PATTERN OF DRUG USE, PERCEIVED SOCIAL SUPPORT AND MENTAL HEALTH OF FEMALE SEX WORKERS – INTRAVENOUS DRUG USERS IN AIZAWL.

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CERTIFICATE

This is to certify that the present research tittled **"PATTERN OF DRUG USE, PERCEIVED SOCIAL SUPPORT AND MENTAL HEALTH OF FEMALE SEX WORKERS– INTRAVENOUS DRUG USERS IN AIZAWL"** is the bonafide research conducted by P.C.Lalbiakkimi under my supervision. P.C.Lalbiakkimi worked methodologically for her dissertation which is being submitted for the Degree of Master of Philosophy in Psychology of the Mizoram University.

This is to further certify that the research conducted by P.C.Lalbiakkimi has not been submitted in support of an application to this or any other University or an Institute of Learning.

(Dr. ZOENGPARI)
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DECLARATION

I, P.C. Lalbiakkimi, hereby declare that the subject matter of the dissertation, "**Pattern of Drug Use, Perceived Social Support and Mental Health of Female Sex Workers – Intravenous Drug Users in Aizawl**', is the record of work done by me under the guidance of Dr. Zoengpari, Associate Professor, Department of Psychology, Mizoram University.

The contents of this dissertation did not form basis for the award of any previous degree to me or to the best of my knowledge to anybody else, and that the dissertation has not been submitted by me for any research degree in any other University or Institute. References from other have been duly acknowledged.

This is being submitted to Mizoram University for the Degree of Master of Philosophy in Psychology.

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ABBREVIATIONS

AIDS – Acquired Immune Deficiency Syndrome

BBV – Blood Borne Virus

CDS – Centers for Disease Control

CSW – Commercial Sex Worker

FHI – Family Health International

FSW – Female Sex worker

HIV – Human Immune deficiency Virus

ICD-10 – International Statistical Classification of Disease

IDU – Intravenous Drug User

MAP – Monitoring the AIDS Pandemic

MSACS – Mizoram State AIDS Control Society

NCPCR – National Commission for Protection of Child Rights

NGOs – Non – government Organization

PTSD – Post-traumatic Syndrome Disorders

RRTC – Regional Resource and Training Centre

STDs – Sexually Transmitted Diseases

STIs – Sexually Transmitted Infections

UNAIDS – United NationsProgramme on HIV and AIDS

UNESCO –United Nations Educational, Scientific and Cultural Organization

UNODC – United Nations Office on Drugs and Crime

US – United States

USA – United States of America

VOLCOMH – Volunteer for Community Mental Health

WHO – World Health Organization

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CHAPTER – I

INTRODUCTION

Sex work is a global and deeply rooted social phenomenon; substantial disparity exists in its perception, depending on different social and cultural factors (Kramer, 2003). One view is to consider prostitution as a crime that induces violence; such as human trafficking, sexual abuse, rape, physical or verbal abuse, and racial discrimination, including serious violations of human rights (Barry, 1996; Farley, 2006). The other extreme is to consider prostitution as a type of occupation in which the people involved are known as special workers, or "sex workers"(Romans, Potter, Martin, & Herbison, 2001). The term "sex worker" was coined in 1980 by sex worker activist Carol Leigh. Its use became popularized after publication of the anthology, *Sex Work: Writings by Women in the Sex Industry* in 1987, (Delacoste, & Alexander, 1998;BAYSWAN.org. Accessed 2009; Nagle & Routledge, 1997). The term "sex worker" has since spread into much wider use, including in academic publications, by NGOs and labor unions, and by governmental and intergovernmental agencies, such as the World Health Organization (WHO). A broad definition of sex worker would be: as "female, male and transgender adults, young people and children, who receive money or goods in exchange for sexual services, either regularly or occasionally, and who may or may not consciously define those activities as income generating (United Nations "Programme on HIV and AIDS [UNAIDS] Inter-Agency Task Team on Gender and HIV/AIDS, 2005). Sex workers may be male, female, or transgendered (Harcourt& Donovan, 2005). Like many other occupations, sex work is conducted primarily for economic gain (Deering,Shoveller, Tyndall, Montaner, & Shannon, 2011). Some may be full time sex workers i.e. total income comes from sex work and some may be doing it as part time sex work i.e. they may be engaged in some work and part of their income comes from sex work. It can also be defined as provision of sexual services for money or its equivalent (Vandepitte et al, 2006).

Sex work is also sometimes called prostitution, although the term is sometimes viewed as a synonym or euphemism for prostitute, it is more general. Some people use the term to avoid invoking the stigma associated with the word prostitute (Lumby, 2012). The term is strongly opposed, however, by many who are morally opposed to the sex industry, such as social conservatives, anti-prostitution feminists, and other prohibitionists. Such groups view prostitution variously as a crime or as victimization, and see the term "sex work" as legitimizing criminal activity or exploitation as a type of labor (Farley, 2006; Baptie, 2009).

There are obvious differences that separate sex work from other occupations, including the increased risks to sexual health and safety, social and economic vulnerability and a high degree of marginalization and criminalization in many settings (Blanchard et al., 2005; Dandona et al., 2006, Rekart, 2005, Shannon et al., 2008a; &Strathdee et al., 2008). The social stigmatization (Scambler & Paoli, 2008) and lack of legal regulation (Hubbard, Matthews, & Scoular, 2008) are arguably among the main characteristics of sex work that separate it from other professions. The vulnerability of women in sex work to sex work-related harms including high rates of sexually transmitted infections (STIs) and HIV, violence and poverty, and marginalization and isolation from health and social services has been well-documented (Rekart, 2005). Factors related to their mobility, such as extreme poverty and low social support, may heighten their vulnerability to HIV/STIs (Fernandez, 1998; Rangel et al., 2006).

The boundaries of sex work are vague, ranging from erotic displays without physical contact with the client, through to high risk unprotected sexual intercourse with numerous clients. Individuals may occasionally and opportunistically exact a fee or gift for a sexual favor without perceiving themselves to be sex workers, or they may engage more or less full

time in the explicitly commercial provision of sex services. This variability results in a spectrum of implications for public health and health service provision; yet sex work is typically stigmatized and often criminalized (Harcourt& Donovan, 2005).

Sex work today occurs in various different settings. At least 25 types of sex work have been identified according to worksite, principal mode of soliciting clients, or sexual practices. These types of work are often grouped under the headings of 'direct' and 'indirect' sex work (Harcourt & Donovan, 2005). Direct (open /formal) female sex workers (FSWs) are typically women who do define themselves as sex workers and earn their living by selling sex. Indirect (hidden/ clandestine/ informal) FSWs are women for whom sex work is not the first source of income. They may work as waitresses, hairdressers, tailors, massage girls, street vendors, or beer promotion girls and supplement their income by selling sex on a regular basis or occasionally. They do not consider themselves as sex workers and often work outside of known venues for sex work and therefore they are even more difficult to reach than women known as direct sex workers (Harcourt, & Donovan, 2005a; UNAIDS, 2002; UNAIDS, 2003; Family Health International [FHI], 1999; Gysels, Pool, & Nnalisuba, 2002; Wojcicki, 2002; WHO, 2001; Hanenberg, & Rojanapithayakorn, 1998; Aral et al, 2003).Indirect sex work is also less likely to be perceived or to perceive themselves as sex workers (Harcourt & Donovan, 2005). Sex work is not always the sole or primary source of income for these individuals, even in relatively impoverished settings. It can provide additional income for lowly or irregularly paid workers in other industries (Aral et al, 2003). In these cases the transaction may not be recognized as sex work. Consequently the personal and public health risks may be greater than in the “direct” sex industry (Jackson, Highcrest, & Coates, 1992).There are also some indirect sexual services (bondage and discipline, lap dancing, massage) that involve little or no genital contact and therefore have little sexual health risk (Blain, 1994). Even less risky are services such as telephone sex and the various

forms of internet (virtual) sex which only become a public health concern if they precede an actual sexual relationship however, these services are mostly confined to wealthier countries (Harcourt & Donovan, 2005).

The reasons why people take money or gifts for sex are very varied. In some ancient traditions sex work was recognized as the hereditary calling of particular subgroups or castes. In these cases women were "born into prostitution" (Harcourt, & Donovan, 2005). There are echoes of this practice in India and Nepal where descendents of temple dancers (Devadasis) and female court musicians (Nautch girls) still follow their "hereditary" calling, although their ritual significance is greatly diminished (Bhatt, Gurubacharya, & Vadies, 1993; Khanna, Nadkarni, & Bhutani, 1998). Currently most sex work has a strong economic basis, primarily as a source of income for sex workers, but also for dependent kin and associates including pimps, managers, and ancillary workers (Aral et al, 2003). There are many reasons for women becoming sex workers and escorts. There are women who see sex work as their way out of poverty, while they may choose to sell themselves; it is economic necessity that drives them. These are people who are unable to get jobs and are sometimes the only bread winners in the family. Some have stated that they are attracted by the large sums of money they can earn while they are still young. Others see it as a way to pay for university education and further advancement. Most state that they intend to leave the business once they have earned the amount they want or need. They also see themselves as helping men save their marriages by supplying something they cannot get at home, or helping them chase away loneliness when they are on business trips (Schwartz, 2011).

