

**PROBLEM OF DRUG USE, RISKS AND
VULNERABILITIES TO HIV AND THE NEEDS AND
BARRIERS TO SERVICE ACCESS AMONG FEMALE
INJECTING DRUG USERS (FIDU) IN MANIPUR,
INDIA.**

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Problem of drug use, risks and vulnerabilities to HIV and the needs and barriers to service access among female injecting drug users (FIDU) in Manipur, India.

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

by

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Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis "**Problem of drug use, risks and vulnerabilities to HIV and the needs and barriers to service access among female injecting drug users (FIDU) in Manipur, India**" is my own work.



Signature:.....

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Acronyms

AFSPA	Armed Forces Special Power Act
AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Ante Natal Care
ART	Anti Retroviral Therapy
CBO	Community Based Organization
CHC	Community Health Centers
EHA	Emmanuel Hospital Organization
FIDU	Female Injecting Drug User
FHI	Family Health International
FSW	Female Sex Worker
GOI	Government of India
HIV	Human Immuno-Deficiency Virus
HR	Harm Reduction
HRG	High Risk Group
HSS	HIV Sentinel Surveillance
IBBA	Integrated Behavioral & Biological Assessment
ICTC	Integrated Counseling & Testing Center
IDU	Injecting Drug User
IEC	Information Education & Counseling
IHRA	International Harm Reduction Association
IMR	Infant Mortality Rate
INGO	International Non Governmental Organizations
MACS	Manipur AIDS Control Society
MENAHRA	Middle East & North African Harm Reduction Association
MOHFW	Ministry of Health & Family Welfare
MOSJE	Ministry of Social Justice & Empowerment
MOSW	Ministry of Social Welfare
MSM	Men who have sex with men
NACO	National AIDS Control Organization
NACP	National Aids Control Programme
NFHS	National Family Health Survey
NGO	Non Governmental Organization
NS	Needles & Syringes
NSEP	Needle & syringe exchange program
ORCHID	Organized Response for Comprehensive HIV interventions in the Districts of Nagaland & Manipur
OST	Opioid/Oral Substitution Therapy
PDI	Peer Driven Intervention
PLHIV	People living with HIV
PMTCT	Prevention of Mother to Child Transmission
PPTCT	Prevention of Parent to Child Transmission
PWID	People Who Inject Drug
PBS	Polling Booth Survey
RHS	Rural Health Statistics
SACS	State AIDS Control Society

SP	Spasmo Proxyvon
SRH	Sexual & Reproductive Health
STI	Sexually Transmitted Infection
TB	Tuberculosis
TI	Targeted Intervention
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Economic & Social Council
UNGASS	United Nations General Assembly
UNODC	United Nations Office on Drugs & Crime
WHO	World Health Organization

Glossary

HSS: The HSS is an annual systematic collection of HIV data to estimate HIV prevalence from specific sites based on target populations.

NFHS: The NFHS survey is a population-based household survey targeting women on SRH, HIV status, & risk behaviors, conducted approximately every five to six years.

IBBA: The IBBA is a survey that targets high risk groups who access HIV prevention services. It collects blood samples to determine HIV and STI status, and information on demographics, sexual history, and HIV knowledge, risk perceptions and testing history.

PBS: It is a group anonymous polling booth interview method where respondents respond to yes/no questions through color coded ballot boxes. It is suitable for asking sensitive behavioral questions.

ICTC: An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center

Drug use: Self-administration of a psychoactive substance.

Illicit drug: A psychoactive substance, the possession, production, sale or use of which is prohibited.

Illicit drug use: It refers to the use of illicit drugs and the illicit use of legal drugs.

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Abstract

Introduction: Female injecting drug users (FIDU) have seen an increasing trend in the recent years forming an important subgroup of high risk population in curtailing the epidemic of HIV. However, currently there are relatively few data on FIDU in the region, and in particular for Manipur. While FIDU still constitute a small minority of IDUs, they are of particular concern due to the heightened dual risk of drug use and sex work.

Methods: The study was done by reviewing the literature. To answer the relevant objectives, an analysis was made on the problem of drug use, risks and vulnerabilities to HIV and then explored the health needs and barriers to service access.

Results: The findings reveal high drug use problem among FIDUs Manipur. Young age, poverty, unemployment, family rejection, cultural norms, violence, disadvantaged societal environment including geographical proximity to drug trade route and peer pressure were found as vulnerable risk factors for increase drug use and high risk sexual activity. These factors coupled with limited access to health and drug treatment facilities; and lack of services meeting their unique needs including SRH, social and economic needs were found to be important barriers thereby increasing the risk of HIV among FIDUs.

Conclusion: While the study had several limitations including lack of data for making good comparisons within the country and the neighboring countries, it is evident that high risk activities with consequent poor health outcomes was highly prevalent among FIDUs and interventions require services beyond harm reduction (HR).

Key words: FIDU, HIV, Risks, Barriers, Services

Word Count: 12837

Introduction

I am a medical doctor by profession and I was working with Emmanuel Hospital Organization (EHA) before joining the ICHD course here in Amsterdam. The organization has hospital based as well as project based institutions in central, north and north eastern part of India. I worked for one of the HIV Targeted Intervention projects in Nagaland, India. Initially, for a brief stint, I worked as Medical Officer in the state Government. From there, I moved to EHA and worked for about 8 years until I moved to pursue this course. I started working as a clinical coordinator and worked closely with my national capacity building partner, Family Health International (FHI). Later, I became State manager of the project. Monitoring and supervision of partner Non Governmental Organizations (NGO), training and capacity building of health care workers were the main part of my role.

The topic which is "The problem of drug use, risks & vulnerabilities to HIV and the needs and barriers to service access among female injecting drug users (FIDU)¹ in Manipur, India" was chosen as a subject for my thesis for I have the opportunity to look more in depth about this less known and forgotten subgroup of population which the standard national programme do not include them as a unique separate group, but include them in the existing programme for the key populations which include the three core groups of injecting drug user (IDU), female sex worker (FSW) and men who have sex with men (MSM). This topic will give me better insight about FIDU in understanding how they are vulnerable and may likely contribute to the spread and also form an important subgroup in controlling the epidemic of Human Immunodeficiency Virus (HIV) infection. This group of population faces more stigma and discrimination because of their dual behavior of injecting and also majority engaging in sex work. They become more hidden as a result of attitude and norms of the society and try to separate them from the mainstream which causes adverse consequences in the prevention and control of HIV. Hence, they form an important group for public health intervention. The objective of this thesis will be explored and analyzed based on a conceptual framework under five main level components which will be described in the following part of the chapter.

¹ Although the term 'people who inject drugs (PWID)' is favored in international literature, the terms 'IDU' and 'FIDU' are in common use across India, including among the community who inject drugs, so for consistency this is mainly used.

Chapter1. Background information of Manipur

1.1. Manipur state profile

Geographical and historical background

Manipur is one of the Border States in the northeastern part of India having an international boundary of about 352 km long with Myanmar in the southeast. (Figure 1) It is bounded by Nagaland in the north, Assam in the west and Mizoram in the south. Geographically, the State of Manipur could be divided into two regions, viz. the hill and the valley. There are nine districts in the

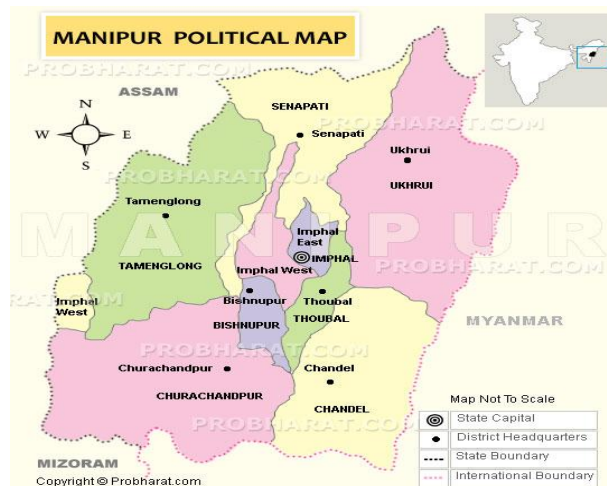


Figure 1: Manipur Political Map. (Source: Google Image)

state: Bishnupur, Tamenglong, Thoubal, Senapati, Churachandpur, Chandel, Imphal West, Imphal East and Ukhrul. These are further divided into 38 sub-districts, 33 towns and 2,391 villages. Manipur existed as a princely State in its early stage, and only on 15th October 1949, Manipur was merged into India and ended the era of the independent kingdom and achieved its statehood in the year 1972. (State Mission Authority Manipur n.d)

Population profile

The state of Manipur has a population of 2.57 million in 2011 with a growth percentage of 12.05%. The sex ratio in 2011 is 992 females per 1000 males. The details are provided in the appendix 1. (GOI Census 2011)

Ethnicity:

The Manipur valley is home to more than two-thirds of its population. The Meiteis (hindus-58%) followed by Meitei Pangans (muslims-7%) are the majority group in the valley and surrounded in the hills by Nagas, Kukis and few other tribal ethnic groups (34%), mostly Christians which was introduced by the British during the colonial era. (Planning department Manipur n.d.)

Literacy & Education

The literacy rate in Manipur is 79% as per 2011 population census. However, male literacy stands higher at 86.06% compared to female of 71.73%. (GOI census 2011) Gender disparity in education is also evident where 77% of girls' aged 6-17 years attend school compared with 81% of boys. In rural areas, 62% of boys compared with only 49% of girls age 15-17 attend school. 32% of men have completed 12 or more years of education as against 21% of women. (IIPS 2008) Despite the relatively high literacy rates, human resource development in the education sector is poor, with schools and colleges understaffed and consequently offering a sub-optimal quality of teaching. (Natale 2006)

Socioeconomic development

Although, Manipur show high literacy rate compared to the national average of 74.04%, (GOI census 2011) it is still one of the least developed states of India (Mahajan 2009) and rely heavily on the Government for development assistance. Agriculture is the principal source of income for about 70% of population. The state has poor industrial growth, transport networks and infrastructure development mainly due to isolation from the rest of India coupled with rough terrain and ongoing insurgencies. Few small scale industries are insufficient to stimulate economic growth and generate employment outside the public sector, where they face stiff competition for the limited positions and thus, suffering brain drain, the educated tend to seek employment in other regions of India. (Mannava et al. 2012)

Political situation

The political situation in the small, conflict-affected state of Manipur has been unstable since its formal integration with India. The state continues to have unresolved 'vertical' conflict with the Government of India that resorted to arm by non state actors for separation from India. Also, the state has a 'horizontal' conflict with the tribal people in the borderland areas. Hence, Manipur was declared a disturbed area in 1980 by the Indian government and a legal framework called the 'Armed Forces Special Powers Act, 1958' (AFSPA) was introduced that gives special power to army to facilitate its operations without prosecution. (Subramaniam 2009) Although, few changeover situations were seen in recent times, strikes, curfews and violence continue to be a common feature and combined with weak governance, insurgency and poor socioeconomic development reinforced each other that added HIV as an important public health problem in Manipur. (Mannava et al. 2012)

1.2. Health system of Manipur

Manipur has the highest concentration of health manpower per capita among the North-Eastern States. It has 2 tertiary Health Care Centres with attached Medical Colleges within the capital city Imphal; 7 District Hospitals and about 26 Private Hospitals and Nursing Homes. However, the District Hospitals & Community Health Centres (CHC) are faced with acute shortage of health workforce with an estimated 70% shortage of medical specialists at community health centres. (Appendix 2) The mushrooming of private hospitals and medical colleges are reasons for migration of specialists from the districts to the capital city. If doctor population ratio is accounted taking public and private sector, then the ratio seem to be sufficient at 1:1635 as against the national level of 1:1700. (Directorate of Health services 2015) However, the public sector is relatively weak and together with corruption and political unrest has combined to limit the public sector development. (Project ORCHID 2013)

In comparison to all India figures, Manipur perform relatively well in health indicators. As seen in the table 1, Infant mortality rates (IMR) were 10 per

