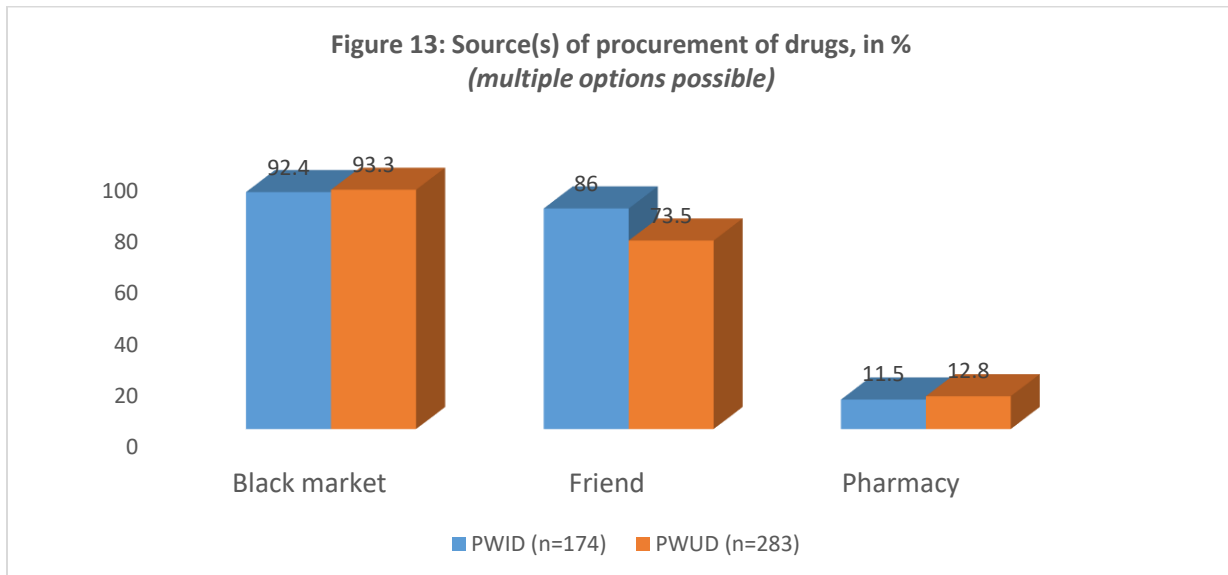
A high proportion of PWID reported sharing their injecting equipment. As many as 85% had shared their injecting equipment ‘ever’ while, 64% shared their needles in the last one month. It was alarming to find that about 68% of PWID shared their injecting equipment in the first instance of injecting, while 12% reported that they shared for the first time within one month of starting to inject drugs. Almost half of the PWID report injecting usually in groups, currently. Among reasons

for sharing on the most recent occasion of sharing, the most common reason was “No new needle / syringe was available” – 46% followed by “We did not see the need to use a new needle /syringe” – 39%. About 11% reported that they shared since there was “mutual trust between people who shared”.

There were other alarming behaviours reported by PWID. Almost half (51%) of PWID reported throwing their used needles and syringes, ‘anywhere’, while 52% also reported throwing their used needles and syringes in the ‘garbage bins’. When enquired about the sites on body where they have injected ‘ever’, while everyone reported injecting on hands, about 23% also reported injecting on legs. As many as 43% reported experiencing ‘abscess’ at their injection sites, ‘ever’, while 38% reported experiencing ‘blocked veins’ as a consequence of injecting.

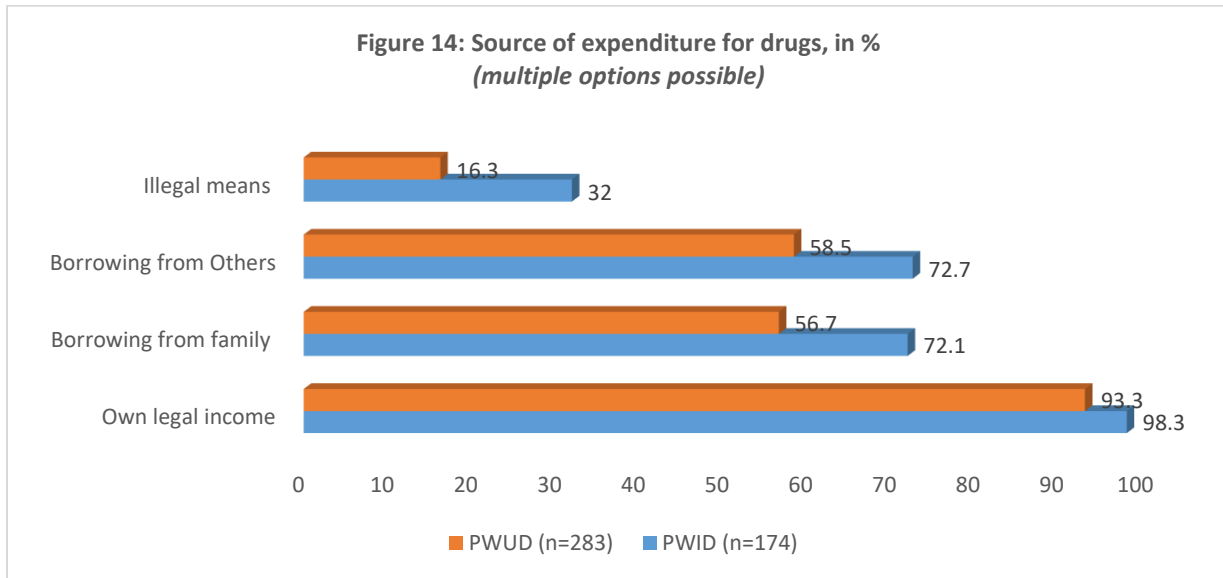
A variety of sources of procuring needles and syringes were reported. Almost everyone (93%) reported procuring them from pharmacy or peddlers, others procured them from their friends. In addition, 30% reported borrowing needles and syringes from their friends (with about half of them borrowing USED syringes and needles).

A majority of PWUD and PWID alike, procure their drugs through black market (i.e. peddlers). Some also reported ‘friends’ as the source of drugs while a small minority reported ‘pharmacy’.