Research on initiation into sex work has made a distinction between voluntary and involuntary sex work (UNESCO, 2002). The former includes women who enter sex work willingly because of poverty or family pressure. The later includes those who are forced into sex work through trafficking, violence or tradition. The dynamics of initiation into sex work

however is far more complex. Many women who enter sex work are not forced physically but do so due to compelling reasons that are beyond their control. Thus this simple dichotomy of "voluntary"and "involuntary" may undermine the complex antecedents that lead women to the sex trade (Saggurti, Sabarwal, Verma, Halli & Jain, 2011). At the other end of the spectrum of sex work are the street walkers. Most of them are addicted to drugs, and many were forced into sex work against their will. However, it's important to avoid generalizing about how women get into sex work. Studies show that large numbers of sex workers were sexually abused during their childhood. It is the fact of the sexual abuse, more than anything else, that seems to underlay how and why some of them become sex workers. These are the people most likely to be addicted to drugs as well as to develop, or already have, serious health problems, not the least of which is HIV as well as other STDs (Schwartz, 2011). Factors related to their mobility, such as extreme poverty and low social support, may heighten their vulnerability to HIV/STIs (Fernandez, 1998, Rangel et al., 2006). Then there are women who see sex work as their way out of poverty. Most enter sex work out of economic necessity (Bucardo, Semple, Fraga-Vallejo, Davila, & Patterson, 2004). While they may choose to sell themselves, it is economic necessity that drives them. These are people who are unable to get jobs and are sometimes the only bread winners in the family (Schwartz, 2011).Studies have also show that large numbers of sex workers were sexually abused during their childhood. It is the fact of the sexual abuse, more than anything else, that seems to underlay how and why some of them become sex workers. These are the people most likely to be addicted to drugs as well as to develop, or already have, serious health problems, not the least of which is HIV as well as other STI's (Schwartz, 2011). Studies to date also indicate that populations of individuals involved in sex work experience high levels of trauma relative to the general population (Farley et al., 2003; Vaddiparti et al. 2006). In a study conducted by Roxburg, Degenhardt, and Copeland (2006) 75% of their sample of street based

sex workers in Sydney, Australia reported experiencing some form of sexual abuse before the age of 16. In many instances exposure to trauma changes an individual's beliefs about themselves, others, and the world. These changes often lead one to feel as if he or she is bad, unsafe, and lacks control over his or her environment and such maladaptive cognitions may put individuals at risk for entering sex work in several ways (Briere, 2002). According to Raphael & Shapiro (2004), if an individual develops the aforementioned maladaptive schemas at an early age, she or he may be vulnerable to recruitment into sex work by pimps (individuals who recruit and manage prostitution transactions) who initially offer the illusion of safety and control. These relationships can develop fast and may soon lead to drug addiction and violence, which prevents the individual from freely exiting the environment. This theory is supported by research indicating that a major reason that individuals continue to work in the sex industry is due to a lack of physical and psychological protection once they leave (Farley et al., 2003). It must however be stated that there are also many individuals engaged in sex work who have not experienced trauma in either childhood or adulthood (Chudakov, Ilan, Belmaker, & Cwikel, 2002).

Sex work is also often linked with socio-demographic disadvantages like minority ethnic status, low income, homelessness and low education level (Medrano, Hatch, Zule, & Desmond, 2003; Gilchrist, Gruer, & Atkinson, 2005). A study conducted among female street-based sex workers in greater Sydney, Australia by Roxburgh, Degenhardt, Larance & Copeland (2005), revealed that the median years of school education completed was nine. Fourteen percent reported having no fixed address, or currently homeless and nearly half the sample reported being homeless within the past 12 months. Income apart from sex work in the past month came from several sources, and the vast majority reported sex work as their main source of income in the past month. More than half of the sample reported moving out of home before age 16. Just fewer than half the sample reported the money as being the most

enjoyable aspect of their work. Furthermore, many individuals in the sex industry are reportedly happy with their job and do not wish to leave (Chudakov et al, 2002). These individuals indicate that there are many factors that influence one's decision to enter into and continue sex work.

Prostitution, or some aspect of it such as soliciting, is illegal in many countries, but the law is an ineffective means of eliminating its negative aspects, often resulting in the criminalization of sex workers (Vanwesenbeeck, 2001; Government of Quebec, 2004; UNAIDS, 2002; Ngugi, Branigan, & Jackson, 1999; Lewis, Bamber, & Waugh, 1997; Morton et al, 2002). Criminalization leads to violence; police harassment; increased HIV and STI risk; reduced access to services; psychological disease; drug use; poor self-esteem; loss of family and friends; work-related mortality; and restrictions on travel, employment, housing, and parenting (Government of Quebec, 2004; UNAIDS, 2002; Pauw, & Brener, 2003; WHO, 2001; Ngugi et al, 1999; Blankenship, & Koester, 2002; Lowndes, Alary, & Platt, 2003; Ahmad, 2001; Rio, 1991; Snell, 1994).

Studies from across the world have also suggested that women enter sex work for variety of reasons and mostly related to lack of economic and social resources. While abject poverty was cited as the main cause by most women, lack of education, financial freedom, domestic violence, family responsibility, lack of support by family members and harassment and abuse in society and in the workplace, were other inter-linked factors facilitating involvement into sex work (Saggurti et al, 2011). Wawer, Podhisita, Kanungsukkasem, Pramualratana, & McNamara (1996), Day (1988), and de Zalduondo (1991), reported that in Thailand, broad contextual factors such as the responsibility of women in the household economy, lack of economic development and migration from less developed areas to cities are the major reasons for involvement in sex work. Research in Russia shows that lack of employment opportunities within the country is a major reason for women entering sex work

(Aral et al., 2003). Specific individual level factors such as lack of money, economic necessity and "survival sex" are reported as reasons for involvement in sex work in China (Hong and Li, 2008), Mexico and the United States (US) (Bucardo et al., 2004; Whelehan, 2001). Other reasons are domestic violence in the US (Dalla, 2001; Sharpe, 1998) and coercion and deception in Vietnam (Busza, 2004). One study among street-based sex workers in greater Sydney reported that the majority of participants reported starting sex work because they needed the money for drugs, and that this was also the main reason for remaining in the sex industry and just under half the sample reported the money as being the most enjoyable aspect of their work, and the biggest concern for approximately one-third of the sample was the provision of a safe work environment (such as safe houses) (Roxburgh et al., 2005).

Sex work in India is clandestine (Dandona et al., 2006). Previous research about this topic in India documented that the decision to enter into sex work is largely involuntary. Some women choose it knowingly but find the conditions unacceptable. Others are coerced in the beginning and then decide to continue with it (Nag, 2006). Studies in India show that women either involve in sex work involuntarily, often due to economic reasons (Blanchard et al., 2005)or they are forced into sex work and that woman who join sex work for economic reasons belong to particular social, caste and class groups (Dandona et al., 2006; Silverman et al., 2007). Studies that have profiled the socio-demographic characteristics of sex workers (Somaiya, Awate, & Bhore, 1990; Salunke, Shaukat, Hira, & Jagtap, 1998; Dandona et al., 2006; Ramesh et al., 2008; Reza-Paul et al., 2008)document that the majority of women in sex work are illiterates, belong to lower castes, are destitute and/or are from poor economic backgrounds. The sale of women and children into the sex trade or sex trafficking or immigration from Nepal and Bangladesh are other reasons for the increasing numbers of girls

and women entering the sex trade in India (Chattopadhyay & McKaig, 2004; Silverman et al., 2007).

Sex Work and Substance/Drug Use

The last two decades have seen an increasing interest in the study of sex workers as a marginalized group at increased risk for poorer mental and physical health outcomes, inequitable access to housing and the problematic use of illicit drugs (Vanwesenbeeck, 2001). Substance/drug use is prevalent among Female Sex Workers (FSWs). Substance/drug dependency according to International Statistical Classification of Disease and Related Health Problems (ICD-10) is a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state. The dependence syndrome may be present for a specific psychoactive (e.g., tobacco, alcohol, or diazepam), for a class of substances (e.g., opioids, drugs), or for a wider range of pharmacologically different psychoactive substances). Sex work is also associated with a host of psychosocial vulnerabilities, including exposure to childhood physical abuse, childhood sexual abuse, and interpersonal violence in adulthood and substance uses.

Much of the research literature suggests either that sex workers use substances to cope with having to prostitute themselves, or that they were misusing substances prior to entering the sex industry and turned to sex work in order to support their addiction (Farley, 2004; Inciardi, Lockwood, & Pottinger, 1993). Although substance use may occur prior to entry into sex work, substance misuse is a significant factor in maintaining sex work involvement, given that "substance use is woven into the sex work life-style in multiple respects"

(Nuttbrock, Rosenblum, Magura, Villano, & Wallace, 2004). Once addiction develops, continued involvement in sex work is required to support it (Nadon, Koverola & Schluderman, 1998). The link between substance abuse and sex work is hard to pinpoint though there are a variety of factors that are common to both including homelessness, unstable family lives, socio-economic deprivation, disrupted schooling, local authority care and confidence and esteem issues (May & Hunter, 2006). Sexual risk behavior related to drug use should not just be considered within the bounds of sex work. While the impact of drugs on sexual behavior may vary by drug, length of use, sexual identity, and other factors, there are a number of effects related to drug use that could influence unsafe sexual behavior(http://www.avert.org/hiv-injecting-drug-users.htm).

Research literature has suggested that substance use is endemic among female street-based sex workers in large metropolitan areas (Goldstein, 1979; Plant, 1990). The National Institute of Justice, U.S.A, in 1998, reported a study conducted in Atlanta in 1997, where 92.5% of the women arrested for prostitution were tested as positive for illegal drugs, high levels of alcohol, marijuana, cocaine and heroin use, in particular, have been observed in this population, with a significant minority using amounts of these substances indicative of dependence (Gossop, Griffiths, Powis, & Strang, 1992; Gossop, Powis, Griffiths, & Strang 1994; Gossop et al., 1995). One study among street-based sex workers in greater Sydney reported that the majority of participants reported starting sex work because they needed the money for drugs, and this was also the main reason for remaining in the sex industry (Roxburg et al, 2006). FSWs may be more likely to acquiesce to requests for unsafe sex in order to earn more money to support their drug addiction (Strathdee et al, 2008). Although the link between substance abuse and sex work is hard to pinpoint because of a variety of other factors that are common to both including homelessness, unstable family lives, socio-economic deprivation, disrupted schooling, local authority care and confidence and esteem

issues (May & Hunter, 2006).Research literature has revealed that substance abuse is one of the major factors.