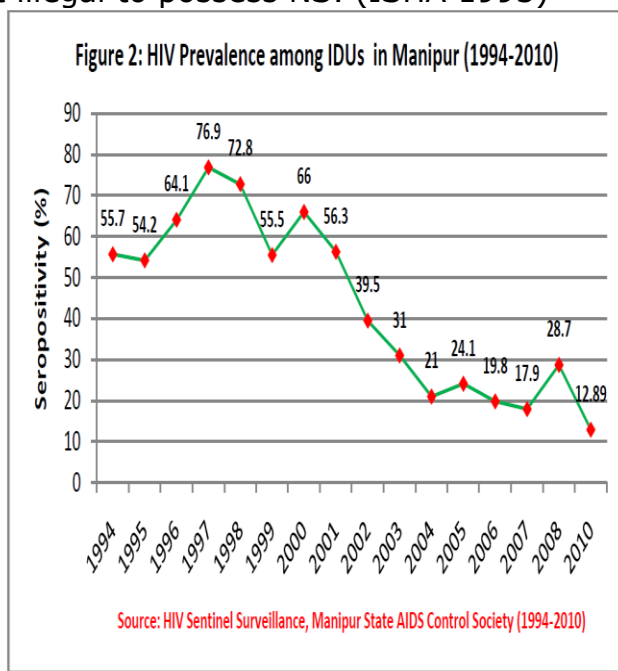
1,000 live births in 2012, which is much lower than the country-wide rate of 40 per 1,000 live births. (GOI 2012) Nevertheless, 1 in 34 children die in the first

Table 1: Health Indicators of Manipur (Source: GOI, Rural Health Statistics Bulletin, 2012)		
Indicator	Manipur	India
Crude Birth Rate (SRS 2013)	14.7	21.4
Crude Death Rate (SRS 2013)	4	7
Natural Growth Rate (SRS 2013)	10.6	14.4
Infant Mortality Rate (SRS 2013)	10	40
Maternal Mortality Ratio (SRS 2010-12)	Not surveyed	178
Total Fertility Rate (SRS 2012)	2.8 (NFHS 3)	2.4

year of life, about 1 in 24 die before reaching the age of five. (IIPS 2008) Indicator like the maternal mortality ratio is not disaggregated for northeastern states in the survey and is likely to be higher particularly in the rural areas. For example, in the third phase of the National Family Health Survey (NFHS), more than half of births in Manipur take place at homes than health facility which is common in rural areas. (IIPS 2008)

1.3. Overview of the History of IDU and FIDU in Manipur

In the 1990s, Manipur has seen a rapid spread of HIV (Figure 2) among IDUs probably due to sharing of infected needles and syringes (NS), limited availability of NS, lack of HIV awareness and the crackdown on drug users under Narcotic Drug and Psychotropic Substance (NDPS) Act of 1985 that made it illegal to possess NS. (ISHA 1993)



The first harm reduction (HR) interventions aiming to control the spread of HIV in IDUs were initiated in 1993 in Manipur. At the end of the decade, with intensive coverage of IDUs with HR and the introduction of Opioid substitution therapy (OST), (Project ORCHID 2012) the prevalence has shown a decreasing trend but increased in 2008 due to limited coverage and gap in provision of OST. Only, under the phase 3 of the National AIDS Control Programme (NACP), the Government formally took up and expanded its OST programme nation-wide leading to reverse trend in 2010 but still remains high at 12.89%. (MACS 2012a)

Historically, FIDUs in Manipur were almost thought to be non-existent because of cultural norms and other factors including the perception of drug use as men's activity or even if they exist, it was thought that they represent only a small fraction of the total IDU population. However, recent experiences show an ever increasing trend (Murthy 2012) and women make up an increasing proportion of people infected by the HIV. Women in India contribute to about 39% of the HIV burden in the country. (NACO 2012a)

FIDU definition:

Different definitions of IDU exist and may be useful depending upon the context on what is being investigated. (WHO, UNODC, UNAIDS 2009) The definition of FIDU for the purpose of this thesis is consistent with the definition of IDU by National AIDS Control Organization (NACO). Thus, FIDU refers to a female who has been injecting drugs any time in the last three months. (NACO 2007; Murthy 2012). This definition is considered because "current" injecting drug use is applied when planning Needle Syringe Exchange Programme (NSEP) by NACO.

Chapter 2: Problem statement, Objectives and Methodology.

2.1. Problem statement and Justification

A home to about 2.3 million people infected with HIV, India stands as the country with the third highest number of people living with HIV (PLHIV) in the world (after South Africa & Nigeria). (UNGASS 2010; UNAIDS 2014) With population of over one billion, even a small increase in infection rates makes it globally significant. (Avahan 2009)

An estimated 13.2 million people inject illicit group of drugs worldwide, of which about 78% IDUs live in developing countries. IDU estimation in India ranges from 177,000 to 180,000 (IHRA 2014; UNGASS 2010). From the total estimate² of IDUs, the north east region of Manipur and Nagaland shares the largest IDU population estimated to be more than 62,000. (Avahan 2009) Manipur is a small state which has a population of about 2.5 million (GOI census 2011) and it is estimated that about 2% of the adult population has injected drugs, most commonly heroin and spasmoproxyvon (SP)³. (Armstrong et al. 2011)

Injecting drug use by women is reported in many parts of the globe including India and the South-east Asian region (Figure 3) but there are limited statistics for FIDU. In the South-east Asian countries, at least 10-20% of the total IDU populations are women including China, Vietnam (Needle & Zhao 2010) and India⁴ as shown in table 2. The recent information in India shows rise in the number of FIDU and NACO estimates ranging from 10,000 to 33,000. (IHRN 2013)

Table 2: Women as percentage (%) of all IDU in selected South-east Asian countries.

Country	Women as an estimated % of all IDU (Needle & Zhao 2010)	Total estimated IDU population (IHRA 2014)	HIV prevalence among IDU (%) (IHRA 2014)
Cambodia	10%	1,300 (1,200–2,800)	24.8
China	20%	2,580,000	6.3
Indonesia	11%	74,326 (61,901– 88,320)	36.4
Malaysia	10%	170,000	18.9
Vietnam	18%	271,000 (100,000– 335,000)	10.3
India	18%	177,000–180,000	7.14

Although FIDUs constitute only a small proportion of the IDU population, (Strathdee et al. 2001) they sit at the intersection of high-risk groups (HRG) with multiple vulnerabilities of being an IDU, a woman and a sex worker that

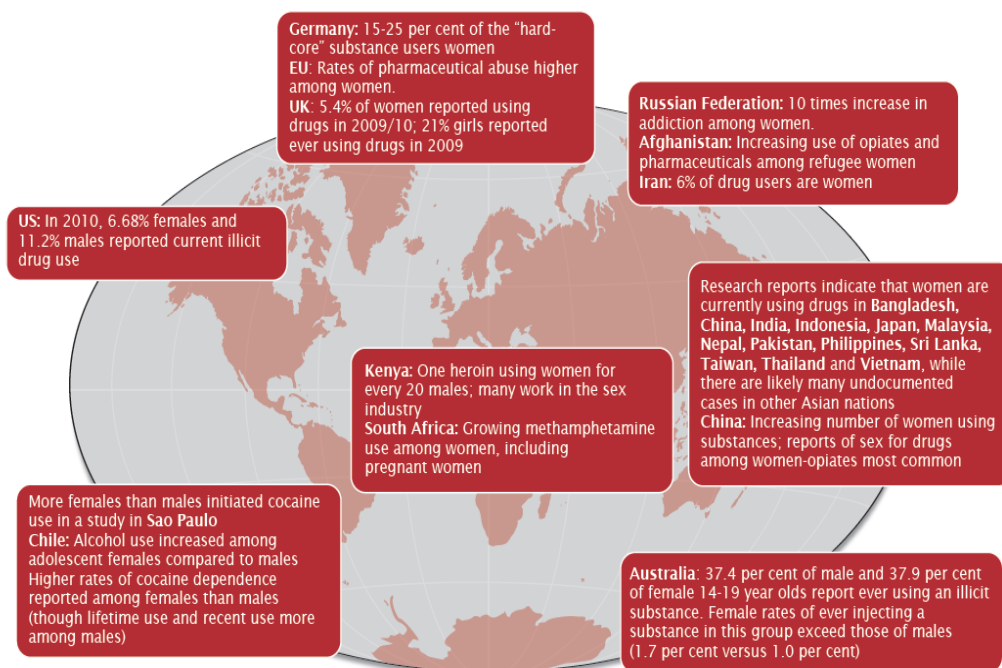
² The estimates for IDU may differ depending on its definition. For example, in phase 1 & 2 of NACP, IDUs are defined as those who have injected any time within the past 12 months (Aceijas et al. 2004 gives an estimate of about 500000-2000000 in India; whereas NACP 3 & 4 defines IDU as those injected in the last 3 months. The latest figure shows around 186000 IDUs -UNGASS country report 2010 and 177,000 to 180,000- IHRA 2014)

³ SP is an oral synthetic opioid analgesic containing dextropropoxyphene, dicyclomine hydrochloride and paracetamol but also used for injecting in the North east, India.

⁴ The percentage is calculated from the higher FIDU estimate of 33000 with the higher IDU denominator of 180000.

may contribute to the epidemic of HIV (El-Bassel et al. 2012) through unsafe injecting practices as well as through sexual risk taking.

Fig 3: Global information on female drug use (Source: Murthy 2012)



HIV prevalence was found to be high among IDUs in South-east Asian countries ranging from 6%-36%. (IHRA 2014) In India, injecting drug use is estimated to contribute to almost 2% of all new HIV infections, but prevail as the major route of HIV transmission in the northeastern states. (NACO 2015) The state of Manipur has the highest prevalence of HIV in the country mainly driven by injecting drug use, hence, the primary focus of HIV prevention intervention. The prevalence among IDUs in 2010-11 was 12.89% (India 7.14%) and adult HIV prevalence in 2011 was 1.22% (India 0.27%). (NACO 2012a) In a particular sentinel district of Churachandpur in Manipur, reported HIV prevalence as high 31% among IDUs (Manipur 29%) and 18% among FSWs (Manipur 11%) in 2008⁵. (MACS 2012a) Similarly, the integrated biological and behavioural assessment (IBBA) undertaken in 2006-07 and 2009-10 reported a considerable increase in HIV prevalence among IDUs in Churachandpur, from 32% in phase I to 40% in phase II. (ICMR & FHI 2011) HIV sentinel surveillance (HSS) does not disaggregate data by sex among IDUs. However, based on the above information, if a high proportion of FIDUs engage in sex work, it is probable that HIV prevalence among FIDU to be even higher than male IDUs and FSWs.

⁵ As there was no specific country latest data/information for FIDU, old data reports from HSS 2008 and IBBA 2006-07 and 2009-10 were used for comparison and to understand the prevalence of IDU & FSW and the likely role that FIDU play between the two risk groups.

Justification

The trends are changing, as the use of various psychoactive substances is becoming more evident among women. (Murthy 2008) However, there are no proper studies documenting the magnitude and problem of injecting drug use among women.

The prevalence, patterns of drug use and other health promotion services are less known among females in most countries of the world. Drug use in women may vary from those of men as they are believed to be more stigmatized, face more barriers and less accepted than men in the society and treatment settings. (UNODC 2004)

Drug use also can have a negative impact on FIDUs as drug users or sex partners or sex worker which poses challenges in creating an enabling environment thereby increasing their vulnerability to HIV, both from unsafe injecting and risky sexual practices, and thus, has a potential to intensify HIV transmission in the community. (Avahan 2009).

Furthermore, HIV prevention services and most available treatment services for FIDUs are not gender responsive⁶ or design for their needs. (El-Bassel et al. 2010) Under NACP, HIV prevention amongst IDUs is executed through targeted intervention (TI) programmes for male IDUs & FSWs and FIDUs face many barriers under the current policies to access the service centres. (Murthy 2012).

On the basis of these rationales, the need arises and this thesis seeks to explore the problems of drug use, risk and vulnerability to HIV and identify the health needs and barriers to service access among FIDU and review the current mechanisms of service delivery and recommend for a holistic intervention programme that can respond to the unique needs of FIDUs.

2.2. General Objective

To explore the problem of drug use, risks and vulnerabilities to HIV and identify the needs and barriers to service access of FIDUs in order to provide recommendations to strengthen existing programmes in Manipur, India.

Specific Objectives

- Explore the problem of drug use among FIDU.
- Analyse various risks and vulnerability factors to HIV among FIDUs.
- Identify the health care needs and barriers to service access among FIDU.
- Review program responses and the best practices of other countries in implementing FIDU programme.

⁶ "Gender-responsive programmes are those that consider the needs of women in all aspects of their design and delivery, including location, staffing, programme development, programme content and programme materials." (UNODC 2004)

- Formulate recommendations to Government, NACO, SACS and NGOs for further strengthening the existing programs and conduct research to bring about policy changes to improve health service & referral linkages for FIDUs.