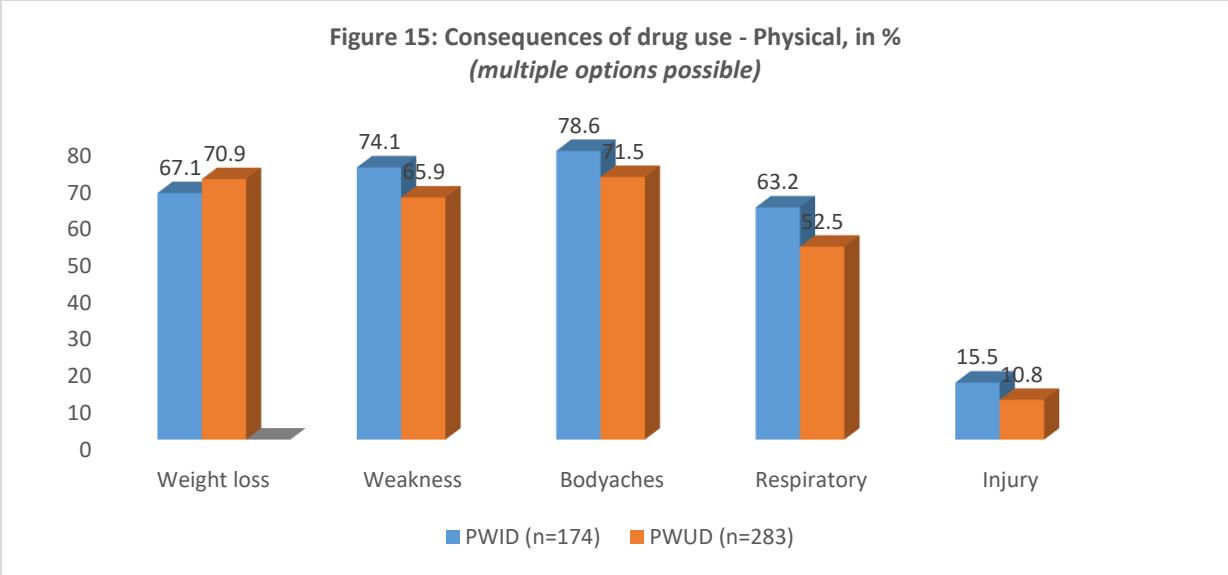
A variety of sources of money for expenditure on drugs were reported. Almost all the respondents spent their own legal earnings on drugs and a majority also reported that they borrowed money

from family / others. A sizable proportion also reported resorting to illegal means to fund their drug use.

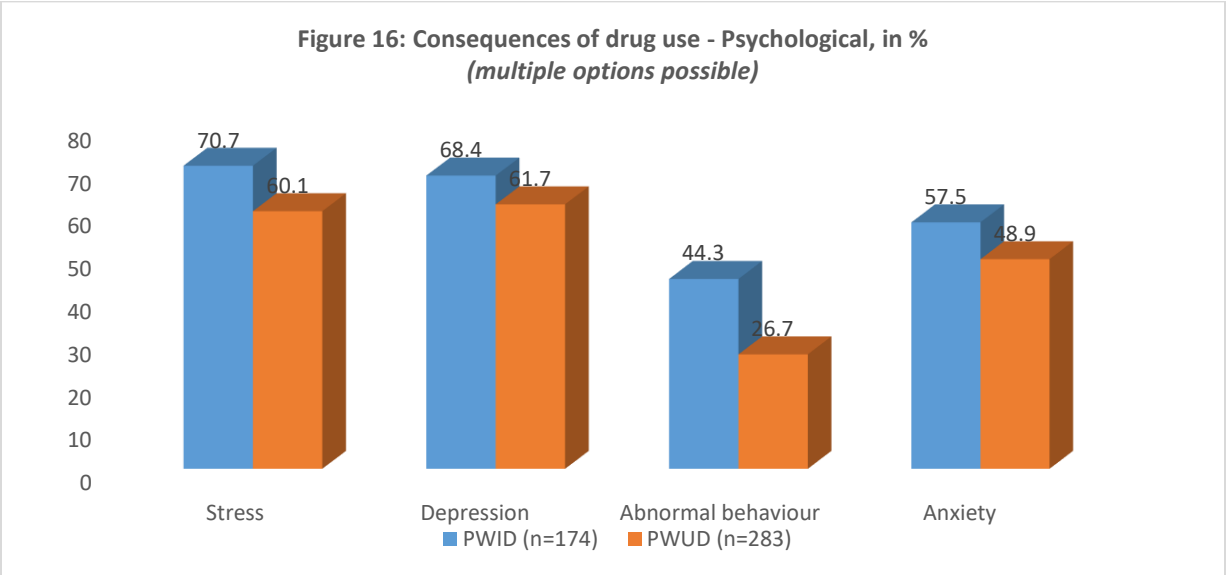


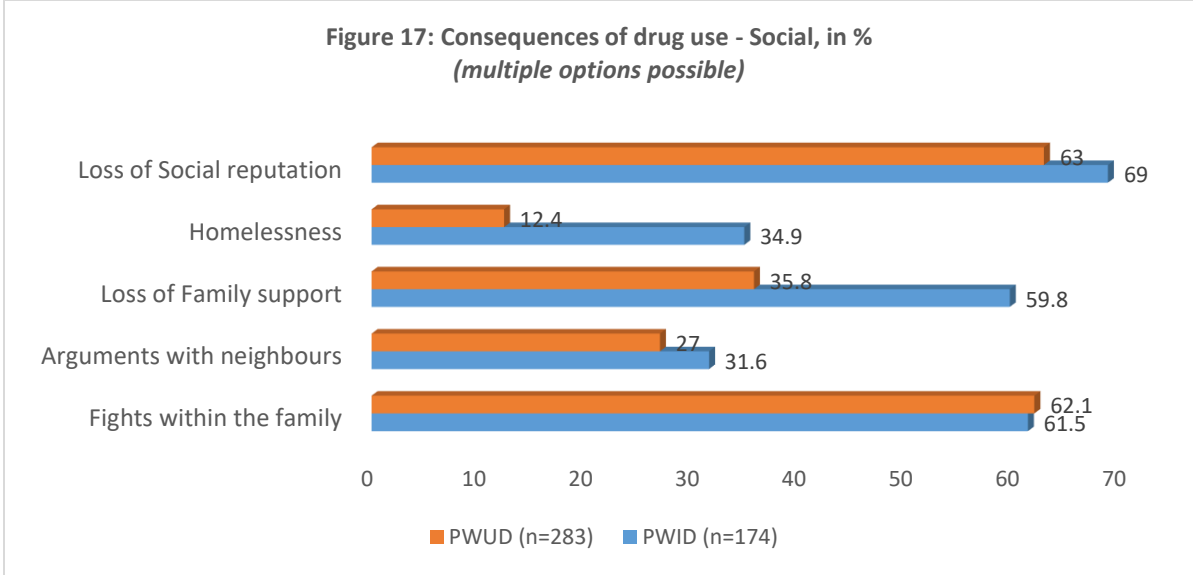
5.4. Consequences of drug use of respondents

A wide variety of possible consequences of drug use were enquired into. A majority of PWUD and PWID reported suffering from *physical* consequences of drug use like, *weakness* and *weight loss*. Around 12% of respondents in both the groups also reported experiencing *overdose* in their lives. However, among those who reported experiencing overdose, most common help they received was from their peers. Notably, only 3 PWID and 2 PWUD, who experienced overdose, received specific medical treatment for drug overdose.