Injection drug use (IDU) is common in sex workers in many locations (Vanwesenbeeck, 2001; Rekart, 2002; Aral, & St Lawrence, 2002; Romero-Daza, Weeks, & Singer, 2003; Braitstein et al, 2003; UNAIDS, 2002; Persaud, Klaskala, Baum, & Duncan, 2000). Although injecting drug users constitute a risk group in themselves, there is also an overlap between drug addiction and those involved in sex work (May & Hunter, 2006). Although there are several studies examining the prevalence of drug use and risk behavior of FSWs-IDU, there has been less attention given on the pattern and types of their drug use. FSW-IDUs demonstrate exclusive sensitivity due to being able contract infectious diseases from the routes of both the sexual and injection. FSW-IDUs exhibit particular vulnerability because they can acquire communicable infections through both the sexual and the injection routes; this subgroup may also act as a bridge through which HIV and other sexually transmitted infections (STIs) are spread from higher-prevalence to lower-prevalence populations (Strathdee et al, 2011; Hamers, & Downs, 2003; Liu, Grusky, Li, & Ma, 2006). FSWs are even more likely to accept a demand for unprotected sex to acquire more money in order to sustain their drug use and may be more likely to acquiesce to requests for unsafe sex in order to earn more money to support their drug addiction (Strathdee et al, 2008). Individuals who fall into both categories are therefore particularly vulnerable to HIV and are perhaps doubly stigmatized (May & Hunter, 2006).

The overlap between sex work and injecting drug use is considered to be among the most dangerous conditions for rapid spread of HIV and other STIs. A qualitative study conducted among FSWs in Hanoi, Viet Nam, revealed that drug use is common, and many FSWs inject drugs, especially street-based sex workers (Tran, Detels, Hien, Long, & Nga, 2004). A study among female street-based sex workers in greater Sydney also reported that

around half of the samples studied mentioned injecting drugs before initiating sex work and one-fourth of the samples stated starting sex work within 3 years of their first injecting drug and over one-quarter of the sample reported starting sex work prior to injecting drug use, and approximately three-quarters reported that their drug use had increased since they started sex work (Roxburgh et al, 2005). Research literature on FSWs who are also injecting drugs range from 32% in Hanoi, Vietnam (Tran, Detels, Long, Van, & Lan, 2005), 58% in Yunnan, China (Chen et al, 2005), 56% and 65% in Vancouver and Montreal, Canada, respectively (Shannon, Kerr, Bright, Gibson, & Tyndall, 2008; Weber, Boivin, Blais, Haley, & Roy, 2002), 51% among seven cities in the United States (Centers for Disease Control [CDC], 1987), 71% in Glasgow, Scotland (McKeganey, Barnard, Leyland, Coote, & Follet, 1992) and 82% in Amsterdam, the Netherlands (van den Hoek, van Haastrecht, Scheeringa-Troost, Goudsmit, & Coutinho, 1989). Although estimates vary widely by region, overlap between FSW and IDU populations can be considerable. The risks faced by sex workers are further compounded by drug use, with studies documenting associations between sex workers' drug use and the poorer safety outcome of the sex encounter (Minichiello, Marino, Khan, & Browne, 2003), and risk of BBV transmission due to injecting drug use and sharing of needles (Gossop, Powis, Griffiths, & Strang, 1995). FSW-IDUs had higher STI levels, engaged in riskier behaviors and were more vulnerable to having unsafe sex with clients compared to other FSWs (Strathdee et al, 2008).

The use of psychoactive substances is popularly believed to loosen sexual inhibitions and contribute to increased sexual activity. However, the actual direct and indirect effects of alcohol and drugs on sexual function are still not fully understood. Research on the /impact of substance use and abuse on human sexual function has some limitations due to small and non - generalizable samples, lack of controlled research design or comparison groups, reliance on self-reported data, or failure to specify or control for dosage effects, expectancies, social

effects, and multiple substance use. The lack of controls on physiological, psychological, environmental and cultural factors that could alter the relationship between substance use and sexual function also make it difficult to draw conclusions about direct causal mechanisms. Despite these limitations, the review of one article suggests that chronic alcohol and drug abuse have clear deleterious effects on sexual functioning for many individuals (Peugh & Belenko, 2001). The significant overlap was found in involvement in all of the behaviors including- smoking cigarettes, getting drunk on alcohol, use of marijuana, and having had sexual intercourse with log-linear procedures (Corwyn,Benda , Clowers, & Liu,1999). Sexual risk behavior related to drug use should not just be considered within the bounds of sex work. While the impact of drugs on sexual behavior may vary by drug, length of use, sexual identity, and other factors, there are a number of effects related to drug use that could influence unsafe sexual behavior and HIV transmission may be facilitated among drug users and their sexual partners if the user is sexually stimulated or disinhibited by drugs (http://www.avert.org/hiv-injecting-drug-users.htm). Although substance use may occur prior to entry into sex work, substance misuse is a significant factor in maintaining sex work involvement, given that "substance use is woven into the sex work life-style in multiple respects" (Nuttbrock et al, 2004). Once addiction develops, continued involvement in sex work is required to support it (Nadon et al, 1998). Furthermore, existing research on FSW's has demonstrated clear and consistent associations between the sale of sex, substance abuse and HIV risk. So, despite the reason of their commencement into sex work, it is necessary to study the pattern and types of drug use among FSW-IDUs to have a more in-depth understanding about their risk behavior.

Mental Health

Global literature suggests that, compared with the general population, FSWs generally have relatively higher rates of psychopathology and other health-related risks, including higher rates of depressive symptoms, drug use, and psychological distress (Alegria et al., 1994; El-Bassel et al., 1997; El-Bassel, Witte, Wada, Gilbert, & Wallace, 2001; Jones et al., 1998; Surratt, Kurtz, Weaver, & Inciardi, 2005). The mental health of sex workers has been found to be influenced by violence of client and rapes in some settings which in turn develops risk of stress, anxiety, depression, and posttraumatic stress disorder, and even use of alcohol or drugs as a coping technique (Carter & Dala, 2006).Exposure to early sexual abuse and destructive parenting result in women running away from home which in turn leads to increased participation in deviant activities, including prostitution (Simons & Whitbeck, 1991). In adults, interpersonal network influences also play a critical role in a culmination of events that result in a woman's first experience with prostitution (Dalla, 2001).

The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2010). Prostitution is associated with a host of psychosocial vulnerabilities, including exposure to childhood physical abuse, childhood sexual abuse, and interpersonal violence in adulthood and substance uses (Burnette et al, 2008). In some settings, the daily threat of client violence and sexual assault (Farley, Lynne, & Cotton 2005) affects mental health outcomes among sex workers, increasing risk of stress and anxiety, depression, and posttraumatic stress disorder, and the use of alcohol or drugs as a coping strategy (Carter & Dala, 2006). These issues has even been aggravated by unceasing police inspection, agitation, seizure of money, and gender-based assault (Wolffers & Ivan, 2001;

Katsulis, 2009). Constant police surveillance, harassment, extortion, and gender-based violence at the hands of police exacerbate these issues (Wolffers & Ivan, 2001; Katsulis 2009). However, studies which examined the mental health of FSWs had generally conducted among only a general population of FSWs, but less attention has been paid on the mental health status of a more specific population of FSWs i.e., FSWs-IDU.

Research indicates that mental health problems are prevalent among sex workers (Alegria et al., 1994) and it has been suggested that sex workers have high rates of psychological symptoms (Romans et al, 2001). Sex work either creates a conducive atmosphere for the development of psychopathology or maintains the growth of psychopathology (Akinnawo, 1995).Research has shown that most women do not choose prostitution; rather, they are forced into this type of work because of drug addiction, poverty, or lack of education (Romero-Daza, Weeks, & Singer, 1998-99; Williamson, 2002). These factors, in addition to their lives on the streets, expose sex workers to a number of health problems other than, or in addition to, HIV/AIDS and sexually transmitted diseases (STDs) (Baker, Case, &Policicchio, 2003). FSWs are an especially vulnerable population for psychological disorders, as their life is enmeshed with substance use, violent victimization, social or economic vulnerability and other negative events (Surratt,Kurtz, Chen, & Mooss, 2011). Women, who have been subjected to trafficking and forced into service, including sex work, are more likely to suffer multiple physical and mental health problems than the general female population, according to a recent study (Maki, 2007).A study conducted among female commercial sex workers who were consecutive patients attending the psychiatry outpatient department of the Victoria hospital, Bangalore, India found that seventy-eight out of 100 samples had psychological morbidity (depression and adjustment disorder) (Pandiyan, Chandrasekhar, &Madhusudhan, 2012). Psychiatric morbidity is also found to be more among female commercial sex workers (El-Bassel et al, 1997). A study

which describes the self-reported mental and physical health of female sex workers in three industry sectors (licensed brothels (n=102), as private sole operators (n=103) and illegally (n=42) in Queensland, Australia, revealed that overall, there were few differences in the physical health of women from different industry sectors. Illegal (and predominantly street-based) sex workers were four times more likely to report poor mental health (95% CI 1.94-11.58) with some of this difference attributable to the particular social background of this group. Much of the increased levels of poor mental health among illegal sex workers were associated with more negative experiences before, and subsequent to entering the sex industry. These patterns were not seen among women from the legal industry sectors. This research suggests that illegal, street-based sex workers, from whom many previous results have been derived, may show patterns of disadvantage, and health outcomes not seen in sex workers from other industry sectors (Seib, Fischer, & Najman, 2009).One study which examined histories of past emotional, physical, and sexual abuse as correlates of current psychological distress using data from 916 female sex workers (FSWs) who were enrolled in a safer-sex behavioral intervention in Tijuana and Ciudad (Cd.) Juarez, Mexico, revealed that all forms of past abuse predicted higher levels of depressive symptoms, and physical and sexual abuse were significantly associated with higher levels of somatic symptoms. Social support was also significantly associated with fewer symptoms of distress; however, it was not shown to moderate the relationship between abuse histories and distress (Ulibarri et al, 2009). One study which examined drug use and dependence and associated risks among female street-based sex workers in greater Sydney, Australia found that risk factors associated with developing problematic drug use were prevalent. Child sexual abuse, leaving home before the age of 16, and exposure to multiple traumas was common. Depression and posttraumatic stress disorder were also prevalent. A substantial minority reported cocaine

dependence which was associated with engaging in sex and injecting risk behaviors (Roxburgh, Degenhardt, Copeland, & Larance, 2008).