2.3. Methodology

The type of the study for the purpose of this thesis is through literature review. Analysis of the literature was done by searching the global, regional and local level articles and documents. Initially, peer reviewed journals on FIDU was searched through PubMed/medline, Google scholar and the VU library. Search was made with broad keywords initially which was narrowed to obtain finer related hits. Also, identified selected journals from bibliographies on related topics were directly searched through the internet. Secondly, grey literature search was done through the Google search engine. Thirdly, search on National and International websites as shown below in table 3 was done to obtain publications and reports related to the topic. Finally, an analysis of the national and local research and surveys like IBBA, NFHS, and Polling Booth Survey (PBS) was done and reviewed to answer relevant objectives of the thesis.

Search Strategy keywords:

The criteria for choosing the keywords was done based on the specific objectives in combination with FIDU or IDU as listed in the table 3. The language chosen is English and period was selected starting from 2000 except for the conceptual model (1998).

Type	Source	Objective 1	Objective 2	Objective 3	Objective 4
Peer Reviewed Journals	Google Scholar	Determinants, Drug use, problem, prevalence	Risk, Vulnerability, culture, norms, socio economic status, age, sex, education	Needs, Barriers, Treatment, health care, Access, community support.	Global, National, International, Best practice.
	Pubmed				
	VU Library				
Grey Literatures & Institutional websites	UNAIDS	Determinants, Drug use, prevalence, estimates	Risk, vulnerability, culture, norms, opportunities	Needs, Barriers, surveillance, survey, support, HR.	Global, National, Policy, legislation, Strategy Response, HR, Best practices, Funding.
	UNODC				
	UNESCO				
	NACO				
	WHO				
	MACS				
NGO					
Some general Key words used across: FIDU, WWID, IDU, HIV, Manipur, India, South East Asia, Asia					
Direct search from bibliographies of related article from the article used.					

Conceptual Framework

Alegria et al's (1998) conceptual model which is based on combination of theories including stress-vulnerability model, family interactional model and the social learning theory is used to analyse the injecting drug use in FIDU, their problem behaviour as a result of drug use, service needs and access barriers that contribute in increasing risk and vulnerability to HIV. The stress-vulnerability model states a clear relationship among stress⁷ exposure and increased likelihood of drug use and problem behaviour. Family Interaction model explains the presence of vulnerabilities, such as childhood victimization, disgraced parents and psychological distress, and conceptualized as an important factor that, together with life and role strains, is associated with drug use. Also, how we learn habits from direct experience from family, friends and society is a common way e.g. coping stress with drug use, history of family drug use etc and are therefore important for recovery efforts of drug use. The model as shown below in table 4 has five level components. Alegria (1998) argues that most conceptual models that guide research on drug abuse and other problem behaviour have been largely developed for men and assumes that the same constructs explain both male and female behaviour. However, research efforts demonstrate many differences and cannot be explained by a single theory. The model below is considered for this work as it uses combination of theories to understand the behaviour problem, explain drug use and barriers of women in the context of HIV. Also, the framework has been validated and cited by other authors in their work.

Table 4: Conceptual Framework for FIDU (Source: Alegria et al. 1998)				
Individual/Personal factors	Interpersonal factors	Neighbourhood factors	Institutional factors	Outcome
Socio-demographics	Family Interaction	Neighbourhood characteristics	Institutional Resources	Problem behavior
Biologic/Genetic	Friend Integration	Neighbourhood norms	Incarceration experience	Health
Psycho-emotional		Neighbourhood Opportunities	Drug Treatment barriers/Participation	Functional Impairment -Productivity
Experiential		Neighbourhood Risks		
Cultural				

⁷ Stress in the model includes circumstances such as life stresses (e.g., divorce, death of spouse) as well as role strains (e.g., burdens in parental, occupational, and housekeeping responsibilities).

Chapter 3: Analysis of the different levels of determinants

3.1. Introduction on the process of using the conceptual framework

This framework will be used by reviewing the various factors in the different levels of the model from individual factor towards the Institutional and the outcome factors. Based on the objectives of the study, each factor of the conceptual framework will be categorized into headings: "Individual", "Interpersonal" "Neighbourhood", "Institutional" and "Outcomes", and then analyse for their respective emerging sub-themes. The specific objectives are analysed and described across the headings. However, the problem of drug use, risk and vulnerable factors are mostly explained by the Individual, Interpersonal and the Neighbourhood factors; whereas, the needs and barriers to service access are largely analysed in the Institutional factors. Although, the framework does not include Government policies, strategies and responses; a separate chapter on national existing policies and strategies on injecting drug use will be considered to understand national government support to drug programmes. In addition in this chapter, the best practices of other countries will be identified and try to adapt those practices for policy recommendations at the national and state level.

3.2. Analysis of the determinants of Individual/Personal factors

3.2.1. Socio-demographics

Age

In a mixed method study with 200 FIDUs in Manipur, Oinam (2008) found a mean age of 27 years and at least 65% of the women falling below 29 years and almost all below 35 years of age (Table 5) which correlates with the study findings in Nepal where about 88% of women were below the age of 29 years. (UNODC 2011) Similar finding was found by Tuan et al. (2004) in a cross-sectional survey in Vietnam among 51 FIDUs with the mean age of 25.4 years. In yet another small qualitative study, (n=39) about women using drugs in Manipur by Kermode et al. (2013) found more than 60% of women fall below the age of 35. All these suggest that FIDUs are quite young and likely to start injecting at a relatively early age. This is a period where they are sexually active and therefore highly vulnerable to HIV and other Sexually Transmitted Infections (STI).

	Manipur, N=200 (Oinam 2008)	Manipur, N=39 (Kermode 2013)	Nepal, N=393 (UNODC 2011)
Mean age (range)	27 yrs	31 yrs (20–45)	20 yrs (18-55)
<25 yrs	26.5%	26%	88%
25–29 yrs	40%	15%	
30–34 yrs	33.5%	21%	
35–39 yrs	0%	33%	12%
≥40 yrs	0%	5%	

Education

Among the FIDUs in Manipur, only about 6% have graduated, 17.5% have completed secondary school level while the rest (73.5%) have not completed their education and of that 12% had never attended school. (Oinam 2008) This finding is comparable to FIDUs in Nepal where 17% did not attend school and 67% not completed schooling and only 4% completed the intermediate level of education. (UNODC 2011) Tuan et al. (2004) also found 21.6% of FIDU were illiterate and about 43.1% had attended 1-5 years of schooling. Similar finding was reported by Kermode et al. (2013) where 21% had graduated and 79% had never done or not completed schooling. The findings indicate that most of the FIDUs are of low educational background and may not be aware of their risk to HIV.

Marital status

Women drug users seems more disadvantaged within the family in Manipur as the proportion of widowed and divorced women was found high (64%) considering the relatively young age. (Kermode et al. 2013) Similarly, the study by Oinam (2008) among FIDUs in Manipur found 46% either divorced or widowed. This highlights the vulnerability of these women due to mental and psychological trauma they face from family instability.

Income status & Family Composition

Women's decisions are shaped by their living situations, relationships, and economic positions. (Pinkham et al. 2012) In general, women drug users have fewer resources (education, employment, income). (UNODC 2011) Most FIDUs are alienated from their families or homeless, so obtaining food and shelter is a daily struggle. Children are often removed from their care because they are viewed as unfit parents. (Project ORCHID 2013) Walsh (2011) in Cambodia, found 77.7% of the women interviewed were without a permanent shelter. Also, in Nepal, nearly 75% of respondents do not have a specific occupation and 53.5% were unemployed. (UNODC 2011) It appears from the findings that FIDUs are poor in terms of income, employment and shelter.

3.2.2. Genetic/Biologic

Dependence on illicit drugs been investigated and studied suggests drug abuse is under significant genetic influence and heritability estimates ranged from 45% to 79%. (Dick & Agrawal 2008) This estimates correlates with a cross-sectional study in Sikkim, India by Pandey (2015) among 241 alcohol and substance users found 52.3% of parents, siblings (31.1%) and 79.7 % of friends had history of alcohol use and 59% of the friends were using drugs. Thus, family history of alcohol and drug use was found to be important risk factor.

Experimental study by Robbins et al. (1999) demonstrates that female cocaine dependent patients show strong reactivity when exposed to cocaine stimulation in a laboratory setting ($X^2 = 4.15$, $P < 0.05$) and that females (90%) were more

likely than males (69%) to increased craving. Similarly, Volkow et al. (2011) showed increase craving in females, suggesting that there may be sex differences in response to stimulation that could affect subsequent drug use and relapse. This highlights the importance of tailored interventions for males and females who use drugs.

3.2.3. Psycho-emotional

The psycho-emotional component that includes distress dimensions and the feelings of powerlessness or hopelessness has been posited as precursors to drug use by women. (Alegria et al. 1998) There are many sources of personal distress for FIDUs to experience psychological problems such as anxiety, depression or suicidal thoughts as society, family, partners, and pressure group members frequently subject them to stigma, harassment, sexual abuse and violence. (Project ORCHID 2013) FIDUs also perceive themselves as deviating further from societal expectations particularly those FIDU engaging in sex work and having children as they cannot care for them properly. (UNODC 2004) Similar findings were observed in the study by Kermode et al. (2012) of loss of hope as problem for women. The findings also relate to FIDUs' lack of readiness or eagerness for drug treatment in the presence of these issues.

"If we look at their mental status, their motivation towards life and hope is very low. They are living for the sake of living. Once they die, then it is over, this is what they think. They don't have any hope for the future. Being women, they also want to be a part of family where there are children, a husband and all..... They don't have any hope of living a normal life. I think it might be the reason why they don't want to go for health treatment or anything else. They think that even if they were free from drugs, they don't have any place to go for a living."
(KI3 NGO Project Manager, Manipur) Source: Kermode et al. 2012

3.2.4. Experiential

The negative life circumstances, stressors, traumas including childhood sexual abuse may increase the likelihood of drug use or associated problem behaviour. (Alegria et al. 1998) In Manipur, FIDUs frequently find themselves in crisis situations as described above that they are unable to manage on their own. (Project ORCHID 2013) Women usually experience physical or sexual violence from their intimate partners, police, law enforcement agencies and experience high rates of incarceration indicating a direct correlation between violence and increased HIV vulnerability. Study show that women who have experienced violence are less likely to use condoms, more likely to share needles and have multiple sexual partners. (Azim et al. 2014) A history of violent assault can increase the risk of substance use and post-traumatic stress disorder or other mental health problems. (UNODC 2004; Azim et al. 2014) Therefore, they cope with the sexual abuse experience and mental problems by taking drugs leading in participation of HIV risk behaviour such as sexual risk taking and injecting. (Roberts et al. 2010)

3.2.5. Culture

FIDUs hold a largely subordinate position in the society as well as in the family (UNODC 2011) and women's substance use are more stigmatized and less acknowledged than men's. Cultural taboos and stigma mean they are often not acknowledged by themselves, their families or people who could support them. More societal condemnations are faced if they engage into sex work or are pregnant or parenting that result in delay to seeking services with serious implications for both mother and the baby. In some cultures it is very difficult for women to leave their homes and family responsibilities to seek treatment because of their primary responsibilities as mother, for childcare and other household responsibilities. (UNODC 2004) Similar cultural practice was found in Manipur where FIDU also face extreme stigma and social exclusion for being a woman who use drugs and for being FSWs, giving them very little prospect for social reintegration. (Project ORCHID 2013)

These cultural characteristics, experiences of subordination, discrimination and acculturative stress play a potential role in influencing drug use among FIDU. Therefore, studies have demonstrated the importance of adapting effective interventions that take into account differences in culture, life situation and social roles of women. (UNODC 2004)

3.3. Analysis of Interpersonal factors

3.3.1. Family Interaction

Women learn drug use and problem behaviours through the same mechanisms of social influence through which they learn conventional behaviours. For example, the influence of a partner's drug use is hypothesized as a powerful risk factor for drug use and problem behaviour. (Alegria et al. 1998) In a study to assess participants' attributions about addiction by Dillon et al. (2011) found addiction is caused, in part, by what one learns from the behaviour of one's family and friends, and also by growing up in a troubled family.

The study by Oinam (2008) asked respondents to describe their interaction with parents, their perceptions of parental attitudes, and communication with parents on various topics. Only 29% reported close interaction with family members, serious conflict with family members (68%), parents did not understand their needs (61%), not spending enough time with them (64%) and 54% had been beaten by one or both parents while growing up. Almost all respondents perceived that their parents would disapprove of drug use and 42% felt that their parents would disapprove of them having male friends.