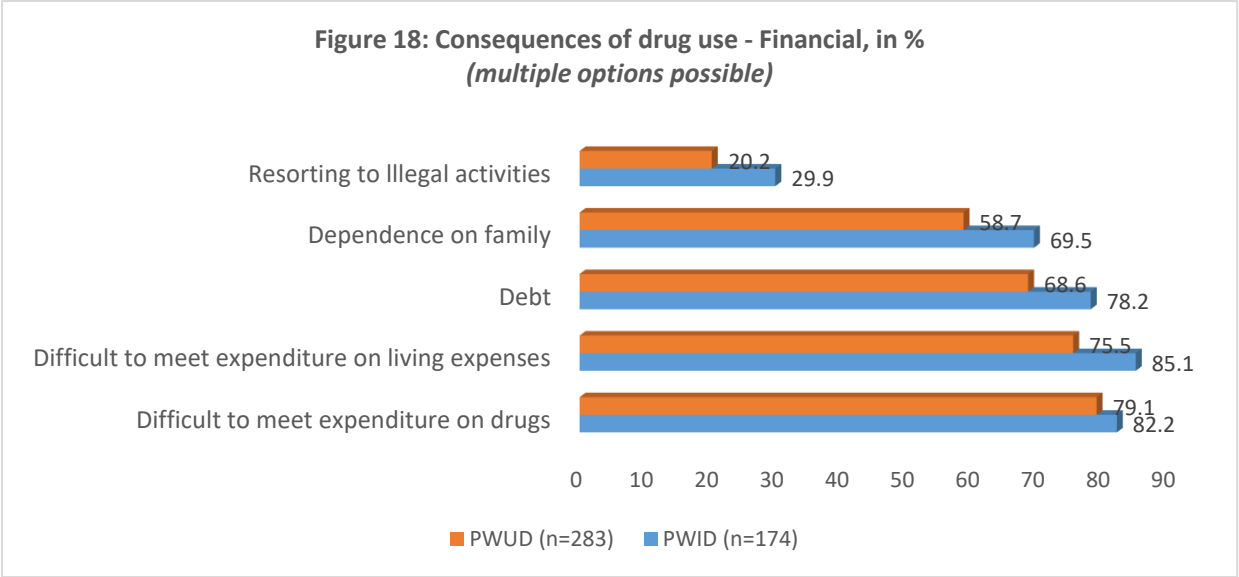


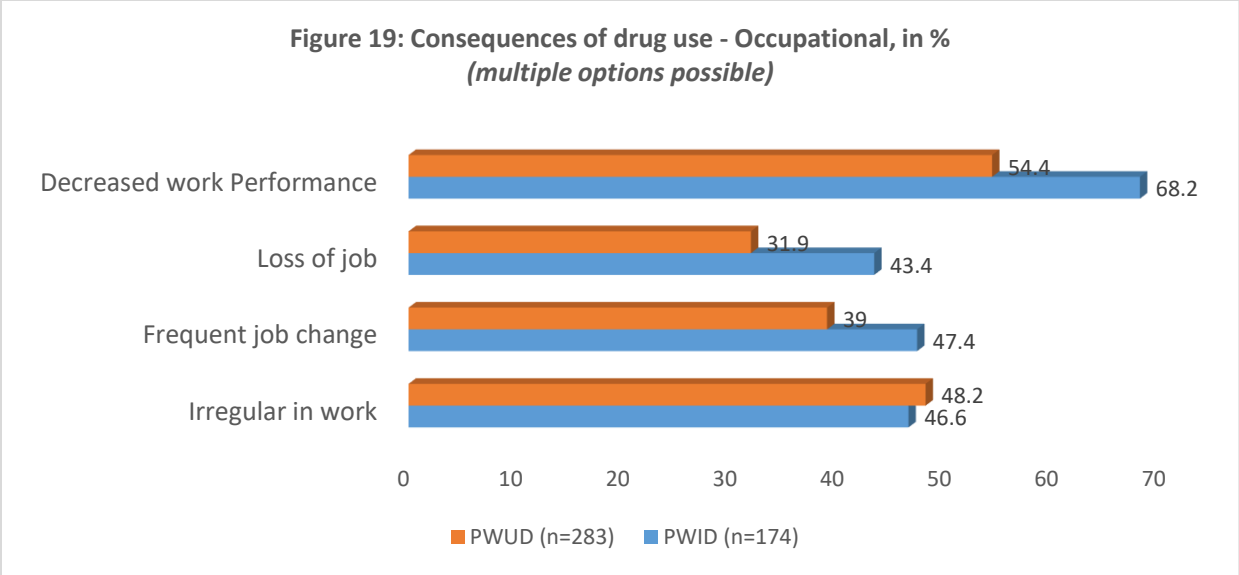
Similar to physical consequences a majority of respondents also reported suffering from psychological consequences of drug use. In addition a large majority also reported suffering from various *social* consequences of their drug use, indicating the stigma towards drug use and the discrimination faced by PWUD by their immediate families and communities.





In spite of majority of respondents reporting themselves to be employed, most of them also reported frequent problems with holding their jobs and poor work performance. This is also evident from the data on financial consequences where most respondents found it difficult to meet their expenses and were dependent on others for their living. A sizable minority also reported resorting to illegal activities.