Only a few researchers have examined the mental health problems among this particularly vulnerable population (Vanwesenbeeck, 2001; Surratt et al, 2011; Lau, Tsui, Ho, Wong, & Yang, 2010). Based upon existing studies, it is found that FSWs had a higher rate of mental health problems, including depressive symptoms, suicidal behaviors, anxiety, and post-traumatic syndrome disorders (PTSD) compared to the general woman population (Li, Li, & Stanton, 2010; El-Bassel et al., 1997; Alegria et al., 1994; Rossler et al., 2010). In a study conducted among Puerto Rican sex workers, Alegria et al. (1994) indicated that 70.1% of them had depressive symptoms. A number of physical or psychological problems, such as rape, depression, and tuberculosis were also identified among inner-sex city workers in a large Midwest City (Baker et al, 2003). FSWs who reported violence perpetuated by their partners had serious health repercussions including elevated risks of HIV infection, unwanted pregnancy or abortion, depression, substance abuse, suicide and even death (Zhang, et al., 2011; Surratt et al., 2011; WHO, 2002). The last two decades have seen an increasing interest in the study of sex workers as a marginalized group at increased risk for poorer mental and physical health outcomes, inequitable access to housing and the problematic use of illicit drugs (Vanwesenbeeck, 2001).

Perceived Social Support

Social support is usually defined as the existence of people on whom we can rely, people who let us know that they care about, value, and love us. A broad definition of social support is the "resources provided by others" (Cohen and Syme, 1985). Studies have indicated that people with low support have more suicidal ideationand more alcohol and drug

problems. In stressful times, social support helps people reduce psychological distress (e.g., anxiety or depression) (Taylor, 2011) and social support has been found to promote psychological adjustment in conditions with chronic high stress like HIV (Turner-Cobb et al, 2002), rheumatoid arthritis (Goodenow, Reisine, & Grady, 1990), cancer (Penninx et al, 1998), stroke (Robertson, & Suinn, 1968), and coronary artery disease (Holahan, Moos, Holahan, & Brennan, 1997). Many studies have reported a beneficial effect of social support on mental and physical health in adults, including the elderly (Berkman, 1985; Berkman & Syme, 1979; Chipperfield, 1996; Choi & Wodarski, 1996; Commerford & Reznikoff, 1996; Cutrona & Russell, 1987; Friedman, 1993; Glass, Matchar, Belyea & Feussner, 1993; Henderson, et al., 1997; House, Robbins, & Metzner, 1982; Krause, 1987b; Matt & Dean, 1993). However, social support is a complex, as demonstrated by reports that the presence of a partner or close friends, rather than simply being around family members or others, is associated with perceived social support and reduced stress levels (Burgoyne & Saunders, 2000).

In a study conducted among female sex workers in South Korea the direct factors for STI prevalence among this population were related to safe sex, indirect factors such as social support were also significant (Jung, 2012). According to Dalla, Xia, and Kennedy (2003) examined various relationships among coping strategies for stressful events (e.g., locus of control and social support) and depression among American street-level sex workers and they found that lack of social support (or inability to access supportive relations) was related to a lower sense of agency or competence in affecting one's environment (what they termed external locus of control) and in turn, this external locus of control was associated with higher levels of depression for the women. So, although they did not directly measure the relation between social support and depression, they did provide evidence for how social support may indirectly affect coping with psychological distress. In another study of Nepali former sex

workers diagnosed with HIV, researchers found seeking social support was the most common form of coping style, and this resulted in lower rates of perceived stress (Eller & Mahat, 2003). One study describes social support that Mexican female sex workers who inject drugs (FSW-IDUs) receive and recovery efforts in the context of relationships with family and intimate partners. FSW-IDUs received instrumental and emotional social support, which positively and negatively influenced recovery efforts. Participants reported how some intimate partners provided conflicting positive and negative support during recovery attempts. Problematic support (i.e., well-intended support with unintended consequences) occurred in strained family relationships, limiting the positive effects of support (Hiller, Syvertsen, Lozada, & Ojeda, 2013).

Social support can come from a variety of sources, including (but not limited to): family, friends, romantic partners, pets, community ties, and coworkers (Taylor, 2011). Sources of support can be natural (e.g., family and friends) or more formal (e.g., mental health specialists or community organizations) (Hogan, Linden, & Najarian, 2002). Support from a romantic partner is associated with health benefits, particularly for men (Kiecolt-Glaser, & Newton, 2001). Early familial social support has been shown to be important in children's abilities to develop social competencies (Repetti, Taylor, & Seeman, 2002), and supportive parental relationships have also had benefits for college-aged students (Valentiner, Holahan, & Moos, 1994). Social support groups can be a source of informational support, by providing valuable educational information, and emotional support, including encouragement from people experiencing similar circumstances (Helgeson, & Cohen, 1996; Gottlieb, 1988). Studies have generally found beneficial effects for social support group interventions for various conditions (Hogan et al, 2002), including Internet support groups (Hazzard, Celano, Collins, & Markov, 2002).

Measures of social support usually include support from both family and friends (DuPertuis, Aldwin, & Bossé, 2001). Studies have found that interaction with friends and with family can produce different and distinctive patterns in reliability of support (Seeman & Berkman, 1988), satisfaction with support (Rook, 1987), morale (Crohan & Antonucci, 1989), arousal and affect (Felton & Berry, 1992; Larson, Mannell, & Zuzanek, 1986), depression (Potts, 1997), and psychological distress (Dean, Kolody, Wood, & Ensel, 1989; Matt & Dean, 1993). For example, Cantor (1979) found that family, both partners and children, were the first choice of the elderly when requesting tangible aid. However, when in need of help with social issues, such as loneliness, friends were the preferred support providers. Several reasons have been proposed why these two relationships differ. One is the sense of continuity with the past that friends can provide (Lewittes, 1989). Children may make less adequate companions because, unlike peers, they do not share the same history and life perspective with their parents (Arling, 1976). A second reason is that friendships tend to be a matter of choice rather than of birth. People choose friends because of shared interest and desire for contact (Crohan & Antonucci, 1989; Lee & Ishii-Kuntz, 1987; Wood & Robertson, 1978). The relationship itself can help well-being: to be a friend means that one is desirable as a friend (Arling, 1976). Finally, friendships share a form of reciprocity that may be absent in family relationships (Crohan & Antonucci, 1989; Wenger, 1990). Thompson and Heller (1990) examined both physical and psychological outcomes in female subjects with varying degrees of support from both family and friends. They also measured both perceived support as well as frequency of interaction. They found that having lower qualitative support from the family was associated with worse psychological health. Despite the reframing of 'prostitution' as 'sex work' in research and advocacy literature, the stigma associated with this activity persists. One study examined how independent female sex workers advertising online as "escorts" perceive and manage the stigma associated with their work, and how these

coping strategies impact their personal relationships. Women who engaged in selective disclosure regarding sex work reported greater access to social support, while women who concealed their work from most people often reported feeling lonely and socially isolated. Escorts' stigma coping strategies may have significant impact on their social relationships and access to social support (Koken, 2012). Despite the prevalence of mental health problems among female sex workers, little research has been conducted about their social support.

Most women do not choose sex work; rather, they are forced into this type of work because of lack of education (Romero-Daza, Weeks, & Singer, 1998-99; Williamson, 2002), financial freedom, domestic violence, family responsibility, lack of support by family members and harassment and abuse in society and in the workplace and drug dependency, these factors, in addition to their lives on the streets, expose sex workers to a number of health problems other than, or in addition to, HIV/AIDS and sexually transmitted diseases (STDs) (Baker, Case, &Policicchio, 2003). FSWs are also especially vulnerable population for psychological disorders, as their life is enmeshed with substance use, violent victimization, social or economic vulnerability and other negative events (Surratt,Kurtz, Chen, & Mooss, 2011).Commercial sex either creates a conducive atmosphere for the development of psychopathology or maintains the growth of psychopathology (Akinnawo, 1995). Women, who have been subjected to trafficking and forced into service, including sex work, are more likely to suffer multiple physical and mental health problems than the general female population, according to a recent study (Sara Maki, 2007).

Sex work is widespread in India, although it is currently a contentious issue (Casciani & Dominic, 2009). In 2007, the Ministry of Women and Child Development reported the presence of over 3 million female sex workers in India, with 35.47 percent of them entering the trade before the age of 18 years (UNODC, 2007). An estimated 0.6% to 0.7% of the female adult urban populations are engaged in commercial sexual transactions

(Chandrasekaran et al, 2006). Sex work in India is clandestine (Dandona et al., 2006). Previous research about this topic in India documented that the decision to enter into sex work is largely involuntary. Some women choose it knowingly but find the conditions unacceptable. Others are coerced in the beginning and then decide to continue with it (Nag, 2006). Studies in India show that women either involve in sex work involuntarily, often due to economic reasons (Blanchard et al., 2005) or they are forced into sex work (Dandona et al., 2006; Silverman et al., 2007). Women who join sex work for economic reasons belong to particular social, caste and class groups. Studies that have profiled the socio-demographic characteristics of sex workers (Somaiya, Awate, & Bhore, 1990; Salunke, Shaukat, Hira, & Jagtap, 1998; Dandona et al., 2006; Ramesh et al., 2008; Reza-Paul et al., 2008) document that the majority of women in sex work are illiterates, belong to lower castes, are destitute and/or are from poor economic backgrounds. The sale of women and children into the sex trade or sex trafficking or immigration from Nepal and Bangladesh are other reasons for the increasing numbers of girls and women entering the sex trade in India (Chattopadhyay & McKaig, 2004; Silverman et al., 2007). One study suggested that women enter sex work for variety of reasons and mostly related to lack of economic and social resources. While abject poverty was cited as the main cause by almost three-fourths of the women interviewed, lack of education, financial freedom, domestic violence, family responsibility, lack of support by family members and harassment and abuse in society and in the workplace, were other inter-linked factors facilitating involvement into sex work. Some women reported that they were pushed into sex work by deception or force by known or unknown persons (Saggurti, Sabarwal, Verma, Halli & Jain, 2011). A study conducted among one hundred consecutive female sex workers with alcohol and drug abuse patients attending the psychiatric OPD at Victoria hospital, Bangalore found out that fifty of them were illiterate (Pandiyan, Chandrasekhar, & Madhusudhan, 2012). Female sex workers in India are a

traditionally stigmatized group, with high prevalence of HIV (Chandrasekaran et al, 2006) and levels of stigma and violence that relate to the context of their work (Blanchard et al, 2005). Findings from a study conducted among female sex workers who were economically backward stated that an important element responsible for commencing sex work were lack of education, lack of family support and deficit of capability to accomplish their primary needs (Chattopadhyay, Bandyopadhyay, & Duttagupta, 1994). Among the total reported AIDS cases in India nearly 85% of infections were transmitted by sexual route of transmission. Sexual route is one of the most common routes of transmission as reflected by the statistics.