Similar finding was found by Kermode et al. (2012) in Manipur including family rejection or exclusion and this was described as a major source of guilt and pain. These findings was supported by Gu et al. (2010), where in China over half (55.8 to 75.4%) received no or only little social support from their families leading to depressive symptoms (75.3% to 92.4%). Family abandonment preceded drug use for some of the women, and was therefore perceived to be a

cause of it, while for other women; family abandonment was a direct consequence of their drug use. (Kermode et al. 2012)

"Due to our No. 4 [heroin] use we have guilty feelings and are scared of our family. Even if we go home our family doesn't want us to be at home, due to our drug habit." (FGD 4 Churachandpur, Manipur). Source: Kermode et al. 2012

Studies have shown that FIDUs who perceived the availability of social support showed a reduction in negative feelings and an increase in coping behaviours. (Alegria et al. 1998)

3.3.2. Friend/partner Integration

The male partners and the small circle of injecting friends are extremely important to FIDU in hiding from broader society. FIDUs are not comfortable with non-drug users who frequently avoid them, but belief and restrict to their small group of injecting users. These friendship dynamics is a reason for increasing drug use among FIDUs as Spooner et al. (2010) found this social group not only constitute the social world for FIDUs but were also an important source for obtaining drugs and sharing was a way to bond with one's partner and friends. This finding is supported by a qualitative study among pregnant women who use drugs in Phnom Penh, Cambodia where 55.6% claimed their reasons for initiation of drug use was through friends and about 16.6% attributed to their partners. (Walsh 2011)

3.4. Analysis of the determinants Neighbourhood factors

The neighbourhood factors include the norms, opportunities, values and risk trends to which a woman responds in the environment. (Alegria et al. 1998)

In most countries, drug use is considered as deviant behaviour and therefore stigmatized (UNODC 2011) and FIDU are faced with high social marginalization. (Roberts 2010) Disadvantaged neighbourhoods can be considered loci of stress proliferation and studies have found that chronic social and environmental

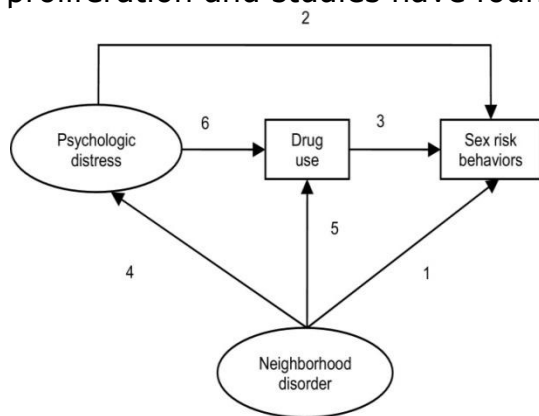


Figure 4: Hypothesized structural model for men and women. (Source: Latkin et al. 2007)

stressors are associated with psychosomatic signs, symptoms of helplessness and higher rates of drug use and early sexual initiation. (Latkin et al. 2007) As shown in the Figure 4, Latkin (2007) hypothesized that perceived neighbourhood disorder is linked to psychologic distress, drug use and sexual risk behaviour (direct associations). Drug use leads to sexual risk behaviour, and psychologic distress leads to drug use, which in turn had an effect on sexual risk behaviour (indirect associations).

3.4.1. Neighbourhood norms

Neighbourhood norms may be tolerant or intolerant to drug use and sex work, or promote or penalize drug use and high-risk sexual activity. (Alegria et al. 1998)

Oinam (2008) found among FIDUs in Manipur a relatively conservative attitude about the acceptability of drug use or pre/extra marital sex. For example, a large proportion of the society did not approve of their behaviour where about 98% of respondents believed that society looks down on FIDUs, 50% were of the view that men would not respect women who engages in sexual relations and about 75% felt that a woman should be a virgin at the time of marriage. FIDUs in Manipur are considered a deviant in the society (Project ORCHID 2013) and Alegria et al. (1998) hypothesized a strong disapproval and rejection of drug use behaviour in the neighbourhood in influencing drug use behaviour that make FIDUs incapable of addressing their health needs causing negative health and mental outcomes.

3.4.2. Neighbourhood Opportunities: Residential arrangement & stability

Manipur is ethnically distinct and geographically isolated from the rest of the country with longstanding civil unrest, poverty, unemployment, unstable social and political environment. (Armstrong et al. 2014) A strong association has been established between unstable residential arrangement and HIV risk; where homeless women and poverty can lead women to trade sex for drugs, food, or other necessities, and in such situations, concerns about HIV can be less urgent than immediate survival. (Pinkham et al. 2012)

The study conducted by Oinam (2008) found most respondents' families had been affected by the limited economic opportunities and political instability in the state. The families were displaced as a result of ethnic conflict and families having to migrate to towns, in search of livelihoods and several families had to resort to selling alcohol and engaging in sex work as a means of earning money. These factors may have played a role in fostering drug dependence among women.

"My parents sent my elder brother and sister to Imphal [after the clashes]. I was very young so I stayed behind with my parents in Churachandpur. To support the family, my parents started selling alcohol. I helped them sell alcohol. I used to attend school in the village but after we shifted to Churachandpur town, I was not admitted in school. I started drinking and taking pills [drugs] with friends. That was our way of enjoying ourselves and having fun." (22 years, FIDU, Churachandpur district) Source: Oinam 2008.

3.4.3. Neighbourhood Risks

Manipur borders Myanmar where goods and drugs are trafficked across the border. Consequently, heroin and other illicit drugs of high purity are easily

available at prices far lower than in the rest of India. The thriving trade route also supports a sex industry that services the large mobile population of traders, travelers and truck drivers. Disadvantaged, marginalized and substance-dependent women move into sex work to escape poverty and unemployment and, in many cases, to pay for their drug dependency. (Project ORCHID 2013) These factors led women to be subjected to emotional and physical violence, including rape. (Kermode et al. 2012) The violence sometimes took the form of social humiliation which forced FIDUs' activity underground, making hard to reach with HIV prevention interventions.(Project ORCHID 2013) Those neighbourhoods that are perceived as being models of deviant/delinquent behaviour, characterized by violence, are expected to increase the likelihood of drug use. (Alegria et al. 1998)

3.5. Analysis of determinants of Institutional factors

3.5.1. Institutional Resources

Public system dependence/Independence

According to the findings from the NFHS-3, for about 80% of households in Manipur, the public sector is the main source of health care (82% in rural areas and 72% in urban areas). However, poor quality of care (46%), lack of a nearby facility (30%), and inconvenient facility timing (20%) are main reasons for not using government health facilities. (IIPS 2008) For FIDUs, these services are even more difficult to access for reasons of coming from rural areas and stigma attached to sex work and drug use behaviour.

Availability of health facilities & Integration with community services

Manipur State AIDS Control Society (MACS) in 2012 shows at least 65 Non-Governmental Organizations (NGO) implementing partners working for the IDU, FSW & MSM, 91 integrated Counselling and Service Centres (ICTC) and 11 Anti-Retroviral Therapy (ART) centres spread across the nine districts in the state. However, there is disproportionate distribution and as explained earlier, many of these centres are located either in the district head quarters or the capital city; (Directorate of Health services 2015) whereas the remote districts who require most because of geographical inaccessibility, cost of services and transportation have limited service centres. (Project ORCHID 2013)

It can be observed that the government implements Targeted Intervention programmes, however, no specific FIDU only services are available and only limited health facilities both public and private sectors in the districts where the packages of services are not inclusive for the demand needs of FIDUs as explained in the later section (3.5.3).

3.5.2. Incarceration experience

Most FIDUs are incarcerated at some point in their drug injecting careers and studies found that a history of incarceration is associated with an increased risk

of injection and women who undergo detention initiate injecting at a younger age. (Roberts et al. 2010) It has been found that unsafe injection practices seems to be particularly prevalent and HIV infection rate in female prisoners is higher than incarcerated males as they are marginalized in prisons too, on the basis of gender, drug use and sex work. (UNODC 2006) The dual criminalization of sex work and drug use puts drug users at high risk of police harassment, extortion, sexual coercion and arrest. (Pinkham et al 2012) Among FIDUs in Manipur, about 21% (n=19/88) had been imprisoned in the past two years and none of them had access to either condoms, ART, OST or NS. (Chakrapani 2012) Similarly, in Nepal, about 32.5% FIDUs have been arrested in the past and about 7.4% served sentences in prisons. (UNODC 2011)

These findings describe the extent of various problems faced by FIDUs and indicate the important role of prisons in HIV prevention and control to educate on safe drug and sex practices and therefore, the need to network with the law enforcement agencies and strengthen prison based interventions and prevention programme.

3.5.3. Barriers/Participation to drug treatment and service access

Access to treatment

Globally, evidence on the experiences of FIDU shows many barriers and limited access to health services, including SRH care, prevention of mother-to-child transmission of HIV (PMTCT), and drug treatment in many settings. (Pinkham et al. 2012) For example in a study across seven sites in Nepal, only 14% (58 of 393) of respondents had ever accessed help to quit drugs. (UNODC 2011) A major reason found why services do not reach FIDUs is the fact that services are mostly not gender responsive and thus their specific needs are not met. (UNODC 2006)

One vital health problem identified by women in Manipur was associated with drug dependence that includes withdrawal symptoms. (Kermode et al. 2012) However, FIDUs generally sought care for immediate problems such as skin infection, liver problems and TB (83%); fewer had visited a facility for drug related problems (38%) or SRH complaints (51%). (Oinam 2008) The qualitative study by Kermode et al. (2012), found that women drug users generally avoid going to government health services because they feared of being treated poorly; they could not afford to pay; their own sense of shame; or their reluctance to self-identify as a drug user coupled with discrimination from health care providers. Oinam (2008) also found that providers are unsupportive and confidentiality was an issue, which makes them reluctant to visit a facility.

There are also systemic barriers like lack of decision-making power among FIDUs that limits to influence policy development and resource allocation which consequently impede the development of services that respond to women's needs. Additionally, national policies and practices make it difficult for women to access services. For example, women seeking treatment are more likely to be

living with dependent children and lack of childcare is the most consistent factor restricting women's treatment access. (UNODC 2004)

"When I fell sick a year ago, I approached X [a particular drug treatment centre] for treatment. They refused to admit me with my daughter. I don't know who my daughter's father is... there was no one to look after her. She is no more.... I will never go for treatment. I am not interested." (26 years, FIDU, Imphal West district) Source: Oinam 2008

Few drug-treatment and HIV prevention programmes attempt to help women suffering from violence and sexual trauma, and fewer still emphasize SRH and pregnancy related provisions. Pregnant drug users face major barriers to staying in treatment and face criminal sanctions due to stigma and criminalization of drug use during pregnancy that encourage to conceal their addictions and keep away from accessing health services. (El-bassel et al. 2010)

In the study by Murthy (2012) in four states of India that includes Manipur found that factors that reduce FIDUs' access to health services include punitive policies, discrimination by police and health care providers, social stigma associated with drug use, harassment by antidrug-use organizations, a preponderance of programs directed at men, poor functioning or absent health services, absence of SRH and OST services. Also, FIDUs who are also engaged in sex work face difficulty in accessing services from two different service centres i.e. FSW or IDU programmes, as their needs are different. Chakrapani (2012) also found in Manipur, top three barriers among women that include fear of drug use disclosure by others (68%), fear of arrest by police (57%) and travelling distance (40%).

Globally, women's programs that are specialized and comprehensive were more likely to attract women drug user who might not otherwise have sought treatment. (Roberts et al. 2010)

Types of services received and perceived helpfulness of services

One perceived deficiency of the services in the national HIV programmes was the range of services offered that is limited mainly to the provision of HR services, whereas the women's most pressing problems were unrelated to HIV prevention as detailed in earlier sections. (Kermode et al. 2012)

In a 6 country qualitative study of FIDUs by Middle-East and North African Harm Reduction Association (MENAHR), majority of study participants (82%) have accessed at least one HR service and the most used services were HIV testing (56%) and acquisition of needles (47%). (MENAHR 2013) However, as Murthy (2012) found among FIDUs, the priority felt needs in Manipur were counselling and support (60%), detoxification (44%), general health services (29%), job and rehabilitation (23%), and vocational training (22%). However, the needs of

FIDUs are rarely met and suggests for more extensive programmes that are inclusive of the needs as mentioned.

Social support

FIDUs require social and economic assistance as they face problems of social exclusion, violence, concerns about children, and financial difficulties resulting in lack of food, education, health care and medicines. (Kermode et al. 2012) Murthy (2012) found that 63.8% of FIDU in Manipur expressed concerns regarding children, for education (36%) and health and nutrition (13.9%). Personal concerns and needs included unemployment (33.3%), nutritional support (5.6%), financial help (12.8%), partner's health (44.4%) and support requirement that included capital for business (22.2%) and vocational training (27.8%). Similar findings was found by Kermode et al. (2012) where assistance to meet basic needs like food, shelter, employment and livelihood opportunities was mentioned. In Cambodia, Walsh (2011) found about 77.8% lack food for themselves or for their baby, 61% required at least one support service and about 33% wanted assistance to start business or get a job.