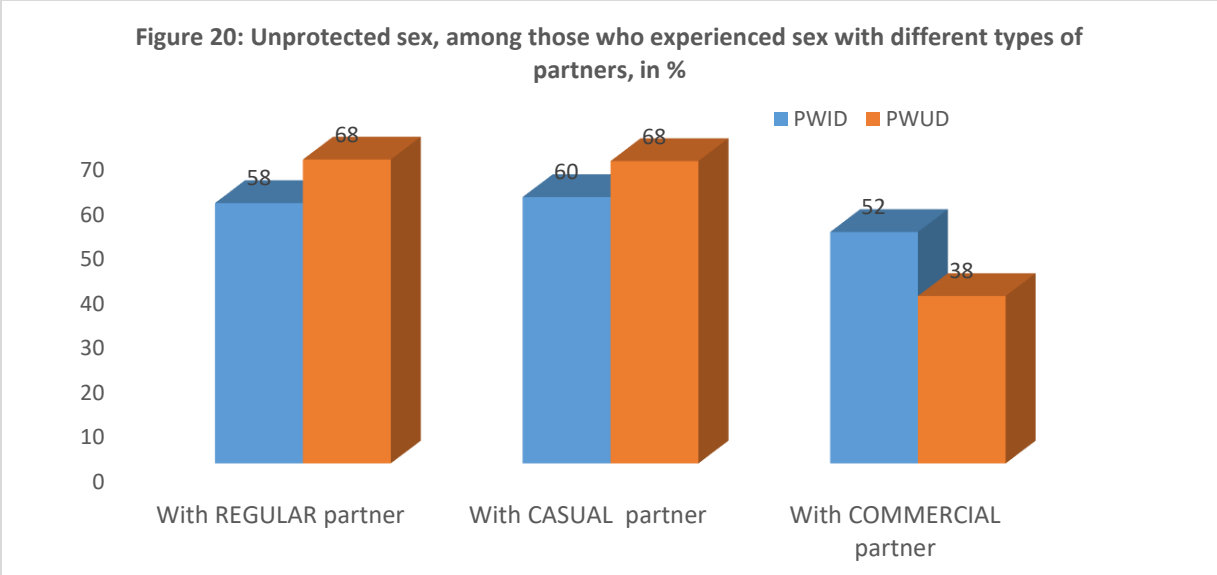




5.5. Sexual Practices of respondents

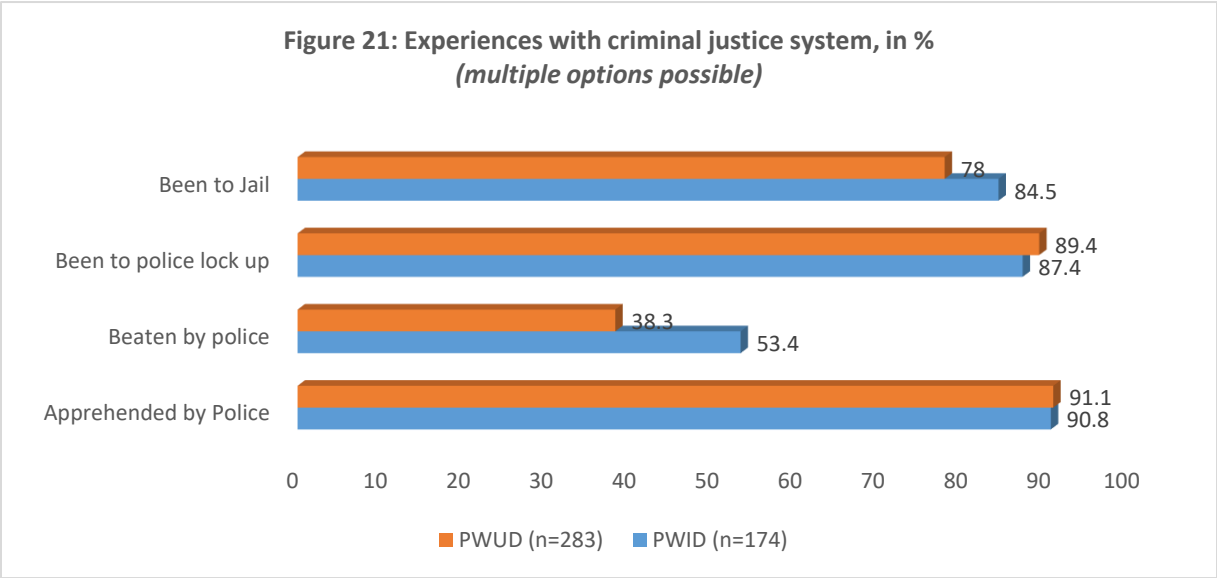
It was not surprising to find that most respondents (being in their 30s) were sexually experienced. However, besides their regular partners, a sizable proportion also reported having sex with casual and commercial sex partners. More concerning finding was that a significant number of respondents reported having unprotected sex with casual as well as commercial partners. The table below shows the number of respondents who reported having sex with different types of partners in the last 12 months while, the figure shows the proportion of respondents reporting unprotected sex with different types of partners. About 21% of PWID and 14% of PWUD also reported symptoms suggestive of sexually transmitted infections.

	PWID (n=174)		PWUD (n=283)	
	Frequency	Percent	Frequency	Percent
Ever had Sexual intercourse	162	93.6	251	89.0
In last 12 months, Sex with REGULAR partner	84	52.2	141	58.3
In last 12 months, Sex with CASUAL partner	62	43.1	93	38.1
In last 12 months, Sex with COMMERCIAL partner	27	19.4	56	24.9



5.6. Legal problems among respondents

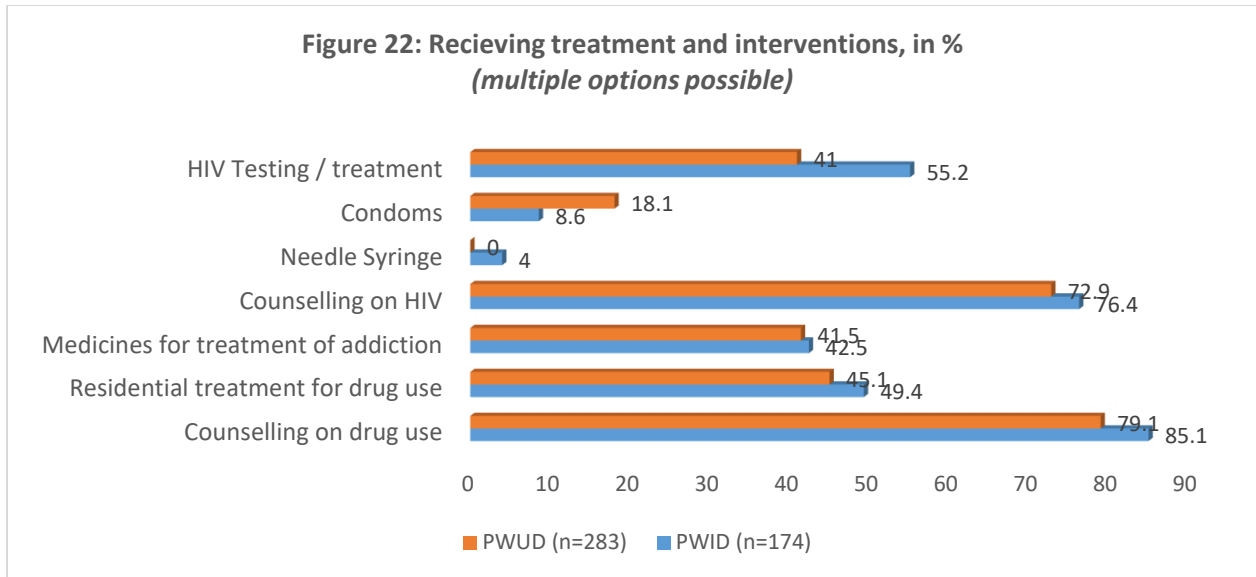
Among legal problems, almost everyone had an encounter with police and law enforcement. The figure below shows the proportion of PWUD and PWID who have experienced a brush with the law enforcement and criminal justice system.



5.7. Treatment seeking and access

Interestingly, while a large majority has had an encounter with the criminal justice system, a much smaller proportion has received treatment services. Surprisingly while a majority report having

received ‘counselling’ on drug use and HIV, despite being drug dependent less than half have received medical treatment for drug addiction. Access to HIV prevention interventions like needles / syringes and condoms is negligible.