Mizoram, the 23rd state of the Indian Union is located in the North Eastern corner bordered by Bangladesh in the West and Myanmar in the East, and also share Inter-State border with Assam, Tripura and Manipur. According to 2011 census, the total population of Mizoram is 891058. Commercial Sex Work, which was not known in the community, started to become evident in the early '70's in the state capital, Aizawl. The modus operandi of the Female Sex Workers (FSWs) was very distinct from that of other places. There were no specific Red Light areas and brothels so the FSW population did not operate from a particular location and there was no system of madams and pimps and so they operated on theirown. The same is the scenario today, there are still no specific Red Light areas and the FSWs are still soliciting on streets and roadsides and the local hotels are mainly the venue for sex work. The sex trade is mainly transient in nature and street based.

Although commercial sex work has been a feature of Mizo society for a long time there are no organized or recognized brothels in Mizoram. A systematic survey to assess its magnitude is yet to be conducted. The Social Welfare Department in 1995 documented four categories of sex workers in Aizawl together with an estimation of numbers involved. The survey reported 300 'high class' sex workers with clients from the higher social group, 470

'low class' sex workers working in the streets and hotels , 70 'secret service' sex workers , office working girls trying to earn extra income, and 40 'senior service' sex workers who were married women. Assuming an average of 3 clients per sex worker per day the department estimates 2,460 sexual contacts daily with commercial sex workers in Aizawl. Survey and Case studies conducted by Protective Home and Human Rights and Law Network suggested the factors to be conductive to prostitution in Mizoram, viz, Broken family, lack of parental skills and neglect of children, delinquency, bad influences by peer, illegitimate pregnancy, illicit sexual urge, desire for easy life, loose character, poverty, unemployment, alcohol and drug addiction, domestic violence (Aus AID, 1999).). A rapid situational assessment of the current drug abuse and HIV/AIDS scenario amongst substance users in Mizoram conducted by Regional Resource and Training Centre (RRTC) Mizoram in 2005 shows that many Male Injecting Drug Users have unprotected sexual contact with the Female Sex workers in Mizoram.

Sex Workers enter into this profession voluntarily due to various reasons. They are mainly from dysfunctional and broken families, low socio economic strata and often with poor education. Poverty is reported to be a major factor for many girls and women. This is especially so for those from the remote poor rural areas of Mizoram and for many from Myanmar. Another distinct feature of commercial sex work in Mizoram is that it may be considered to be closely interlinked with substance abuse. The need to support a drug habit which is associated with the commencement of commercial sex work is well documented (VOLCOMH, 2003).

There are some authentic papers on sex work and related issues - Situational Analysis (Kanth, 1998), Legal aspect (Marli, 1998), Historical aspect of Immoral Traffic (Zorammawia 1998), and Immoral Trafficking (Lalparmawii, 1998). However, most of the writings and presentations related to sex work refer to the Social Welfare Department

document of 1995, which is based on the case study of 122 inmates admitted to Protective Home, the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram. This study though indicative of the situation that prevails in Mizoram then has not been updated. At the same time one of the most important suggestions of this study was the need for a systematic and in-depth study (Lalparmawii, 1998).

Since then a study of "Commercial Sex Workers in Mizoram" was conducted based on 30 Female sex workers as a sample. (Vansangpuii, 2004). The Human Right and Law Network have also conducted a survey on Sex workers identifying 218 Sex Workers. The identified Sex workers were classified into different categories and also identified several causal factors for sex work in Mizoram (Ruatfela nu, 2004). According to C.A.R.E, World Vision, (2003), most of them get married at one point or the other in their life after they became FSW. They are from differentplaces of the state and also from outside the state and so most of them do not have any permanent or regular address. They move from one place to another and doing their work according to convenience and the Sex workers in Mizoram use their money for buying drugs, clothes, ornaments and make up and they rarely save. Research and surveys done on CSW's has revealed that the health seeking behavior and knowledge of HIV is very low in the CSW population. Also that the attitude of the communities towards CSW's is negative. These studies have thrown light on an issue that is generally not discussed in Mizoram. This paucity of relevant literature reveals that there is need to systematically document the problems and needs of Female Sex workers in Mizoram.

CHAPTER – II

STATEMENT OF THE PROBLEM

Like many other occupations, sex work is conducted primarily for economic gain (Deering et al, 2011).There are obvious differences that separate sex work from other occupations, including the increased risks to sexual health and safety, social and economic vulnerability and a high degree of marginalization and criminalization in many settings (Blanchard et al.,2005; Dandona et al., 2006, Rekart, 2005, Shannon et al., 2008a and Strathdee et al., 2008). The social stigmatization (Scambler & Paoli, 2008) and lack of legal regulation (Hubbard et al., Matthews, & Scoular, 2008) are arguably among the main characteristics of sex work that separate it from other professions. The vulnerability of women in sex work to sex work-related harms including high rates of sexually transmitted infections (STIs) and HIV, violence and poverty, and marginalization and isolation from health and social services has been well-documented (Rekart, 2005)and studies in India have also suggested that women enter sex work for variety of reasons and mostly related to lack of economic and social resources. While abject poverty is cited as the main cause by most women, lack of education, financial freedom, domestic violence, family responsibility, lack of support by family members and harassment and abuse in society and in the workplace, were other inter-linked factors facilitating involvement into sex work (Saggurti, Sabarwal, Verma, Halli & Jain, 2011).Prostitution, or some aspect of it such as soliciting, is illegal in many countries, but the law is an ineffective means of eliminating its negative aspects, often resulting in the criminalization of sex workers (UNAIDS, 2002). Studies have indicated that criminalization leads to violence, police harassment, increased HIV and STI risk, reduced access to services, psychological disease, drug use; poor self-esteem, loss of family and friends, work-related mortality, and restrictions on travel, employment, housing, and parenting (Government of Quebec, 2004; UNAIDS, 2002; Pauw, & Brener, 2003; WHO, 2001; Ngugi et al, 1999; Blankenship, & Koester, 2002; Lowndes et al, 2003; Ahmad, 2001; Rio, 1991; Snell, 1994).

Much of research literature suggests either that sex workers use substances to cope with having to prostitute themselves, or that they were misusing substances prior to entering the sex industry and turned to sex work in order to support their addiction. Drug use has been found to be an important antecedent to entry into street-based sex work for women (Malta et al., 2008) and qualitative and ethnographic studies have also documented that many women depend on income from sex work to sustain drug use or to gain access to other commodities such as food and shelter (Aral & St. Lawrence, 2002; Shannon et al., 2008a;Strathdee et al., 2008).

The link between substance abuse and sex work is hard to pinpoint though there are a variety of factors that are common to both including homelessness, unstable family lives, socio-economic deprivation, disrupted schooling, local authority care and confidence and esteem issues (May & Hunter, 2006). A dependence on sex work for income in the context of drug use can have a substantial impact on sex workers' health, safety and well-being. Female sex workers (FSWs) who use drugs may earn less money than their non-drug-using counterparts, with increased pressures in negotiating prices due to immediacy of drug withdrawal and need to sustain drug habit. Concurrently, FSWs who use drugs or with increased dependence on drugs may also be more susceptible to agreeing to clients' desires for sexual practices which can earn more money but carry higher risk for HIV/STIs (Aral & St. Lawrence, 2002). Drug-injecting street-based FSWs are the highest risk sex worker group for HIV infection, and potentially serve as a major bridge through their clients to the general population (Tran et al, 2004). Further, direct and indirect drug-sharing practices between sex workers and clients have been shown to increase the likelihood of clients offering and workers accepting more money for unprotected sex (Shannon et al., 2008). FSW-IDUs had higher STI levels, engaged in riskier behaviors and were more vulnerable to having unsafe sex with clients compared to other FSWs (Strathdee et al, 2008). Although substance use may

occur prior to entry into sex work, substance misuse is a significant factor in maintaining sex work involvement (Nuttbrock et al, 2004). Furthermore, existing research on FSW's has demonstrated clear and consistent associations between the sale of sex, substance abuse and HIV risk. The use of psychoactive substances is popularly believed to loosen sexual inhibitions and contribute to increased sexual activity. However, the actual direct and indirect effects of alcohol and drugs on sexual function are still not fully understood. Despite some limitations, the review of one article suggests that chronic alcohol and drug abuse have clear deleterious effects on sexual functioning for many individuals (Peugh & Belenko, 2001).

Sex work is also associated with a host of psychosocial vulnerabilities, including exposure to childhood physical abuse, childhood sexual abuse, and interpersonal violence in adulthood and substance uses. Studies have confirmed that exposure to early sexual abuse and destructive parenting result in women running away from home which in turn leads to increased participation in deviant activities, including prostitution (Dalla, 2001). Some studies attribute childhood sexual abuse as having a significant correlation with prostitution. In adults, interpersonal network influences also play a critical role in a culmination of events that result in a woman's first experience with prostitution (Dalla, 2001).