Medication/Oral substitution therapy

Opioid substitution therapy (OST) is the oral replacement for people who inject illicit drugs such as heroin. (Project ORCHID 2012) Evidence shows that OST decreases drug use, criminal activity and facilitates linkages to other health services. (Lawrinson et al. 2008) However, as men make up the majority of IDU population, FIDUs in Manipur are highly stigmatized and dominated by males at OST centres reducing the acceptability of FIDUs and deterring them from access reflecting the gender discrepancy of OST programmes. Regulations on OST during pregnancy should also be revised as per the international guidelines, as currently; pregnant women are excluded from participating in OST programs. (Project ORCHID 2012) In addition, Chakrapani (2012) found NGO outreach workers (47%) and drug using partners (29%) as major sources of information about OST services. But, travel cost (19%, n=15/79) and distance (41%, n=33/81) was major barrier for daily access to OST centres.

Satisfaction with drug service providers

Oinam (2008) found women reporting dissatisfaction with services as providers tend to be unsupportive and the services were not confidential. Similar finding was reported by Murthy (2012) including insensitivity of the service provider. Also, health care providers are often not trained to deal with the unique needs of FIDUs and can have a hostile attitude towards the women which poses a significant deterrent for women to seek treatment. For example, evidence shows that pregnant women who use drugs and who seek help for their drug use are often motivated to act in the interests of their children and health care providers should be trained to offer them various range of opportunities (Azim et al. 2015)

Differential treatment based on gender

As mentioned earlier in the above OST section that in the standard IDU programme, the needs of FIDUs are being surpassed by male peers who make up the majority of the clientele. The women found this environment intimidating, and were sometimes harassed by the men. Additionally, the health centres and the NGO clinics are predominantly staffed by males who are largely inexperienced in providing services to FIDUs who are also sex workers. (Project ORCHID 2013) Consequently, very few FIDUs were accessing services from either the IDU or FSW health programmes as the services delivered do not adequately meet their specific needs.

3.6. Analysis of the determinants of Outcomes

3.6.1. Problem behaviour

a) Drug use

Drug use initiation

Research from many countries supports the belief that most IDU start out as non-IDUs and transition to IDU. (Roberts et al. 2010) Although, Manipur lacks sufficient data on FIDUs initiation to drug use, a study by Oinam (2008) among FIDUs showed that there was a gradual progression from oral consumption/chasing⁸ to injecting drug use and of the 200 respondents, the majority (83%) reported that they had initially consumed oral drugs such as SP or chased heroin and the shift to injecting drug use occurred as it was perceived to be less expensive (46%) or gave a better high (38%). (Kermode et al. 2007) also found similar initiation pattern of drug use. In China too, heroin was the first drug used by 94% of women, but none initiated drug use via injection. (Li et al. 2002)

Type of drug use

In the IBBA survey among IDUs in two districts (Bishnupur and Churachandpur) in Manipur, the most common drugs use for injection were Heroin, SP, nitrazepam, diazepam, morphine and pentazocine. Heroin was injected by 93% and 98% of the respondents respectively in the two sites and SP was the next commonly injected drug. (ICMR & FHI 2011) Murthy (2012) also found 75% of FIDU injecting heroin and 63.9% injected SP and similar drug use pattern was found in the study in Nepal among FIDUs. (UNODC 2011)

Injecting behaviour pattern

At least 86% of IDUs injected daily in Churachandpur and 22% in Bishnupur districts of Manipur. Injecting practices at the last injecting incident includes used of a common container (32%- Churachandpur and 29%-Bishnupur) and sharing of other injecting equipments which was 23% and 13% respectively. (ICMR & FHI 2011) It was also found that comparing to men, almost all women inject daily and at a higher frequency (2-5 times as compared 1-2 times in

⁸ Chasing is inhaling the fumes of heroin/brown sugar using a thin foil of cigarette paper.

men) and only 58% of these injections were with new NS. The proportion who had “sometimes” shared injecting equipment during the previous month was 76%, while 20% had shared during their most recent injection. (Project ORCHID 2013) The UNODC (2011) study in Nepal also shows similar findings and found sharing of injecting equipment during the last injecting episode is more prevalent among FIDUs when compared to male IDUs. Reviewing quality of intervention components to identify areas that require strengthening may reduce sharing practices among the FIDUs.

b) Drug relapse

Evidence from Manipur suggests a high relapse rate among FIDUs though majority (87%) of respondents reported trying to give up the drug habit. Almost 73% of these women who sought help were unsuccessful in giving up because of partners and peer pressure and feelings of depression plus sustained contact with services and access to counselling facilities were limited. (Oinam 2008) Another study by Chakrapani (2012) indicates high frequency of relapse and among 44% (n=169/388; 133 men and 36 women) of the participants ever been enrolled in a residential drug rehabilitation centre, 66% gave history of relapse. In Bangladesh too, relapse following drug treatment was more common among females than males; and women without children to support were more than three times likely to relapse. (Azim et al. 2015) Programme interventions need to ensure addressing that FIDUs are free from drugs following rehabilitation and also child care provisions in the centres as having children prove to be a strong factor to prevent relapse.

c) Criminal behaviour

The association between drug use and criminal activities is well established which is also linked with neighbourhood disorder leading to greater concentrations of poverty, crime and drug use. (Latkin et al. 2007) When drug-using women engage in criminal activities, they are more prone to participate at higher levels of violence, such as partner-battering. (Alegria et al. 1998) Kermode et al. (2012) found that the women who use drugs could themselves be perpetrators of violence when under the influence, and sometimes children were the target of their violence and several instances of child neglect and mistreatment were done. These findings were supported by Murthy (2008) where among women substance users found more than 50% reported violence towards their spouse or partners, 42% towards their families, 47% towards outsiders and one-third reported violence towards the children.

d) High-risk sexual activity

In Manipur, the findings from the project data shows over 80% of the FIDUs engaging in sex work with a total of 76% being sexually active during the previous week and a mean of 23.7 sexual encounters per week. (Project ORCHID 2013) Similarly, Murthy (2012), in the findings from four states including Manipur found more than half of FIDUs having sex at least once or more in a day and a substantial number of non- FSW FIDUs also reported daily

multiple sexual encounters where about 23% reported having sex three or more times per day.

Only 35% of FIDUs reported always using condoms with regular partners in the previous month and 73% with non-regular partners. (Project ORCHID 2013) A similar finding from the UNODC (2011) study in Nepal among 323 FIDUs, 69.3% had sex in the past one year and only 54% reported condom use in the last sex act. Condom use with regular sex partners was lower (48%) when compared to use with other partners (89%).

Commonly, FIDUs engage in sex work to generate income and may not perceive themselves at risk of HIV infection because they do not identify themselves as sex workers resulting in high frequency of unprotected sex. (UNODC 2006) The study by Chakrapani et al. (2011) shows an overall 64% of women reported exchanging sex for drugs or money in the past three month and 75% of the women did so at least ten times. Similarly, reports from the Reference group to UN (2010) shows in the central Asia region, about 62% of FIDUs in a Kyrgyz study and 77% from Tajikistan, reported having traded sex for drugs or money. This overlap between injecting drug use and sex work is one reason for the amplification of the risk of HIV transmission in Manipur.

e) Partner violence

Roberts (2010) has found associations between intimate partner violence and a number of sexual and HIV risk factors. As mentioned before, in Manipur, the FIDUs are frequently subjected to harassment and violence. (Project ORCHID 2013) In the large Indian study of 4401 female sex partners of drug users across 109 NGOs, 73% of female substance users had experienced violence, and of these, 91% reported physical violence, 53% sexual violence, and more than 75% had sustained physical injury as a result of the violence with the most common perpetrators being the partners/husbands and parents. (Murthy 2008)

MENAHRA (2013) study also found intimate partner violence as a common finding and respondents reported experiences of violence manifested in sexual, physical and psychological abuse e.g. coerced sex with a partner or with other partners and violence when there is no money to buy drugs, craving drugs, jealousy and sometimes for no reason. The UNODC (2011) study in Nepal also found 34% physical violence and 54% verbal abuse from regular partner when under the influence of drug. The findings show the potential implications of partner violence on the lives and health of FIDU and the need to address it.

3.6.2. Health

HIV

a) Awareness & Knowledge

Murthy (2012) found among FIDUs in Manipur a relatively high knowledge regarding HIV in the community. However, HIV/STI testing uptake is not high.

Another similar finding from UNODC (2011) among FIDUs in Nepal found low level of HIV testing though all respondents had heard about HIV and most (73.8%) knew of someone affected by it indicating a high level of awareness. Of 393 respondents, nearly half (45.3%) were not sure if facilities for confidential HIV testing was available in the community. Even among those who considered themselves at risk of contracting HIV (58%, n=392), only about half had tested for HIV prior to the study (51.5%). Similarly, Tuan et al. (2004) found in Vietnam among FIDUs who are also street based sex workers showing average to good knowledge that they could be HIV infected (33.0% to 91.7%), but a low proportion (37.0%) had been tested for HIV.

b) Prevalence of HIV

In a systematic review of 117 studies from across 14 countries including India revealed FIDUs had higher rates of HIV than male IDUs (Des Jarlais et al. 2012) and this finding was supported in a similar review from Central Asia on data collected between 2002 and 2012 by Azim et al. (2015).

HIV prevalence among IDUs in 2008 was 29% and the prevalence of HIV among FSWs in Manipur in 2008 was about 11%. (MACS 2012a) However, in Churachandpur district, the prevalence among IDU was 31% and FSW was 18% in the same year (MACS 2012a). The interrelation between high proportion of IDUs having sex with females and the FIDUs who are also mostly sex workers is that the FIDUs are likely to be having more higher HIV prevalence than the other high risk groups as evident from the project information data where in Churachandpur, 35.5% (60/169) of the FIDUs are HIV-positive. (Project ORCHID 2013) Across the Central Asia region, the prevalence of HIV among sex workers who also inject drugs is, on average, 8-10 times greater than among sex workers who do not inject. (Reference Group to UN 2010) The study suggests an overlap between injecting drug use and sex work in Manipur and existing interventions may need to address both the needs.

STI and SRH

In Manipur, more than three-fourths of the IDUs had heard of STIs. However, the knowledge of STI symptoms was low and ranged from 18-47%. (ICMR & FHI 2011) The prevalence of STI was about 11.2% in 2010 (MACS 2012a). There are no specific STI prevalence data on FIDUs in Manipur. But, among women drug users, STIs including syphilis, chlamydia and gonorrhoea were named in particular. (Kermode et al. 2012) Also, in the study from Nepal, symptoms like lower abdominal pain (43%), burning sensation during urination (20.3%) and pus like vaginal discharge (51%) were reported indicating pelvic inflammatory diseases or gonorrhoeal or chlamydial infections. Genital ulcers (11.5%) and genital growth (16%) was reported which could indicate infection. (UNODC 2011) However, it was found that when women suspect they had an STI, they often tried to self-treat rather than seeking diagnosis and treatment from a health professional due to embarrassment. (Kermode et al. 2012)

In Manipur, a number of SRH problems were reported among FIDU including unintended pregnancy and abortion; long periods of amenorrhea and irregular menstruation that contributed to late detection of pregnancy. (Kermode et al. 2012) Oinam (2008) in a survey assessed the general health status of FIDUs and 69% had experienced SRH problem.

These problems can greatly increase the risk of getting infected with HIV as the lowered immunity plus the STIs make it easier for HIV to enter a female body. (UNODC, 2006)

Others

There is no prevalence study done on Hepatitis for FIDUs in Manipur but found as an important problem requiring attention because study findings have shown high prevalence of hepatitis C among male ranging between 46% to 92% (ICMR & FHI 2011) and other studies have also highlighted the increased prevalence of the hepatitis C infection among FIDUs including FSWs. (Des-Jarlais et al 2012; El-Bassel et al 2012) Therefore, considering the interaction between high frequency of drug use among FIDUs and the high prevalence of drug use among male IDUs, it is likely that the prevalence among FIDUs in Manipur to be high.

3.6.3. Functional Impairment & Productivity

Drug use can impair a person's performance at work through poor decision making and impaired reaction times causing loss of productivity, inappropriate behaviour, poor performance, as well as shorter working lives. (Nicholson et al. 2014) A large qualitative study in India including Manipur by Murthy (2008) found that the problems in the last month among FIDU included consuming drugs to intoxication (80%), unable to fulfill responsibilities (70%), financial difficulties (73%), physical problems (62%) and 18% reported having legal problems. This suggests that FIDUs are affected due to drug intoxication and interventions require addressing the drug use problem and creating policy mechanism to involve them for productive opportunities.