5.8. Results of KII

In order to supplement the quantitative data collected directly from PWUD/PWID, a qualitative survey was conducted with certain categories of Key Informants from the same localities. These qualitative data were collected by the trained interviewers, using especially prepared Interview Guides, were translated and transcribed. This data is available from:

1. Spouses of PWUD/PWID (n=7)
2. PWUD / PWID themselves (n=7)
3. Law Enforcement Officials (n=8)
4. Service Providers (n=6)

Major insights obtained from the qualitative data (organized as per the major themes explored):

- **Drug use pattern by the PWUD/PWID:** Data from the key informants also appeared to support the data obtained through quantitative survey that most PWUD in Sri Lanka use a variety of substances but the predominant among them is Heroin. Most of them use heroin by inhalational route ‘Chinese method’ but injecting of heroin intake does exist. Most respondents – spouses, service providers, law enforcement personnel or PWUD themselves – reported being aware of existence of Injecting phenomena in Sri Lanka, including in their vicinity. It also appears that there is widespread realization about injecting method being more severe and harmful route of drug use, as compared to the smoking or Chinese method. Existence of risky behaviours among PWID of sharing injecting equipment was also reported.
- **Consequences of drug use:** Significant socio-occupational dysfunction is reported because of drug use in Sri Lanka. The family appears to be adversely affected. Most spouses reported that the PWUD are not able to take the household responsibilities. While domestic violence was not reported, the neglect of wife and children certainly came across as a consequence of drug use. Sexual relations between PWUD and their wives ranged from routine unprotected sex to no conjugal relationship. Instances of PWUD having extramarital affairs were also reported. In one instance it was reported that daughters of a PWUD had to turn to prostitution owing to the poor economic condition of the family. Occupational and economic consequences of drug use came across as prominent adverse

consequence of drug use. Indulgence in criminal activities by PWUD to support their drug use was also widely reported by the law enforcement officials as well as by the spouses.

- **Help for drug use problems:** It was evident that family members had tried getting help for PWUD for quitting drug use but were not successful in the absence of availability of effective treatment. Relapse of drug use, after quitting for some time, appears to be a norm. The treatment facilities appear to rely largely upon ‘counselling’ instead of evidence-based medical treatment. In the words of a doctor *”we don’t give medicine to heroin addicts. We give medicine to people who are addicted to alcohol and cigarettes. If we give medicine treatment to heroin consumers they get addicted to that”*. This statement highlights poor understating of addiction and its treatment. Most PWUD on the other hand, expressed the need for better and more effective treatment for people like them. In the words of a person who uses drugs, *“Programmes like "Mathata Thitha" are not practical.....It is good to provide tablets based treatment services in rehabilitation centres.”* Most service providers expressed the need to make their programs more effective by enhancing the numbers and quality of treatment services and providing training to the service providers.
- **Law enforcement response:** It appears to be a norm for PWUD to be arrested and put into jails. Most of the times the charge is of drug possession (for personal consumption), but committing petty crimes (for supporting their drug use) is also reported. However, it was evident from the Key Informant Interviews that putting PWUD in jail was not an effective intervention at all. All the PWUD interviewed who had been to jail, relapsed to using drugs again after their jail terms. In the words of a law enforcement official *“Most of them are jailed for possession and only few are convicted for selling drugs.”* Other officials reported that *“...most of the arrested people only have about 1 or 2 grams of heroin on them”* or *“major challenge is arresting drug dealers. Arresting drug consumers is not a challenge”*. Thus, it appears that the law enforcement response is heavily skewed towards arresting the people who USE drugs. However even the law enforcers seem to concede that this approach is not likely to be effective. As per a law enforcement officer, *“Some people are repeated offenders and have been jailed for the same offence more than a half a dozen times. But if they are still committing the same offence then something is wrong”*.

- **Stigma and Discrimination:** Significant amount of stigma and discrimination is faced by PWUD in Sri Lanka. This begins from the family and involves the neighborhood and the entire society. PWUD reported their own families “*treating them like thieves and not looking after them*”. Spouses of PWUD reported facing embarrassment in the neighborhood. Wife of a person who uses drugs reported that she “*doesn’t like to attend any wedding or funeral because of her husband’s drug use*”. Even children of PWUD were reported to face discrimination in the society on account of their father’s drug use.
- **Attitude towards harm reduction:** There appears to be a universal discomfort with the idea of harm reduction (with the concept of Needle Syringe programs as a proxy) in Sri Lanka. All the categories of respondents were aware of the existence of the phenomena of injecting drug use, as well as the practice of sharing needles and syringes (with the attendant risks) in Sri Lanka. Yet, almost everyone interviewed appeared to harbor the misconception that making needles and syringes available to PWID amounts to encouragement of drug use. As per a doctor, “*The target (of needle syringe programs) is harm reduction and preventing the spread of HIV. But if you supply them with equipment their drug consumption would only increase..... If the government is supplying injecting equipment it would give heroin legality. Why should we promote something illegal?*” One of the law enforcement officers expressed his misconception that “*Supplying injection would increase the number of drug users and also the number of crimes*”! Yet the need of such an intervention is underscored by the account of a Person who has used drugs through injections in the past, “*I also shared needles and syringes with my friends and we three friends used one same syringe. To legally supply injecting equipment to PWID is not possible in Sri Lanka because the government will not supply injecting equipment for free, we have to buy them. We cannot buy them from shops which are nearby*”. This clearly highlights the risk of continued practices of sharing injection equipment among PWID in Sri Lanka, owing to the poor access to needles and syringes. However, it is evident that any kind of program and policy reforms will need to tackle the widespread misconceptions about needle syringe programs in Sri Lanka.

6. DISCUSSION

In this cross-sectional rapid assessment study, the demographic profile, drug use practices, other risky behaviours and consequences of drug use were assessed among the PWUD and PWID. Since the methodology was based upon the principles of rapid assessment, estimating the size of PWUD / PWID population was not the focus. Instead the study aimed at a quick assessment of risks so as to guide developing and implementing evidence-informed interventions to reduce that risk. Besides quantitative data, key informant interviews provided useful qualitative information to enrich the information.

That heroin use is established in Sri Lanka has been a widely known phenomena for a long time. However, very few studies have explored the pattern of drug use in Sri Lanka in such details. This study provides important insights about pattern of drug use among PWUD and PWID in Sri Lanka (discussed later), on the basis of which pragmatic and evidence-informed intervention programs can be formulated.