Studies which have been conducted among FSWs have only centered on their unprotected sexual behavior (e.g., inconsistent condom use) and its effects e.g., sexually transmitted diseases and HIV infection). Also, although there are several studies examining the prevalence of drug use and risk behavior of FSWs-IDU, there has been less attention given on the pattern and types of their drug use.Despite the overlapping nature of sex work and injecting drug use (IDU), little research has been conducted on the subgroup of women who engage in both behaviors.FSW-IDUs exhibit particular vulnerability because they can acquire communicable infections through both the sexual and the injection routes; this

subgroup may also act as a bridge through which HIV and other STI are spread from higher-prevalence to lower-prevalence populations (Strathdee et al, 2011; Hamers, & Downs, 2003; Liu, Grusky, Li, & Ma, 2006). Furthermore, Sex workers who inject drugs might use condoms less consistently and, for more money, theymight agree to unprotected sex or anal sex (Rekart, 2002; Aral, & St Lawrence, 2002; UNAIDS, 2002; Pauw, & Brener, 2003; de Graaf, Vanwesenbeeck, van Zessen, Straver, & Visser, 1995).It is also necessary to have a more in-depth understanding of the association between mental health and injecting drug use among this specific population in addition to simply revealing their mental health status. Also there are obvious differences that separate sex work from other occupations, including the increased risks to sexual health and safety, social and economic vulnerability and a high degree of marginalization and criminalization in many settings (Blanchard et al., 2005; Dandona et al., 2006, Rekart, 2005, Shannon et al., 2008a and Strathdee et al., 2008).

In Mizoram most of the writings and presentations related to sex work refers to the Social Welfare Department document of 1995, which is based on the case study of 122 inmates admitted to Protective Home, the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram. This study though indicative of the situation that prevails in Mizoram then has not been updated. Since then a study of "Commercial Sex Workers in Mizoram" was conducted based on 30 Female sex workers as a sample. (Vansangpuii, 2004). The Human Right and Law Network have also conducted a survey on Sex workers identifying 218 Sex Workers. The identified Sex workers were classified into different categories and also identified several causal factors for sex work in Mizoram (Ruatfela nu, 2004). According to C.A.R.E, World Vision, (2003), most of them get married at one point or the other in their life after they became FSW. They are from differentplaces of the state and also from outside the state and so most of them do not have any permanent or regular address. They move from one place to another and doing their work

according to convenience and the Sex workers in Mizoram use their money for buying drugs, clothes, ornaments and make up and they rarely save. Research and surveys done on CSW's has revealed that the health seeking behavior and knowledge of HIV is very low in the CSW population. Also that the attitude of the communities towards CSW's is negative. These studies have thrown light on an issue that is generally not discussed in Mizoram. This paucity of relevant literature reveals that there is need to systematically document the issues and needs of Female Sex workers in Mizoram.

The following objectives have been put forward for the present study. In view of the theoretical foundation and empirical findings pertaining to drug use, mental health and social support of female sex workers, this study is aimed to provide baseline information on the current status of the Mizo Female Sex workers (FSW), who are Injecting Drug Users (IDU) who are very mobile and are a floating population in nature, by employing scientific research methods to form basis for further research and extended studies.

CHAPTER – III

METHODS AND PROCEDURE

Sample

In the absence of reliable data on size estimation of Female Sex Workers (FSW) – Injecting Drug Users (IDU), and further, since this is a hard-to-reach population, the study have restricted itself to several agencies, namely - Volunteers for Community Mental Health (VOLCOMH), Agape Drop In Centers, Chawnpui Bethel Camping Centers, Grace Home, and Protective Home which is the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram. All the Female Sex Workers – Injecting Drug Users registered by such identified centers in Aizawl were randomly selected for the study sample without distinguishing the context in which sex work is provided. The sample consisted of eighty five (85) Female Sex Workers, within the age range of thirteen to forty years (13 - 40 years), who are in sex work for more than one (1) year and Injecting Drug Users, and living in Aizawl area, the capital of Mizoram.

Objectives of the study

In view of the theoretical foundation and empirical findings pertaining to drug use, mental health and social support of female sex workers, This study is aimed to provide baseline information on the current status of the Mizo Female Sex workers (FSW), who are Injecting Drug Users (IDU) who are very mobile and are a floating population in nature, by employing scientific research methods to form basis for further research and extended studies.

1. To present a profile of the FSW-IDU.
2. To highlight the pattern and types of drug use.
3. To examine the mental health status.
4. To identify the sources of social support.

Design of the study

The study will incorporate within group research design to highlight (a) the profile of the Female Sex Workers (FSW) – Injecting Drug Users (IDU), (b) their pattern and types of drug use, (c) their mental health status, and (d) their sources of social support.

Procedures

The subjects for the present study were randomly sampled without distinguishing the context in which sex work is provided from several rehabilitations centers in Aizawl, the capital of Mizoram. The primary data for the study was collected in a face to face interaction between the each participant and the researcher in an optimum environmental setting after formation of a good rapport. After obtaining the necessary consents, the self-administered questionnaires containing demographic sheets (demographic profiles, sex work profiles, drugs use profiles, and health status) were administered to the participants which was conducted in an optimum environmental setting. The measures / self-administered questionnaires employed for this study were - General Health Questionnaire (GHQ) – 12 (Goldberg, 1992) was used and Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988) which were translated into local language. After establishing a good rapport, assuring confidentiality, and giving careful explanations of instructions for completing the provided self-administered questionnaires, participants were anonymously required to fill out the questionnaires including demographic sheets. Then, the interview was conducted with assured confidentiality in order to highlight their pattern and kinds of drug use. A structured Interview schedule which was developed in the line of NCPCR (National Commission for Protection of Child Rights), 2012, for the purpose of the present study was used to measure the kinds and pattern of drug use of the participants. Each testing sessions lasted for approximately 90 minutes and the duration of data collection lasted for three (3) months.

Test materials:

The assessment tool consists of a structured interview schedule and self-administered questionnaires. The time required approximately 90 minutes for most participants to complete and included the following measures:

The anonymous demographic sheets were also included in the present study to obtain additional information of the participants. It includes demographic profiles, sex work profiles, drug use profiles, and health status.

i) Interview Schedule: A structured Interview schedule developed in the line of National Commission for Protection of Child Rights (NCPCR), which was based on study on children with substance abuse, 2012, for the purpose of the present study shall be used to measure the kinds and pattern of drug use of the subjects.

ii) General Health Questionnaire (GHQ) – 12 (Goldberg, 1992): The GHQ-12 is a quick, reliable and sensitive short form - ideal for research studies. The GHQ -12 is the shortest versions of GHQ (GHQ-60, GHQ-30, GHQ-28 and GHQ-12). The GHQ-12 is a 12-item self-report measure of current mental health. The General Health Questionnaire (GHQ) screens for non-psychotic psychiatric disorders. The GHQ-12 measures both positive and negative aspects of mental health. The scale asks whether the respondent has experienced a particular symptom or behavior recently. Each item is rated on a four-point Likert-type scale for response choices of 'less than usual', 'no more than usual', 'rather more than usual', and 'much more than usual' respectively. The scores are 0-1-2-3 which can get a range of 0-36 wherein higher scores are an indication of more problems and lower scores indicates mental well-being. The User's Guide provides guidance for researchers intending to set up their own localized validation studies. This self-administered questionnaire focuses on two major areas- The inability to carry out normal functions, and the appearance of new and distressing phenomena.

iii) Multidimensional Scale of Perceived Social Support (MDPSS) (Zimet, Dahlem, Zimet & Farley, 1988): The Multidimensional Scale of Perceived Social Support consists of 12-items with a scores of 1-2-3-4-5-6-7. It is an uni-dimensional tool to measure perceived social support from one particular source and measures the adequacy of support from three sources: family (items 3,4,8,11), friends (items 6,7,9,12) and significant other (item 1,2,5,10). Respondents will use ratings along a 7-point scale, from 1 (very strongly disagree) to 7 (very strongly agree) to indicate how they feel about each statement. Total scores can range from 12 to 84, with total scores of 69-84 indicative of high acuity, 49-68 indicative of moderate acuity and 12 to 48 indicative of low acuity.

The outcomes of the overall analyses are presented in the chapter to follow.

CHAPTER – IV

RESULTS AND DISCUSSION

This chapter presents in a sequential a manner the outcomes of the results and the discussion of the results for the sample. The analysis of the data had been carried out as per the design of the study tables and the interpretations of the data are presented in that sequence. Descriptive well as inferential statistics were employed to see the difference if any in the Socio-Demographic profile, the pattern of Drug Use, and the Social Support and Mental Health variables.