Chapter 4: National Policies, Strategies, Response and Review of best practices.

4.1. National policies:

In India, consumption of any narcotic drug or psychotropic substance (Opioids, cocaine, benzodiazepines etc) is punishable with imprisonment or fine or both under article 27 of the NDPS act, 1985. (GOI 1985) The use and possession of these groups of drugs is considered unlawful and therefore drives many IDUs underground. The concentrated presence of the Indian army in Manipur due to insurgency and ethnic conflicts increases the chances that IDUs being frisked and then detained on evidence of drug use. (Chakrapani et al. 2011)

The Immoral Traffic (Prevention) Act, 1956 (ITPA) is the central legislation that criminalizes sex work in India. Although the law aims to prevent trafficking by prosecuting traffickers, most of the arrests and convictions are against sex workers. The criminalization renders sex work as a criminal resulting in violations of human rights and sexual rights for sex workers. This pushes the sex workers underground and makes it difficult for them to seek protection from violence. (CREA 2012)

These two legal framework deprives the high-risk population including FIDUs of their rights and inhibits them to avail opportunities that exist for the mainstream general population. Policies for combating HIV are often in conflict because on one hand the government recognizes the need to address the HIV concerns, but on the other, the continuation of the criminalization of such behaviours often leads to threats of violence or arrest discouraging those in need of information and services to seek the same. (Devi 2012)

4.2. National HIV Prevention Strategy and response for IDU Population

Despite laws and legal frameworks that hinder programme implementation, India has recognized the burden of HIV and the HRGs as important population group to curb the HIV epidemic problem in India. To achieve this, NACO under the Ministry of Health and Family Welfare (MoHFW) has been authorized to manage the NACP. It is the overall body for framing policy, guidelines and strategies for program implementation. (Bachani & Sogarwal 2010)

India has demonstrated an overall reduction of HIV infections since the launch of its programme to combat HIV. The Government of India in 2012 launched the fourth phase of the NACP with the primary goal to accelerate reversal and integrate response over 5 years (2012-2017). (NACO 2012b) The detail packages of services under NACP IV are provided in Appendix 3.

Since the start of the HIV programme in India, the country relied on funding mostly from international donors. For example, till 2011-12, the expenditure was only about 10% from domestic sources. (NACO 2012b) However, India is

committed to financing 63% in the phase IV of its AIDS programme. (UNESCO 2015) The proposed budget for NACP-IV is estimated at \$2.5 billion with \$1.6 billion from the domestic and \$0.6 billion from external sources. (Avert 2014) NACO releases funds to various states and reviews the progress under various components of the program.

Targeted Interventions

A key component of the NACP is the prevention of HIV by achieving 80% coverage of the key affected groups with TIs. (Avert 2014) The approach entails providing interventions through outreach and peer-based delivery by NGOs and community based organizations (CBOs) who are able to reach out to HRGs much more efficiently. (Rao et al. 2014) The TIs further network and link to general healthcare facilities, PMTCT, ICTC and ART centres to ensure that HRGs' access the facilities. (Bachani & Sogarwal 2010) In Manipur, there are 65 TIs supported by NACO (MACS 2012b) as was mentioned earlier. However, it may be noted that under the national policy, a separate programme intervention for the FIDU is not available and hence services of the subgroup are not met adequately.

Harm reduction

Global HR strategy is employed to manage HIV prevention among IDUs. WHO, UNAIDS and UNODC (2009) together, have proposed nine interventions for HIV prevention, care and treatment of IDUs called the "comprehensive package of interventions" (Table 6) for HIV prevention among IDUs. In India, the HR strategy is endorsed in the National AIDS Prevention and Control Policy. Components include NSEP, condom distribution, abscess prevention and management, general medical care,

Table 6: Comprehensive Package of Interventions

1. Needle syringe programmes
2. Opioid Substitution Therapy
3. Anti-retroviral therapy
4. Counselling and testing for HIV
5. Prevention and treatment for Sexually Transmitted Infections (STIs)
6. Condom programme for Injecting Drug Users and their partners
7. Targeted Information, Education and Communication
8. Prevention, diagnosis and treatment of Tuberculosis
9. Prevention, diagnosis and treatment of Viral Hepatitis

Source: WHO, UNAIDS & UNODC, 2009

STI prevention and treatment, and behaviour change communication for HIV prevention among IDUs. Additionally, testing for HIV, ART, TB diagnosis and treatment, as well as OST are provided. In 2014, there are more than 280 core IDU TIs throughout the country, reaching out to more than 80% of the IDU population in the country (Rao et al. 2014) but, FIDUs were not given adequate attention and coverage with the HR services.

4.3. Review of International best practices for FIDU

The above nine intervention package for IDU HIV prevention is used worldwide because of the positive impact on HIV prevention and treatment. Studies show about 33–42% decrease in HIV transmission through NSEP. (WHO, UNODC, UNAIDS 2009) As shown in table 7, the same HR components are applied for

FIDUs, but without special focus on their unique needs. Pinkham et al. (2012) argues that there are significant differences in health status and risk practices of FIDU as compared to male IDU and suggests that a comprehensive package representing a HR approach need to reach beyond biomedical interventions to include community oriented programs such as livelihood development as well as an expanded list of clinical services including SRH services.

Table 7: Evidences on what works in FIDU

Study type	Intervention	Results
1 Opioid substitution therapy reduces HIV risk behaviour in FIDUs.		
A double-blind placebo-controlled randomized controlled trial in Malaysia of 126 detoxified heroin-dependent patients (Schottenfeld et al 2008)	Drug counselling and maintenance either with naltrexone; or Buprenorphine; or placebo for 24 weeks	HIV risk behaviours were significantly reduced
2 Comprehensive HR programs, (NSP, condom distribution, OST and outreach) reduces HIV risk behaviours and prevalence in FIDUs.		
Prospective, community-randomized trial in China (47 women received the intervention and 32 women in the control group) (Wu et al 2007)	Access to clean needles over a nine-month period, health & peer education.	Needle sharing dropping significantly in the intervention community
3 Peer education can increase protective behaviours among IDUs		
A pilot project in Vietnam that conducted focus groups discussions with 38 PLHIV, including IDUs, (Maher et al, 2007)	Used peer educators to provide HIV care and support	Peer support was critical for IDUs to contact health providers because of stigma
4 Sex-segregated group sessions for IDUs result in increased condom use and safe injection practices.		
Comparative gender group sessions (Gilbert et al, 2010)	Gender group sessions between 40 couples who had single gender group sessions with female and male partner IDUs compared with 40 couples who did not have single gender group sessions	increased condom use and safe injection practices in the intervention group
5 Women's clubs along with peer education and condom distribution can reduce HIV prevalence among women who are sexual partners of male IDUs.		
Cross sectional survey of 33 sexual partners of IDUs at baseline and 24 months later (Hammett et al, 2008)	Women's club formed, Peer education, condom distribution	Increased condom use, No surveyed female became HIV-positive.
6 Nonjudgmental targeted counselling for IDUs can reduce HIV risk behaviours		
Quantitative and qualitative study of NGO services by the Women Federation for 226 male and female IDUs in China (Chen et al, 2007)	3 male and three 3 counselors trained to maintain confidentiality	Safer drug and sex practices. No discrimination. Clients satisfied with service.

Best practices models for HIV prevention among FIDUs

From the above findings in table 7, using one or more method on the examples of what works well for women when combined together with social, economic and other health services has clearly demonstrated effective programs and increase in service utilizations by FIDUs as shown by various models. Some best practices intervention models from selected countries and the successful outcomes are given below.

a) Ukraine model for women who inject Drugs

The International HIV/AIDS Alliance in Ukraine has proven that effective interventions can be delivered at very low cost with a substantial impact by tailoring HR interventions with relevant SRH services, use special innovations like Peer Driven Intervention (PDI) to specifically attract FIDUs, involve women as outreach workers, and offer women groups and short-term childcare support to enable women access services. (Deshko 2015) Table 8 below gives the details of the model.

Implementing agency	The International HIV/AIDS Alliance in Ukraine (Alliance)
Target population	About 300000 PWID (23.6% are women who inject drugs)
Objective	Reaching to 60% of PWID and specifically for women who inject drugs to increase service availability and access.
Intervention	<ul style="list-style-type: none"> • HR plus package of services (NS, condom distribution, IEC, and rapid testing for HIV plus screening and treatment for STI through rapid tests for syphilis, gonorrhoea, and chlamydia, pregnancy test distribution, and distribution of disinfectants to those involved into sex work.) Mobile clinics for hard to reach population. • PDI, a chain-referral model, which includes education and recruitment through outreach, per-task nominal rewards. • Economic opportunities-provided with training and employment opportunities, such as beauty courses and hairdressing. • Gender-sensitive approaches, such as timing of opening hours, women-focused outreach and counselling, structured training & education activities, short-term childcare, case-management (time, group meetings, counselling by gynecologists and lawyers), and gender-sensitive organizational policies.
Results	<ul style="list-style-type: none"> • By 2009, 36,743 drug-using women were covered by preventive services which increased to 57,497 by the end of 2014 • Women constituted 27% of those reached by Alliance's service by the end of 2014. • Newly detected HIV cases were reduced by 33% in these 5 years. • Annual average cost per women- \$46.4
Attribution	<ul style="list-style-type: none"> • HR plus package, PDI initiative, low-budget solutions, female outreach workers, women's support groups, childcare services, and provision of smaller needles.

b) Baltimore, USA model

In Baltimore, USA, the Jewelry Project for Women Empowering their Lives (JEWEL) intervention combined HIV prevention education and skills building with economic enhancement to reduce HIV risk among drug-using women who traded sex for drugs or money. The HIV component aimed to increase women's knowledge about HIV, STIs and drugs; improve their risk reduction knowledge and skills; and negotiation and communication skills to support safer sex. The economic component taught practical skills on how to make and sell jewelry, while aiming to increase their self-efficacy in relation to licit employment. Results after three months has shown significant reductions in the exchange of drugs or money for sex, number of sex partners per month, amount of money spent on drugs daily and increase percentage of women reporting that they never shared needles. The study suggested that exposing women to the possibility of gaining legal employment supports positive behaviour change. (Sherman et al. 2006; Pinkham et al. 2012; Blankenship et al. 2015)

c) From US & Canadian evidence

A qualitative meta-synthesis of US and Canadian integrated drug treatment programs for pregnant or parenting women and their children found that programs that combined medical and social support increased women's sense of self and personal agency, increased women's engagement with the program staff and sense of giving and receiving support, improved women's ability to recognize patterns of destructive behaviours, and helped women set goals. These psychosocial processes were reported to play a role in women's recovery and contribute to favorable outcomes. The motivating presence of children during treatment was also found to support women in their recovery. Perceived outcomes of programs included improved maternal and child wellbeing and enhanced parenting capacity. (Sword et al. 2009)

Chapter 5: Discussion, Conclusion and Recommendations.

5.1. Discussion

The review highlights that health and social service investments continue to focus mainly on HR for IDUs which may result in increasing health disparities and inequities among certain group of populations. Therefore, a balanced approach is warranted with changes in the societal context and the environments in which these problems occur in combination with risk avoidance and risk reduction approaches. This chapter will discuss the main arguments and interactions from result findings and come up with specific recommendations and suggestions.

On reflection, the conceptual framework provides many details of themes on the problem of drug use and the behaviour outcomes. However, it does not include Government policies and policies that criminalise drug use and sex work including human rights. This is an important component as shown from the finding that strict legal policies which criminalize drug use and sex work provides opportunities for FIDUs to share and inject drugs and operate in concealed manner due to fear of arrest and harassments which further prevents them from utilizing health services. In the context of relatively high HIV prevalence in Manipur, if the HIV epidemic is to be comprehensively addressed, then there is a need for legal and policy reforms to establish programmes and harmonize systems for the requirements of FIDUs for improved outcomes in relation to HIV prevention and treatment.