Interventions to address drug use

Worldwide, approaches and interventions to address the drug problems can be loosely categorized into¹⁹:

- Supply Reduction
- Demand Reduction
- Harm Reduction

Supply reduction strategies refer to those which seek to control and disrupt the availability of drugs. For certain psychoactive substances (like tobacco and alcohol) this entails legal, yet strictly regulated availability. In case of certain other substances (such as those categorized as Narcotic or Psychotropic) the controls are much more stringent. In fact most countries, following the three UN Drug Conventions, have totally banned the use of these substances (accept for medical and scientific purpose). Drug supply control heavily depends upon deployment of drug law enforcement machinery for the purpose of intelligence gathering, interdiction, arrests and other similar activities involving the criminal justice system. The illegal nature of drugs has made them

¹⁹ International Narcotics Control Board (2014): *Integration of supply and demand reduction strategies: moving beyond a balanced approach*, INCB Annual Report 2014

very profitable commodity to trade and traffic in and hence, violence associated with drug trade is well-known phenomena. Some countries have been engaged in ‘war on drugs’ which takes a heavy economic toll on national resources, and consequently this War on Drugs has been declared as a failure²⁰.

However, the failure of this supply control oriented approach to address drug problems is increasingly being recognized the world over and UNODC has highlighted the unintended side effects of drug control framework²¹. Such approaches have led to ‘Policy displacement’ (using precious national resources for drug law enforcement at the cost of other human welfare activities); ‘Geographical displacement’ (stringent control in one area leads to emergence of problems in other areas) and ‘Substance displacement’ (control on one drug leads to increased usage of other drug). The most severe consequence however, is ‘marginalization of people who use drugs’. A criminal-justice led approach to drug problems, forces affected people away from the social mainstream, enhances stigma and makes it difficult to access health and welfare services. Indeed, research has proved that criminalization of drug use is a major factor behind HIV epidemic among PWID²².

Demand reduction approaches entail strategies for prevention of onset of drug use (usually among youth) and providing treatment for people affected by drug use disorders. Contrary to the supply reduction strategies – which are employed by law enforcement and criminal justice systems – the demand reduction strategies are better led by the health and welfare sectors. With the demand reduction approaches, the health and welfare of the society become the predominant concerns which are the cornerstones on which the UN Drug Conventions are based.²³ As far as treatment strategies for drug use disorders are concerned, they need to be evidence-based and should be sensitive towards the rights of affected populations.²⁴ Provision of accessible, affordable and effective treatment of drug dependence is regarded as an element of right to health under the international treaties and conventions.²⁵ Fortunately, medical science has made significant

²⁰ The Global Commission on Drug Policy (2011). *The War on Drugs*

²¹ UNODC (2008): *A Century Of International Drug Control*,

²² DeBeck, Kora et al. (2017). HIV and the criminalisation of drug use among people who inject drugs: a systematic review. *The Lancet HIV*, Volume 4, Issue 8, e357 - e374

²³ International Narcotics Control Board (2015) “*The health and welfare of mankind: challenges and opportunities for the international control of drugs*”. INCB Annual Report 2015

²⁴ UNODC and WHO (2008). *Principles of Drug Dependence Treatment*

²⁵ Csete J and R Pearshouse (2007). *Dependent on Rights: Assessing Treatment of Drug Dependence from a Human Rights Perspective*. Toronto: Canadian HIV/AIDS Legal Network.

progress in last few decades and effective treatment strategies for drug dependence are now available. For Opioid use disorders (such as heroin dependence), the strongest evidence base is for agonist maintenance treatment or ‘Opioid Substitution Treatment (OST).²⁶

Harm reduction is a relatively newer concept which simply refers to those ‘programs and policies which are aimed at reducing the harmful consequences of drug use without reducing drug use *per se*’.²⁷ Harm reduction approaches are regarded as more pragmatic and hence more effective in preventing the adverse consequences of drug use among individuals and societies. Most commonly, this philosophy has been employed to reduce the risk of HIV and other blood borne infections among PWID. A comprehensive package of interventions has been recommended which – in combination – has been proven to be effective in reducing HIV among PWID and the wider communities. Notably, this package of interventions includes (among others), Needle Syringe Programs, as well as OST.²⁸ Contrary to the misconceptions, provision of needles and syringes for PWID does NOT result in increased drug use. In fact, provision of such services has been found to adoption of safer behaviors and bringing PWID closer to the health care services.²⁹ Such strategies and intervention have been endorsed by various UN agencies³⁰ and are being widely employed globally, and very few progressive countries deny these services to their citizens.³¹

Summary of results of this study

Despite best attempts at data collection, the required sample size for the PWID could not be achieved. Low prevalence of Injecting Drug Use in Sri Lanka is well known. Among the published research from Sri Lanka cited earlier (in the Review of Literature), in the DAMS study, just about 1% of 2355 treatment seekers were PWID. Report of the Most At Risk populations (MARP) reported the number of PWID to be ranging between 218 and 423 on a given day. The largest of the published reports did provide data on 721 PWID.

²⁶ WHO (2009). *Guidelines for Psychosocially Assisted Pharmacological Treatment of Opioid Dependence*

²⁷ Single E. (1995). Defining harm reduction. *Drug Alcohol Rev.* 1995;14(3):287-90

²⁸ WHO, UNODC, UNAIDS (2012). *WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users.*

²⁹ WHO (2004). *Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among injecting drug users*

³⁰ United Nations General Assembly (2011): *Political Declaration on HIV/AIDS: Intensifying our Efforts to Eliminate HIV/AIDS* (General Assembly resolution 65/277)

³¹ Harm Reduction International (2016). *Global State of Harm Reduction Report - 2016*

However none of the earlier reports could describe the details of pattern of drug use and other behaviours of PWID. More importantly there has been no opportunity to compare the PWUD and PWID on various parameters. Thus, this study provides valuable data and insights in this regard.

Demographically, PWUD and PWID were very similar. Both groups were in their late 30s. Majority were married. However a larger proportion of PWID tended to report separation or divorce after their marriage. An overwhelmingly large proportion of PWID and PWUD are currently employed (largely as unskilled workers) and more than 90% were currently living with their families. This has important implications for interventions, since it shows that a large proportion of PWUD / PWID in Sri Lanka have a reasonable degree of social stability. This was also reflected in the responses during the KII.

A large majority of the respondents were using multiple substances. While almost everyone was a tobacco smoker, about 60% of PWUD and 45% of PWID reported current alcohol use as well. Almost two-thirds in both the groups were using cannabis too. A much smaller proportion reported using pharmaceutical sedatives (about one-fourth in both groups) or cocaine (just about 4% in both groups).