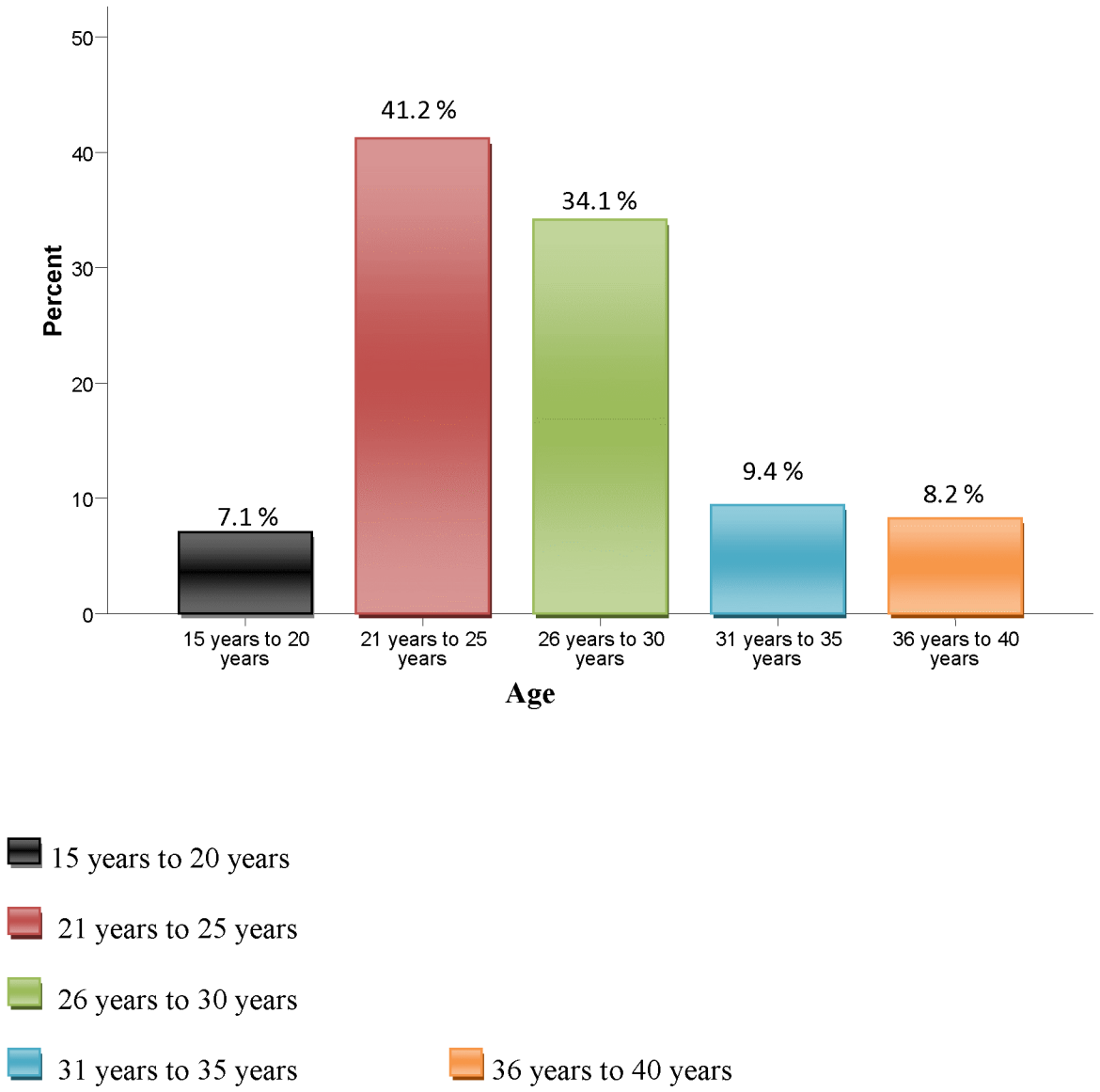
SOCIO - DEMOGRAPHIC PROFILE

The socio - demographic profiles of the present study subjects are presented in Table-1 and the bar charts of each of the profiles are presented in figure-1.1 Age, Figure-1.2 Education, Figure-1.3 Marital status, Figure-1.4 Number of children, Figure-1.5 Marital status of parents, and Figure-1.6 Occupation.

Table-1: Socio-demographic profile

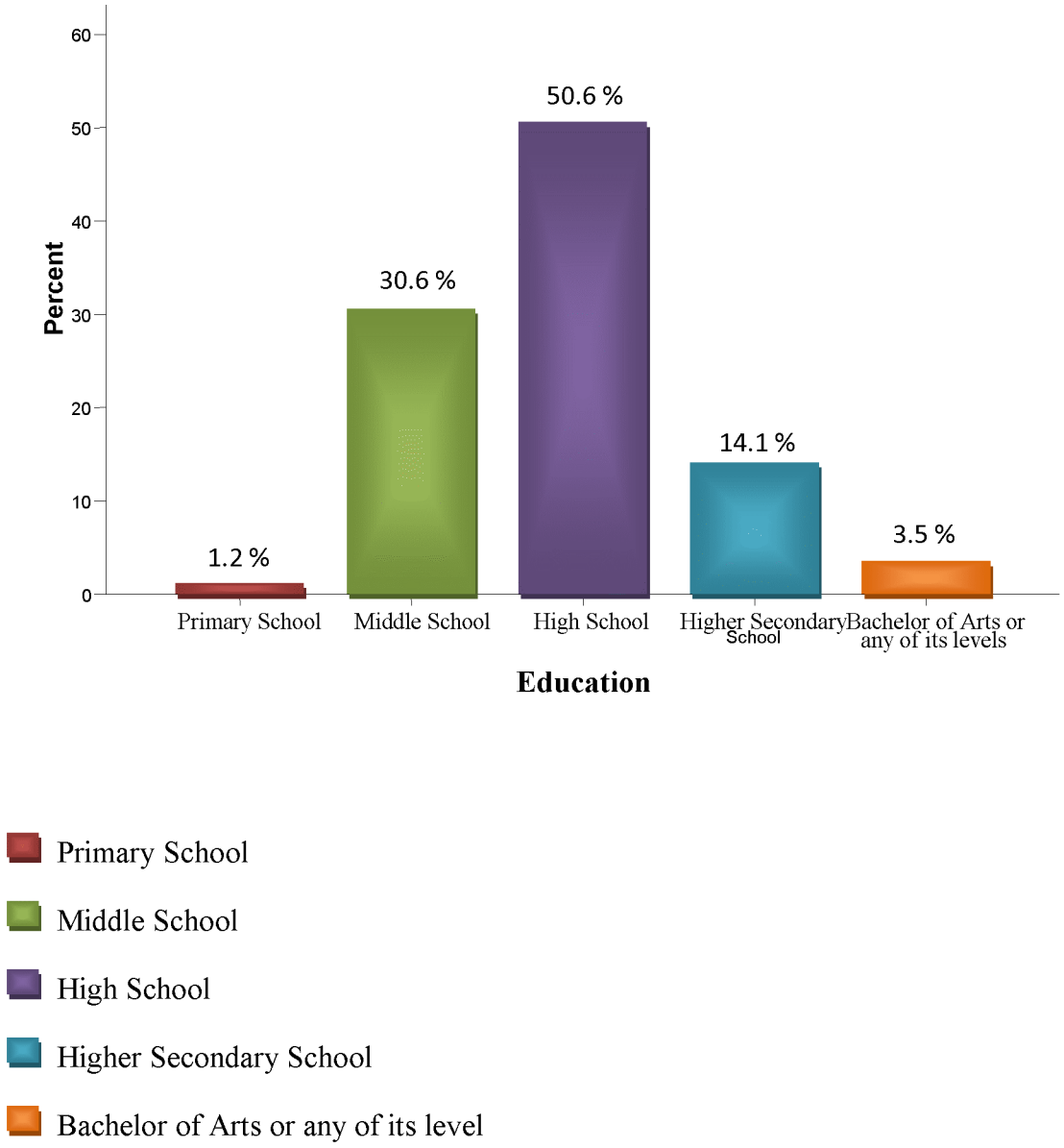
		Percentage
Age	15 years to 20 years	7.1%
	21 years to 25 years	41.2%
	26 years to 30 years	34.1%
	31 years to 35 years	9.4%
	36 years to 40 years	8.2%
Education	Primary School	1.2%
	Middle School	30.6%
	High School	50.6%
	Higher Secondary School	14.1%
	Bachelor of Arts or any of its levels	3.5%
Marital status	Single	25.9%
	Married	22.4%
	Divorced	49.4%
	Widowed	2.4%
Number of children	Do not have child	45.9%
	Have child	54.1%
Marital status of parents	Married	31.8%
	Divorced	41.2%
	Father deceased	17.6%
	Mother deceased	2.4%
	Both deceased	7.1%
Occupation	Government employed	7.1%
	Business	9.4%
	Unemployed	83.5%`

Figure- 1.2: Age



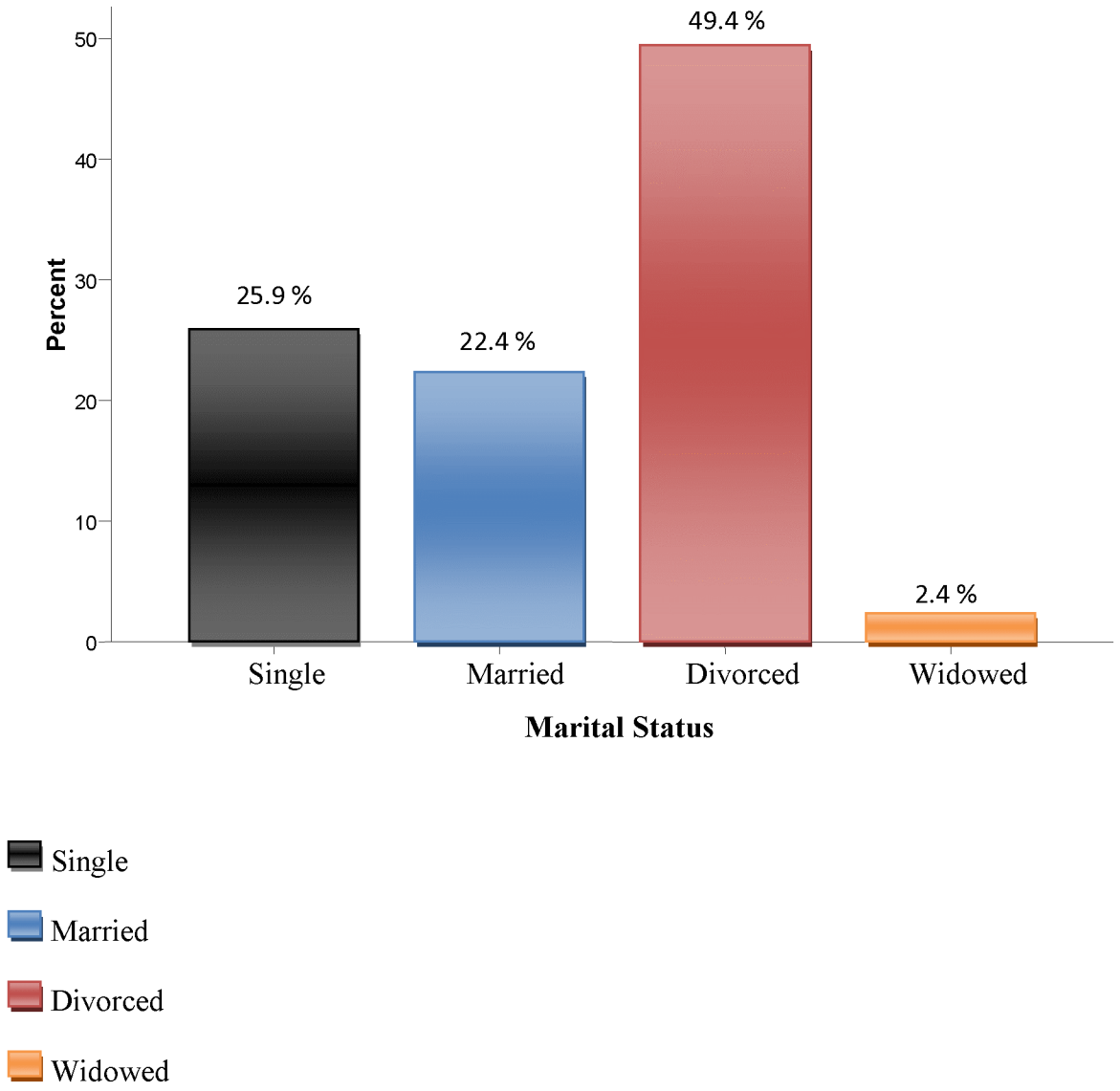
Out of 85, 6 (7.1%) of the samples were 15-20 years old, 35 (41.2%) were 21-25 years old, 29 (34.1%) were 26-30 years old, 8 (9.4%) were 31-35 years old, and7(8.2%) were 36-40 years old.