Women uses drug for a complex range of reasons. Most of the FIDUs in the study were young which implies that they initiated drug use at an early age. Low educational background means they lack knowledge and awareness and interlinks with the outcome of drug use and also HIV. Having a disadvantaged societal life, disturbed family relationship, unemployed and divorced or widowed marital life lead FIDUs to face with severe economic burden. All these factors cause mental and psychological symptoms and eventually they solve the problem by coping with drug use. In addition, physical illness, stigma, harassment, violence and alienation by families and partners because of their drug use also interconnects with mental depression and increase problem behaviour outcomes (increase NS sharing, low condom use and multiple sex partners) that associates with increase vulnerability to HIV. It implicates the importance to link with law enforcement agencies like police, anti-drug agencies including the general community to reduce violence and sensitize them on drug use. Also, advocacy with relevant Government sectors, NGOs and women's groups to provide economic and social support to FIDUs; and involvement of families and partners in counselling services to reduce violence as well as mental and psychological issues.

There is also a direct link of neighbourhood disorder to psychologic distress, drug use and sex risk behavior. The societal attitude about the acceptability and rejection of drug use and sex work coupled with subjection to violence and

harassment from different sectors makes the women incapable to reach with HIV prevention interventions and address their health needs. Also, Manipur's geographical isolation from India, geographical proximity to the drug trade route, political unrest and availability of drug at cheap price coupled with poverty and economic hardships as mentioned above, associate women to trade sex for drugs, food and other basic amenities resulting in increase HIV risk. Thus, disadvantaged environment was found to have increase risk behaviour including early sex and drug use. The findings suggest in creating a supportive environment and implement stigma reduction measures to win support from family and society to reduce social isolation through education and counselling and provide opportunities for women to lessen their economic burden.

The cultural, societal taboos and high stigmatization of FIDUs because of their drug use and sex work and their expectations of a woman's responsibility as a primary care taker of homes, as mothers & wives and child caring proves detrimental and delay women in seeking health care. From the findings, advocacy with the society including the health care professionals to lessen stigma is needed.

In Manipur, the public sector which is the main source of health care was found to be weak. To top it all, FIDUs mentioned a number of needs and barriers to service access relating to availability, accessibility, affordability and acceptability. They are burdened with disproportionate or limited health service centres in the rural areas. The findings also shows low treatment seeking behaviour among FIDUs because of the perceived deficiency between services offered and the real priority needs and problems of FIDUs. The types of services received by FIDUs are limited to HR services whereas the priority felt needs of FIDUs were of the drug use, SRH, pregnancy, child care, social and economic services including employment and reintegration which was also substantiated by other studies suggesting a requirement of a female only centre with the above mentioned broad package of services. Existing programmes in Manipur were found not lacking only on these components but, the few available services are not gender responsive, mostly male staffed, untrained on women's needs, stigma, clinic opening hours are not conducive, lack privacy and confidentiality which deters them of services. Therefore, they tend to avoid or do not access the health facilities thereby increasing the risk to STIs/RTIs and HIV.

Study findings have also found women's lack of decision-making power and programmes that are directed to only men as factors causing barrier to access services. Other barriers include inadequate coverage by NSEP, OST and unavailability of HR services in prisons. These finding proves that for FIDU interventions to be successful, women has to be empowered to make their own decisions and programmes are implemented with their consultation. Inclusion of special programmes like women responsive health centres, trained health care providers on women's need, prison HR services, free or affordable drug

treatment including OST for FIDUs and drug dependent pregnant mothers are required. Also, it is important to address the economic needs of FIDUs by building livelihood or vocational skills, offer work opportunities and raise awareness about their rights and available options. Also, implement stigma reduction measures in the health care settings and sensitize health care providers on health and human rights issues of FIDUs.

The findings in Manipur as well as from the findings of those countries that was analysed confirm high volume of drug use, high risk sexual activity and increase prevalence of HIV among FIDUs. Similar type of drug use pattern was seen, but females had higher frequency and also increase sharing behaviour. High proportion of FIDUs engaging in sex work with low usage of condoms was also confirmed by different studies which were attributed to the effect of drug and the inability to negotiate for condom use suggesting intensive coverage with NSEP, condom promotion and skill building in negotiating for NS and condoms. Various other health and drug use related problems were also mentioned including hepatitis C which was of concern for the reason of being highly prevalent in Manipur and a research on prevalence is warranted among the FIDUs. This overlap between injecting drug use and sex work as shown by the interaction between high proportion of IDUs having sex with females and FIDUs who engages in sex work coupled with the low perception level of HIV risk has amplified risk of transmission of HIV in Manipur among FIDUs.

The findings reveal that FIDU requires quality intervention and a different approach of programme implementation to reduce risk of sharing practices and high risk sexual activity. Support systems including community, family and health system interventions specific to their needs has to be scaled up for FIDUs who want to abstain from drugs and sex work. Similar findings have been reported from other studies in other countries indicating that the gaps need to be identified and increase the awareness as well as the perception level. To improve the well being and mitigate the burden of disease in FIDUs, there are an array of needs that requires not only behavioural and bio-medical interventions, but also policies that include a wide range of non-health sector programmes. Political will and commitment of the Government including donor's commitment is needed to ensure sustainable provision of sufficient funds.

National government has adopted and successfully implemented HR programmes for IDUs and another extended approach for FIDUs is needed. There are differences in various health, social and psychosocial needs between FIDU and male IDU or FIDU and FSW. Currently, in Manipur, it is not being addressed in the existing programmes which are mostly tailored to meet the needs of male IDUs or FSWs that are always not appropriate for reaching out and serving the FIDU community.

Although, the exact estimate of FIDU in Manipur is not known, from the estimate of IDU, if 2 % of the population has injected drugs and considering

that 18% are women, it becomes a major concern as they represent one of the most at risk group. There may be serious implications if the problem is not addressed as FIDUs have the potential to rapidly intensify the transmission to their partners as well as the general community through unsafe injecting and high risk sexual activity. It calls for an urgent and comprehensive effort by service providers and policy makers at the national and state level. Learning from the experiences and good innovations being used in other countries can be adapted for implementation. Evidences shows substantial benefits are achieved through multi-disciplinary health approaches including social services. It is important to examine every component of FIDU programmes including services that can have a positive association with reduced HIV risk, drug use and other social, psychological and health outcomes. One such example as Murthy (2012) suggest is HR plus programme that include child care, prenatal care, female only programs, female focused topics, PDI, mental health programming and inclusive programming which has been supported by models from other countries.

Limitations of the study

Several study limitations and gaps were found in the study because there was not much research done on FIDU in Manipur or India and also only few research articles were available from the neighboring countries. One important limitation to be mentioned is the use of many grey and old literatures to analyse the findings because of the lack of recent data. Another gap was the varied range in the number of sample size of FIDUs in different studies that was used to analyse the findings and that the small sample studies including project data information from Manipur may not represent the FIDUs not only in India but in the state of Manipur itself. Further intense research is required to completely understand the dynamics of FIDU in Manipur. However, for the purpose of the thesis, much possible literature search was done to answer the objectives and provide some insights into how the problem influencing drug use, risk factors, barriers to service access need to be formulated for recommendations to MOHFW, NACO and the State for strengthening existing programme and roll out holistic interventions that could meet the sole needs of FIDUs in the country.

5.2. Conclusion

Research and national programmes had focused on IDUs, but only recently the importance of FIDUs as a sub-group in the transmission of HIV is emerging.

The findings from the study presents a variety of demographic, social, legal, education, economic, and policy-level factors that create a context in which FIDUs in Manipur are placed in a situation to use drug.

Factors like low educational background, disadvantaged marital and societal life, financial hardships, troubled family relationship and violence had left FIDUs to undergo anxiety, mental stress & tension thereby increasing the opportunity to use drug and sell sex.

Unsafe injecting and unsafe sex practices have led to double risk of HIV and for the reasons of injecting more than men and engaging more in sex work with low condom usage. FIDUs have low health care seeking behaviour and have a range of barriers to accessing services. The punitive policies and the socio-cultural factors associated with high stigma and discrimination on drug use in women were found to be obstacles in managing their drug use. They remain as a hidden risk group limiting or even refusing access to health centres and HIV prevention programme. Limited health centres and programmes are not responsive to meet their demand needs and thus FIDUs require female comprehensive programmes and at the time convenient for them. These are aspects many of which are modifiable play an important role among FIDUs in getting to the problem of drug use and other risk behaviours.

A few questions can be raised that need to be answered if the situation of FIDU is to be improved. For example, how can the society, families and partners play a role to mitigate drug use among women, when the culture diktats on their behaviour? How can HIV prevention programs appeal FIDUs and those who engage in sex work, when the range of services does not offer the desired needs? How can FIDU get access to effective and affordable drug treatment services in the presence of such limited services?

The problem requires political and donor commitment to ensure that resources are made available and to maintain sustainability. The optimal model for addressing it may be selected from the best practices of other countries like provision of integrated female only services, and collaboration across sectors of government involving those responsible for health, HIV prevention, drug treatment, justice, employment and education.

5.3. Recommendations

To adequately provide services to FIDUs, they must be firstly recognized as a unique subgroup that requires a range of interventions at all levels and services which is accessible, affordable, innovative, and having dedicated staff. In addition to existing interventions that focus on risk reduction, it is important to undertake broader social and health interventions to address key contextual factors.

Many issues (Appendix 4) have been identified from the findings that need to be considered for recommendations. However, some important issues were considered from all levels including findings from the best practices and proposed for recommendations.

5.3.1. Recommendations to address policy and structural level barriers.

Stakeholders involved: National Government, MoHFW, NACO, MACS, MoSJE, MoSW, NGO, CBO, INGO, Donors.

- There is a need from the national Government to amend the NDPS act (1985) and ITPA (1956) that criminalize the use and possession of drugs and sex work that drive many FIDUs underground and limits them to avail health services and other opportunities.
- The MoHFW, MoSJE, MoSW and NACO need to specifically acknowledged the presence of FIDUs and include special programmes for this group like free or affordable drug treatment including OST for FIDUs and drug dependent pregnant mothers, address the economic needs of FIDUs by building livelihood or vocational skills, offer work opportunities and raise awareness about their rights and available options. They should review the existing policy guidelines and relook in their specific needs.
- Political will and commitment of the Government including donor's commitment is needed to ensure sustainable provision of sufficient funds for FIDU intervention. This can be further enhanced through the advocacy efforts by NGOs and CBOs to push the government and donors to allocate resources to improving the health, social and economic well-being of FIDUs.
- NACO and NGOs to sensitize police, anti-drug agencies, general community on drug use and the need for NSEP, OST and condoms.
- NACO, NGOs along with CBOs develop a plan to reduce stigma and implement to win support from family and society through education and counselling and provide information about drug use and HIV. Create a supportive environment to enable FIDUs discuss and address their needs, reduce social isolation and make families and the wider community aware of their role in ensuring the health. Also, implement stigma reduction measures in the health care settings and sensitize health care providers on health and human rights issues of FIDUs.
- Develop some mechanism to provide financial support for travel costs related to accessing services such as STI, ART and OST either through linkages/schemes with the transport department or as travel allowance for appointment-related trips.

5.3.2. Recommendations at the Intervention level

Stakeholders Involved: MoHFW, NACO, MACS, NGOs, CBOs.

The FIDU intervention model requires a comprehensive package at affordable cost while trying to maintain feasibly with the national policies. In addition to HR, effective interventions for FIDUs in other countries have included female only service centre, extended packages and referral linkages as shown in the figure 5. These additional components will be proposed for recommendations.

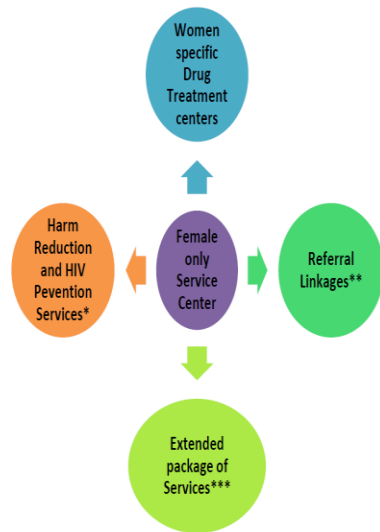


Figure 5: FIDU Intervention Model.

Box 1: FIDU Intervention Model Package Components

* Abscess management, STI management, NSEP, Overdose Management, OST, Condom promotion, HIV Counselling, ICTC, CD4 testing, ART.

** Health care providers, Police, Legal support services, Social services (Labour, Women’s Departments, Child Welfare Department), Institutional settings (prison, correctional homes, destitute homes), Community gate-keepers (community leaders, peer support networks, pressure groups).