The predominant illicit drug used in Sri Lanka is heroin. Almost all PWUD reported using heroin (through Chinese method) currently. Interestingly among PWID too (where almost all inject heroin), a sizable proportion (about 54%), report using heroin through Chinese method! Thus, it is clear that it is the use of heroin which should be the focus of interventions; some people may use heroin through both – inhalational and injecting routes. Data on onset of drug use further validates this point; while average age of onset of heroin *smoking* is 19 years, it is 28 years for heroin *injecting*. In other words, people spend about 9 years as ‘PWUD’ before switching to the category of ‘PWID’. Similar trends in the pattern of drug use have been reported from India as well, where a majority of PWID began their drug use with the non-injecting route.³² Unfortunately, this window of 9 years is not being utilized to provide them appropriate interventions, to prevent their switch to the injecting route. Indeed, about 78% reported that during their first instance of injecting they were injected by someone else (who was a PWID). This indicates that PWUD remain at risk

³² Ambekar A (2012), *Association of Drug Use Pattern with vulnerability and service uptake among IDUs*, New Delhi: United Nations Office on Drugs and Crime (UNODC) Regional Office for South Asia, and National AIDS Control Organization

of transition to injecting route in Sri Lanka, in the absence of effective interventions. If PWID are provided appropriate interventions today, it would result in reduction of risk of other PWUD switching to the injecting route, under their influence.

A very important piece of data (not available from the available studies from Sri Lanka, so far) is the prevalence of drug use disorders among PWUD / PWID. A majority of PWUD (73%) and PWID (64%) have WHO ASSIST scores in the range suggesting that they are suffering from Opioid Dependence. Contrast this with Cannabis; while more than 90% PWUD / PWID use cannabis, only about 16% - 24% have ASSIST scores suggesting cannabis dependence. This further underscores the need of effective interventions for their opioid (heroin) dependence.

Indication of presence of heroin dependence also comes from the data on frequency of injecting. Majority of PWID inject daily, about 3-4 times a day. Such high frequency of injecting heroin is a feature of heroin dependence which, owing to painful withdrawal symptoms, compels the individual to keep injecting frequently.

A major issue which should be of concern for Sri Lanka, is the prevalence of risky injecting practices. About two-third of PWID reported sharing their injecting equipment in last one month. It was also alarming to note that as many as 68% of PWID had shared their injection equipment at the first instance of injecting (it may be recalled that 78% were given their first injection by another PWID). Non availability of injecting equipment (46%) as well as poor knowledge about safe injecting practices (39%) both contribute to such high prevalence of sharing practices among PWID in Sri Lanka. Indeed, this limited access to clean injecting equipment is a serious concern. While 93% of PWID procure their injection equipment from drug peddlers or pharmacies about 30% also borrow used syringes and needles from their friends.

Practices and behaviours of PWID not only put them and their peers at risk but the larger community as well. In the absence of access to safe-disposal systems, more than half of PWID dispose their used injecting equipment indiscriminately, putting others in the community at the risk of accidental infection. Unsafe injecting practices are also evident from the fact that as many as 43% of PWID reported having suffered from injection site abscess.

In the absence of access to effective interventions, and considering that majority of PWUD / PWID are heroin dependent (requiring frequent drug intake) it is not surprising that most of them not only

spend their own or their families' income on drugs, but many are also forced to borrow from others or even resort to illegal means. The similar finding was highlighted in the KIIs as well.

Since most PWUD / PWID are suffering from heroin dependence various other physical, social and financial consequences were reported. Majority of respondents reported suffering from social stigma, a finding, which was echoed in the KIIs too. It may be noted that despite an overwhelming majority being employed, a significant proportion experience occupational problems, which in-turn results in financial complications (which forces them to indulge in illegal activities).

While a majority of PWUD / PWID were sexually experienced, as many as one-fourth of PWUD and one-fifth of PWID also reported sex with commercial sex partners, in last 12 months. Almost half of those who reported sex with commercial partners, reported un-protected sex. This finding indicates the risk of transmission of HIV from one group (PWID) to another (sex workers) and from them onwards to the general population. Such phenomena have been reported at other places earlier. In the states of Manipur and Nagaland, India, HIV epidemic began among PWID, then spread among the female sex workers eventually resulting in a generalized epidemic.³³

Despite such existence of high-risk sexual behaviours and the finding that around 21% of PWID and 14% of PWUD had sexually transmitted infections, just about 9% of PWID and 18% of PWUD received condoms as an intervention from any source. Indeed, data on access to treatment and intervention for PWUD / PWID is quite alarming. While a majority in both the groups reported having received 'counseling' in the past 12 months, despite being drug dependent, less than half have received medical treatment for drug addiction. In contrast, a large majority reported having been subjected to criminal justice interventions; more than 90% had been apprehended by the police and a majority (84% PWID, 78% PWUD) had been to jail. However, as the KII data also shows, jail term does not appear to be an effective intervention at all. Research has demonstrated that imprisonment neither instils fear in people nor does it deter people from restarting drug use after release from prisons.³⁴

Among the limitation of the study, despite best attempts the teams working on the ground could not achieve the desired sample size of PWID. Still, the recruited sample of PWID is large enough

³³ Narain JP (2004). *AIDS in Asia: The Challenge Continues*. New Delhi: Sage Publications

³⁴ Bewley-Taylor, D., Hallam, C., & Allen, R. (2009). *The incarceration of drug offenders: An overview*. The Beckley Foundation Drug Policy Programme Report sixteen.

to provide important insights about pattern of drug use and resulting consequences. The study collected data only on behavioural parameters. Data on prevalence of HIV and other blood borne viral infections (which are known consequences of risky injecting practices) would have been useful. However, irrespective of their HIV status, PWID in Sri Lanka remain vulnerable on account of their injecting practices and this risk is further compounded by lack of access to effective interventions.

The key vulnerabilities and challenges in Sri Lanka – on the basis of the results of this study – have been listed in the box below.

KEY VULNERABILITIES AND CHALLENGES IN SRI LANKA

- Young, productive men engaged in drug use
- Majority suffering from heroin dependence and the serious adverse consequences of the same
- Majority of PWUD at risk of transition to injecting
- High prevalence of risky injecting practices among PWID
- Existence of risky sexual behaviors (with risk of onward transmission of HIV to other population groups)
- A heavy criminal justice system response (which appears ineffective)
- High levels of stigma and discrimination – exacerbating vulnerability
- Poor access to effective, evidence-based treatment for opioid dependence
- No access to specific harm – reduction intervention

7. CONCLUSION & RECOMMENDATION

It is evident that from this study there is a virtual time bomb ticking in Sri Lanka. PWID are certainly much less in number as compared to the PWUD. However, as the data indicates, PWUD (being heroin dependent) remain at risk of switching to the injecting route of drug intake. In addition a high proportion of PWID are forced to indulge in risky practices (both injecting and sexual) which puts them and their partners at risk of acquiring HIV infection. At many places in the world, explosive HIV epidemics among PWID have been documented, which eventually resulted in a generalized HIV epidemic. Sri Lanka is uniquely poised to avert such a situation.

Indeed, most of the HIV prevention interventions work best when they are implemented early in course of epidemic or in the low HIV prevalence settings (like Sri Lanka of today)³⁵. Thus the following set of recommendations must be urgently implemented:

Structural and Policy reforms

The overall policy response to drug problems in Sri Lanka appears to be heavily skewed towards supply control, law enforcement and criminal justice interventions. Availability of evidence-based interventions for treatment of opioid dependence as well for HIV prevention (i.e. harm reduction) is severely limited. In addition, there is considerable degree of stigma in the society which results in discrimination, further limiting the access of affected populations to the health and welfare services.

In view of this, it is important for Sri Lanka to formulate policies which supports provision of effective, evidence-based interventions. For this to occur, wider consultations would be necessary. Specifically the concerns that a policy which promotes harm reduction interventions, is against the UN Drug Conventions, will have to be addressed. It has been repeatedly examined and commented in many contexts across the globe that provision of effective and life-saving interventions like Opioid Substitution Treatment or Needle Syringe Programs does not violate any of the provisions of three UN Drug Conventions.³⁶⁻³⁷

An additional aspect of structural reforms would be to promote and encourage the participation of civil society – notably the affected communities – in decision making regarding policies and programmes. As yet there is hardly any visibility of networks of affected people in Sri Lanka. Globally, as well as in the neighborhood of Sri Lanka such groups are active (such as International Network of People Who Use Drugs (INPUD); Asian Network of People Who Use Drugs (ANPUD) and Indian Drug Users Forum (IDUF)). Such groups play a valuable role in advocating for evidence-informed policies and programs and serve as a bridge between the authorities and the

³⁵ WHO (2016). *Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations*.

³⁶ United Nations Economic and Social Council. (2002). The Commission on Narcotic Drugs, Resolution 45/1: *Human immunodeficiency virus/acquired immunodeficiency syndrome in the context of drug abuse*. United Nations, Office on Drugs and Crime

³⁷ International Narcotics Control Board (1987). *Report of the International Narcotics Control Board for 1987*

beneficiaries.³⁸ Even if the establishment of such civil society entities take some time, a beginning can be made at the level of service delivery points by obtaining the perspective of service beneficiaries and involving them in the decision making process.

Implementation and scale-up of intervention programs

Notably, Sri Lanka is one of the rarer countries in the world which has existence of phenomena of Injecting Drug Use including a high prevalence of risky injecting practices, yet there is no access of the vulnerable populations to the harm reduction interventions. Even the existing interventions have a poor coverage; WHO notes that less than 10% of drug dependent people in Sri Lanka have access to medical treatment which is oriented to abstinence.³⁹ The most evidence based treatment of Heroin dependence – OST – is simply non-existent in Sri Lanka.

Thus, it is recommended that evidence-based and cost-effective interventions like OST should be urgently instituted in Sri Lanka. Contrary to the perceptions, such interventions are not only low-cost and hence feasible in developing countries, but are highly cost-effective as well. Almost all the countries in South Asia (which are all low and middle income countries like Sri Lanka) have provisions of OST for treatment of heroin dependence.⁴⁰ It must be noted that OST is an intervention primarily addressing Opioid Dependence (irrespective of the route of opioid intake).

Thus, having such an intervention in place, would minimize the risk of injecting and sharing by PWID (thereby serving as a HIV prevention intervention). At the same time, provision of OST to heroin dependent PWUD would minimize the risk of transition to injecting as well and serve as an effective treatment of opioid dependence.

Both the medications used for OST – buprenorphine and methadone – have been included in the list of Essential Medicines by World Health Organization (WHO).⁴¹ These medications are

³⁸ Cai T (2017). How Civil Society can influence national drug policy. Available at <http://www.aidsalliance.org/blog/898-how-civil-society-can-influence-national-drug-policy>

³⁹ WHO Atlas. Country Profile: Sri Lanka. Available at http://www.who.int/substance_abuse/publications/atlas_report/profiles/sri_lanka.pdf

⁴⁰ Rao R, Agrawal A, Kishore K, Ambekar A (2013). “Delivery models of opioid agonist maintenance treatment in South Asia: A good beginning.” *Bulletin of the World Health Organisation*, Volume 91, Number 2

⁴¹ Kermode et al (2011). “Opioid substitution therapy in resource-poor settings.” *Bulletin of the World Health Organization*, Volume 89, Number 4

available in the neighboring countries and have been proven to be very effective treatment for opioid dependence.

Considering the prevalence of high risk injecting practices among PWID in Sri Lanka – and with the backdrop of poor access to safe injecting equipment - harm reduction programs are urgently required. These programmes must constitute provision of outreach and peer education for PWID, access to information and skills for safer injecting practices, access to the means for safer injecting (i.e. sterile injecting equipment and condoms), access to HIV testing and treatment as well as access to evidence based treatment of drug use disorders and other health conditions. *Keeping PWID safe, is essential to keep the general population safe in Sri Lanka.*

Such programs and interventions could begin initially at a smaller scale and then through utilizing the learning during the implementation, should be scaled-up to provide an optimum level of coverage.

Building capacities

In order to bring about such reforms and institute such initiatives as described above, it will be imperative to build capacities at all the levels – from the top levels of decision making to the level of implementation in the field. Fortunately, ample opportunities and avenues exist in the neighborhood of Sri Lanka. India, Bangladesh, Maldives and Nepal, all have well-established OST programs. India has one of the richest experiences of implanting harm reduction programs at a large scale (which includes all the elements of harm reduction – needle syringe program, OST, condom distribution, peer education, and access to health care services). Study tours and training programs should be organized for Key Personnel from the relevant departments and agencies of Sri Lanka (NDDCB, NSACP, Ministry of Health etc.) to India. Collaboration between academic institutes of both the countries can also be explored aimed at transfer of skills and technology. Eventually, in-house capacities will be developed within the country to provide technical expertise and inputs for initiation and scale-up of interventions.

Generating data and utilizing the evidence

One-off studies like this, are valuable sources of information to bring about changes in the policies and programmes. However, for sustaining the momentum and taking the initiatives forward, ongoing mechanism for data collection, monitoring and evaluation should be established. Looking

at the trends in data observed in this study, recommendation of larger studies conducted at more locations, with larger sample sizes and more robust methodology can be made. However, there are enough indications from the data presented here, which highlight the need of urgent reforms and institution of appropriate, policies and programs, which keep health, welfare and rights of affected communities in focus.

Specific recommendations on the basis of results of this study have been listed in the box below.

Recommendations for Sri Lanka

- **Legal and Policy reforms aimed at a conducive environment for provision of evidence-informed services for affected communities**
- **Promotion of involvement of civil society and affected communities in the decision-making process**
- **Advocacy for initiation of evidence-based treatment for drug dependence (Opioid Substitution Treatment)**
- **Advocacy for initiation of harm-reduction interventions (including access to clean injecting equipment) for PWID**
- **Organization of exposure visits and Study tours to neighbouring countries for exposure to the programs for drug dependence treatment and harm-reduction**
- **Promotion of collaboration between academic institutes of Sri Lanka and other countries**
- **Retaining the focus on generating and utilizing the evidence through ongoing research, monitoring and surveillance**