*** SRH, ANC, TB, PPTCT, drug rehabilitation, Care and support, vocational training, legal counselling & services, Community mobilization, health, hygiene, Free essential medicines, Night shelter, Short stay facility, Nutrition, Mental health counselling, Child care, Crisis management, Education on safer practices, Female outreach.

a) Female only service centre

- Women-only health centre and services that meet the women’s stated needs. Open on weekdays and possibly on weekends for emergencies. Location of the centre in consultation with FIDUs which is strategically located to their preference preferably in areas of maximum concentration.
- Provision of safe spaces for women that encourage informal interaction between the women and the staff including recreation, counseling, facilities for bathing and laundry, toiletries, cosmetics and dressing room.
- Trained female staffs with appropriate skills in HIV, STIs, NSEP and OST.
- Women-friendly centre means all-female staff especially among the cadre of peer educators and outreach workers to reach out to FIDUs. The programme needs to be outreach-focused by taking services out to FIDU members.
- Women-friendly OST services.
- IEC materials about safe sex and drug use developed and designed in consultation with FIDUs, using easy terminologies and proper visuals.

b) Extended package of services

- FIDUs need to have access to HIV and STI testing and treatment.
- Convergence of drug-related services and SRH services to address dual risks of drug use & sex and other related conditions such as unintended pregnancy, abortion and violence.
- Pregnancy testing and access to contraception including male and female condoms.
- Programme design, staffing and operations must be driven by FIDU community and they must be given power to monitor the programme and advise on programme development.
- Legal advice services, children’s services, nutrition programs, and community mobilization programs.

- Women-friendly drug detoxification and rehabilitation centres that are low cost and offer high quality and non-discriminatory treatment.
- Provide FIDUs with basic needs such as food and shelter including programs and services for the children.
- Short-stay accommodation following completion of the rehabilitation program to reduce risk of relapse, as women are not so easily reconciled with their family, even when recovered.
- Access to essential medicines and general health check-ups should be made available to FIDUs for free.
- Mobile clinics for hard to reach population.
- Provide mental health care and counselling that address the emotional and mental health needs of FIDUs and mental health literacy training for all staff.
- Scale-up OST program to ensure adequate place are available for FIDUs.
- Sustained advocacy with relevant government ministries, departments and agencies regarding the health and other needs of FIDUs.
- Involve partners and family in the programme for better acceptance and support through increase awareness and IEC.

c) Referral Linkages

- Strengthen linkages to vocational training, employment opportunities, micro-finance programmes, legal support, safe-housing, childcare services, and gender specific de-addiction services which need to be advocated through the concern organizations.
- Link up with organizations working with sex-workers as many FIDUs also engage in sex work and these organizations may help in identifying and make referral to FIDU centre.
- Effective linkages to appropriate reproductive services like prenatal care for pregnant drug users.
- Improve testing centres to uninterrupted testing for HIV and syphilis, and improve referrals to ART centres.
- Linkage with law enforcement services, NGOs and women's groups interested in supporting vulnerable women.
- Introduce harm reduction services (condoms, NS and OST) and ensure treatment, including ART for FIDU prisoners and develop mechanisms to ensure continuity in care even after their release from the prison.

5.3.3. Recommendations for research:

Stakeholders involved: NACO, MACS, NGOs, INGOs

Research is lacking to inform programming for FIDUs in Manipur as well as in India. There is not a single document found on providing the estimates of FIDUs. In order to improve the reach of FIDUs, there is a need to fulfill the following research recommendations:

- Generate more data on FIDU, including better estimates of the number of FIDUs via mapping and size estimation.
- The existing national surveys like the HSS and IBBA need to include the FIDUs as a subgroup or a separate survey is conducted.
- Conduct research on the magnitude of problem of drug use among FIDUs, their risk taking patterns, the barriers they face in adopting safe behaviours or acquiring appropriate services, HIV outcomes including Hepatitis C. This can be done by local research institutions including NGOs and INGOs in consultation with FIDU that will help highlight their unique needs and help establish to design appropriate programmes.
- Research on the cultural and societal factors, their attitudes and behaviour towards FIDU and compare with the psycho-social impacts on FIDUs.

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Appendices

Appendix 1: Demographic Profile of Manipur. (Source- GOI Census of India 2011)

Description	2001	2011
Total Population	2,293,896	2,570,390
Male	1,161,952	1,290,171
Female	1,131,944	1,280,219
Population Growth	30.02%	12.05%
Percentage of total Population	0.22%	0.21%
Sex Ratio	978	992
Child Sex Ratio	975	936
Total Child Population (0-6 Age)	326,366	338,254
Male Population (0-6 Age)	166,746	174,700
Female Population (0-6 Age)	159,620	163,554
Literacy	70.53%	79.21%
Male Literacy	80.33%	86.06%
Female Literacy	61.46%	71.73%
Total Literate	1,310,534	1,768,181
Male Literate	753,466	960,015
Female Literate	557,068	808,166

Appendix 2: Public Health Infrastructure and Health workforce. (Source: RHS Bulletin, March 2012, National Health Mission, MoHFW, GOI)

Particulars	Required	In position	Shortfall
Sub-centre	633	420	213
Primary Health Centre	94	80	14
Community Health Centre	23	16	7
Health worker (Female)/ANM at Sub Centres & PHCs	500	975	*
Health Worker (Male)/MPW(M)	420	469	*
Health Assistant (Female)/LHV at PHCs	80	64	16
Health Assistant (Male) at PHCs	80	65	15
Doctor at PHCs	80	170	*
Obstetricians & Gynecologists at CHCs	16	0	16
Pediatricians at CHCs	16	1	15
Total specialists at CHCs	64	1	63
Radiographers at CHCs	16	12	4
Pharmacist at PHCs & CHCs	96	127	*
Laboratory Technicians at PHCs & CHCs	96	132	*
Nursing Staff at PHCs & CHCs	192	574	*
*Surplus			

Appendix 3: Package of Services under NACP IV. (Source: Rao et al 2012)

Prevention Services

1. Targeted Interventions for High Risk Groups and Bridge Population (Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgenders/Hijras, Injecting Drug Users (IDU), Truckers & Migrants)
2. Needle-Syringe Exchange Programme (NSEP) and Opioid Substitution Therapy (OST) for IDUs
3. Prevention Interventions for Migrant population at source, transit and destination
4. Link Worker Scheme (LWS) for HRGs and vulnerable population in rural areas
5. Prevention & Control of Sexually Transmitted Infections/Reproductive Tract Infections (STI/RTI)
6. Blood Safety
7. HIV Counseling & Testing Services
8. Prevention of Parent to Child Transmission
9. Condom promotion
10. Information, Education & Communication (IEC) & Behaviour Change Communication (BCC).
11. Social Mobilization, Youth Interventions and Adolescent Education Programme
12. Mainstreaming HIV/AIDS response
13. Work Place Interventions

Care, Support & Treatment Services

1. Laboratory services for CD4 Testing and other investigations
2. Free First line & second line Anti-Retroviral Treatment (ART) through ART centres and Link ART Centres (LACs), Centres of Excellence (COE) & ART plus Centres.
3. Pediatric ART for children
4. Early Infant Diagnosis for HIV exposed infants and children below 18 months
5. HIV-TB Coordination (Cross-referral, detection and treatment of co-infections)
6. Treatment of Opportunistic Infections
7. Drop-in Centres for PLHIV networks

New Initiatives under NACP-IV

1. Differential strategies for districts based on data triangulation with due weightage to vulnerabilities
2. Scale up of programmes to target key vulnerabilities
 - a. Scale up of Opioid Substitution Therapy (OST) for IDUs
 - b. Scale up and strengthening of Migrant Interventions at Source, Transit & Destinations including roll out of Migrant Tracking System for effective outreach
 - c. Establishment and scale up of interventions for Transgenders (TGs) by bringing in community participation and focused strategies to address their vulnerabilities
 - d. Employer-Led Model for addressing vulnerabilities among migrant labour
 - e. Female Condom Programme
3. Scale up of Multi-Drug Regimen for Prevention of Parent to Child Transmission (PPTCT) in keeping with international protocols
4. Social protection for marginalised populations through mainstreaming and earmarking budgets for HIV among concerned government departments
5. Establishment of Metro Blood Banks and Plasma Fractionation Centre
6. Launch of Third Line ART and scale up of first and second Line ART
7. Demand promotion strategies specially using mid-media, e.g., National Folk Media Campaign & Red Ribbon Express and buses [in convergence with the National Rural Health Mission(NRHM)]

Appendix 4: Different issues identified that needs to be considered for Recommendations.

What are the Issues?	What needs to be considered?
<i>At the Individual Level</i>	
Psychological problems including depression and mental stress	Psychiatric and psychological counseling support should be included in programme
Self stigma	Trained health care workers and provide FIDU with skills for coping with self- stigma
Lack of healthcare seeking due to fear legal consequences	Establish friendly health care services. Train healthcare workers on women's needs. Advocate for hospital base policies for proper management and patient confidentiality.
FIDUs are financially poor	Promote income generating activities for FIDUs
<i>At the Interpersonal Level</i>	
Drug use is often initiated by men, partners, and social networks.	Programs can use men and social networks as entry points to reach out FIDUs.
Lack of partner/family support and violence	Outreach should include reaching out to partners & family on education & counseling
FIDUs live in social isolation & marginalization	Family mediation and reintegration strategies and include psychological support, support groups, couple counseling
FIDUs face family rejection, denied of children care, evictions from homes.	Right based approaches to create awareness among women, families, general community and law enforcement agencies.
<i>At the Neighborhood Level</i>	
Injecting is not socially acceptable for women & hides this activity.	Protections for confidentiality in HR services should to be established.
Social and gender context encourages needle sharing due to limited freedom in decision making	Raising awareness of NS sharing should target both men and women.
Stigma	Anti-stigma awareness campaigns targeting police, general community leaders. Home based services can be considered in settings where it is culturally not acceptable for them to access services outside their home.
FIDUs are perceived as culturally and religiously unacceptable	Advocacy to sensitize community leaders and health and government officials
<i>At the Institutional Level</i>	
Inaccessibility of needles due to fear and travel cost	Outreach distribution of NS. Advocacy and awareness with police on the importance of provision of NS in preventing HIV. Provision of transportation cost location of service centers convenient to women
Stigma and discrimination at health facility	Anti-stigma trainings towards healthcare workers. Legislation and policy development to reduce stigma & discrimination.
Lack of child care services	Mother and child health services should be linked to women's programmes
Lack of gender sensitive services	Specific gender based services and include types of services, location and timing
Arrests due to drug use. Arrest due to carrying needles	Advocacy with police and home ministry on human rights.
FIDUs are frequently in police custody and in prison	Prison can be good entry points for harm reduction services
FIDUs are falsely accused and experience unlawful arrests	Legal literacy counseling and trainings. Training of police and law enforcement on human rights.
Violence against FIDUs by various perpetrators	Behavior change communication to raise public

including IPV	awareness. Trainings to address gender inequality & norms. Counseling for victims of violence, family, and reconciliation sessions. Partnerships with institutions working against violence. Legislation and policy development against violence.
At the outcome level	
FIDUs initiate from oral drugs to injecting.	All vulnerable women & not only injectors should be targeted with primary prevention interventions.
FIDUs who do sex work have sexual & reproductive health problems	Sexual & reproductive health services integrated
Unsafe injection practices	Educate on safe practices
Lack of self awareness of risks (needle sharing, high risk sexual behavior)	Awareness promotion on risks.
Low self esteem and health seeking behavior	Self-esteem building activities for women to increase their interest to care for themselves
Inability to negotiate condom use	Empowerment of women and condom negotiation skills. Female condom programming.
Unintended pregnancies and reproductive health issues	Include family planning and reproductive health services
Pregnancy and unsafe abortions	Follow up for pregnant women and referral ,awareness raising on harms related to unsafe abortions
STI and HIV	STI & HIV services integrated in the programme.
Hepatitis C	Promote Hepatitis C testing and conduct Research.

Appendix 5: Polling Booth Survey 2011 (Project ORCHID 2013)

Survey Questions	%	Mean
Can you access brand new needles/syringes as much as you need them?	70	
Did you injected in last week?	87.93	
If yes, How many times have you injected in the past week?		22.6
How many times did you inject using a brand new needle/syringe in the past week?	57.99	
Did you sometimes share injecting equipment in the last month? (e.g. cotton, swab, water, cooker).	75.86	
The last time you injected drugs, did you share the needle/syringe (i.e. either pass it on to someone else or use it after someone else used it)?	20	
Are you at risk of getting HIV?	88.14	
Can you access condoms as much as you need them?	85.71	
Did you have sex in the last week?	72.88	
If yes, How many times did you have sex in the past week?		23.7
How many times did you have sex without a condom in the past week?	91.94	
If you have had sex with a regular partner in the last month, did you use a condom every time you had sex with your regular partner in the last month?	34.88	
If you have had sex with a non-regular partner in the last month, did you use a condom every time you had sex with a non-regular partner in the last month?	73.21	