Figure 1.2: Education



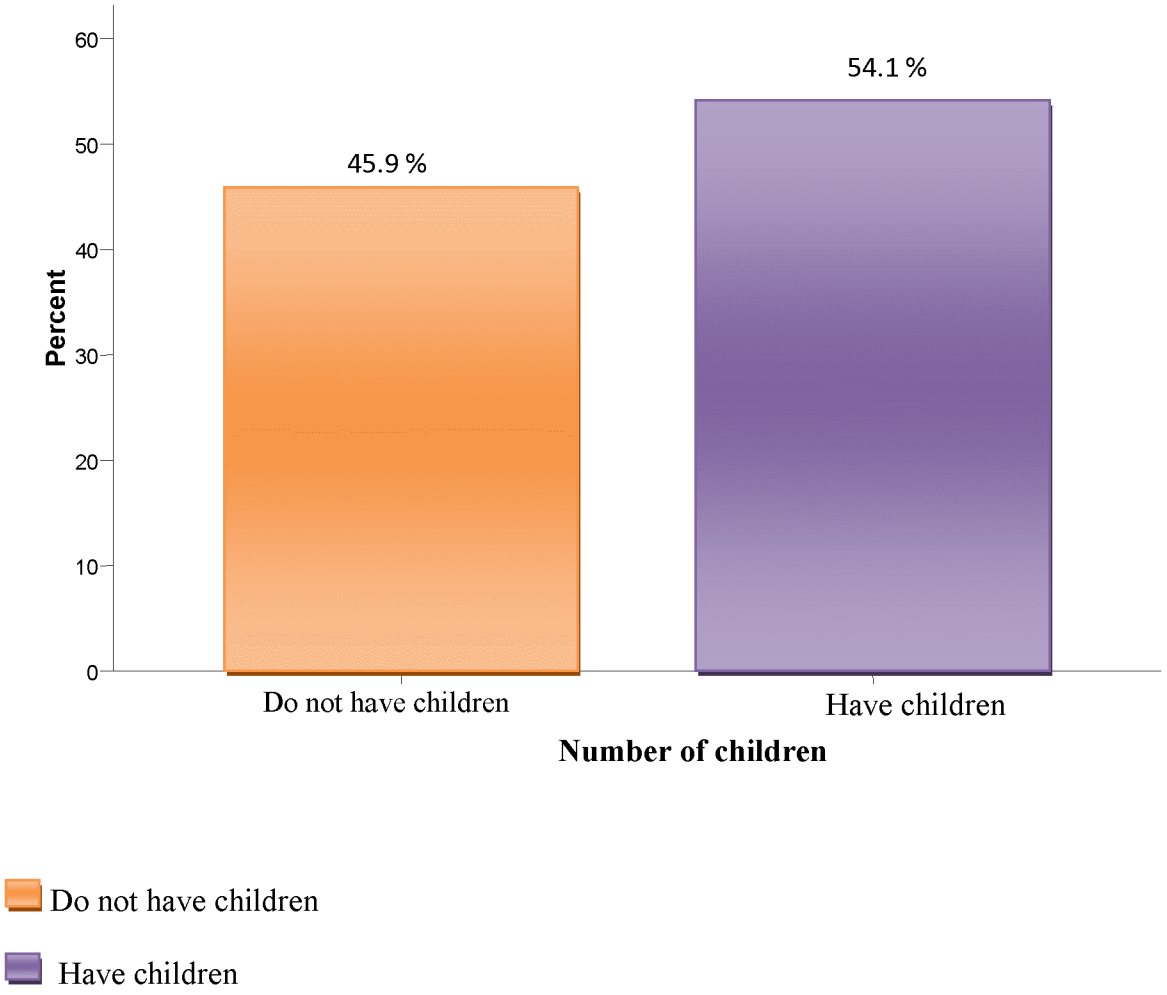
All samples had dropped out of school. 1(1.2%) studied up to primary school, 26 (30.6%) studied up to Middle School, 43 (50.6%) studied up to High School, 12 (14.1%) studied up to Higher Secondary School, 3 (3.5%) were graduate.

Figure 1.3: Marital Status



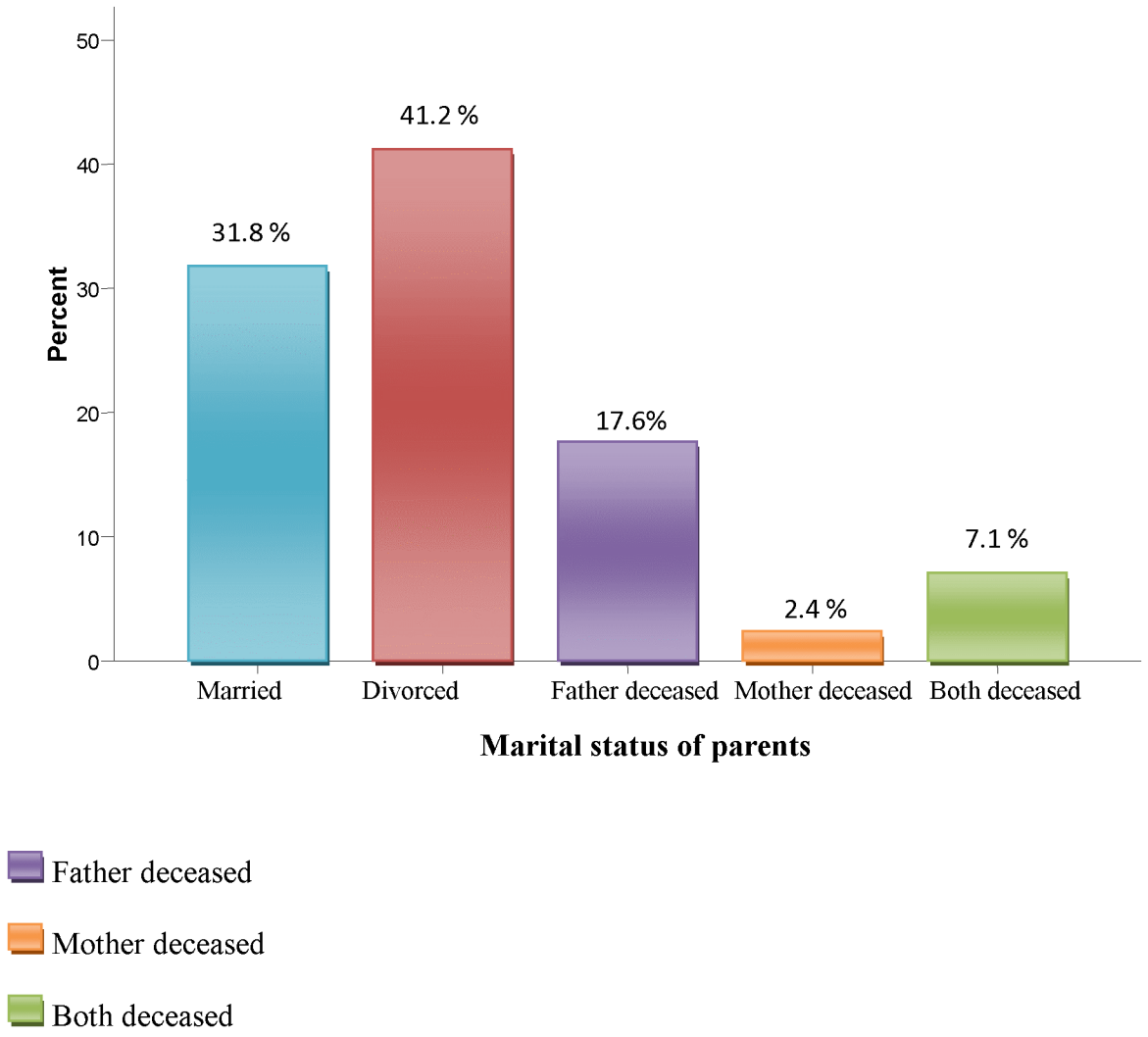
Out of 85 samples, 22 (25.9%) of them were single, 19 (22.4%) were married, 42 (49.4%) were divorced, and 2 (2.4%) were widowed.

Figure 1.4: Number of Children



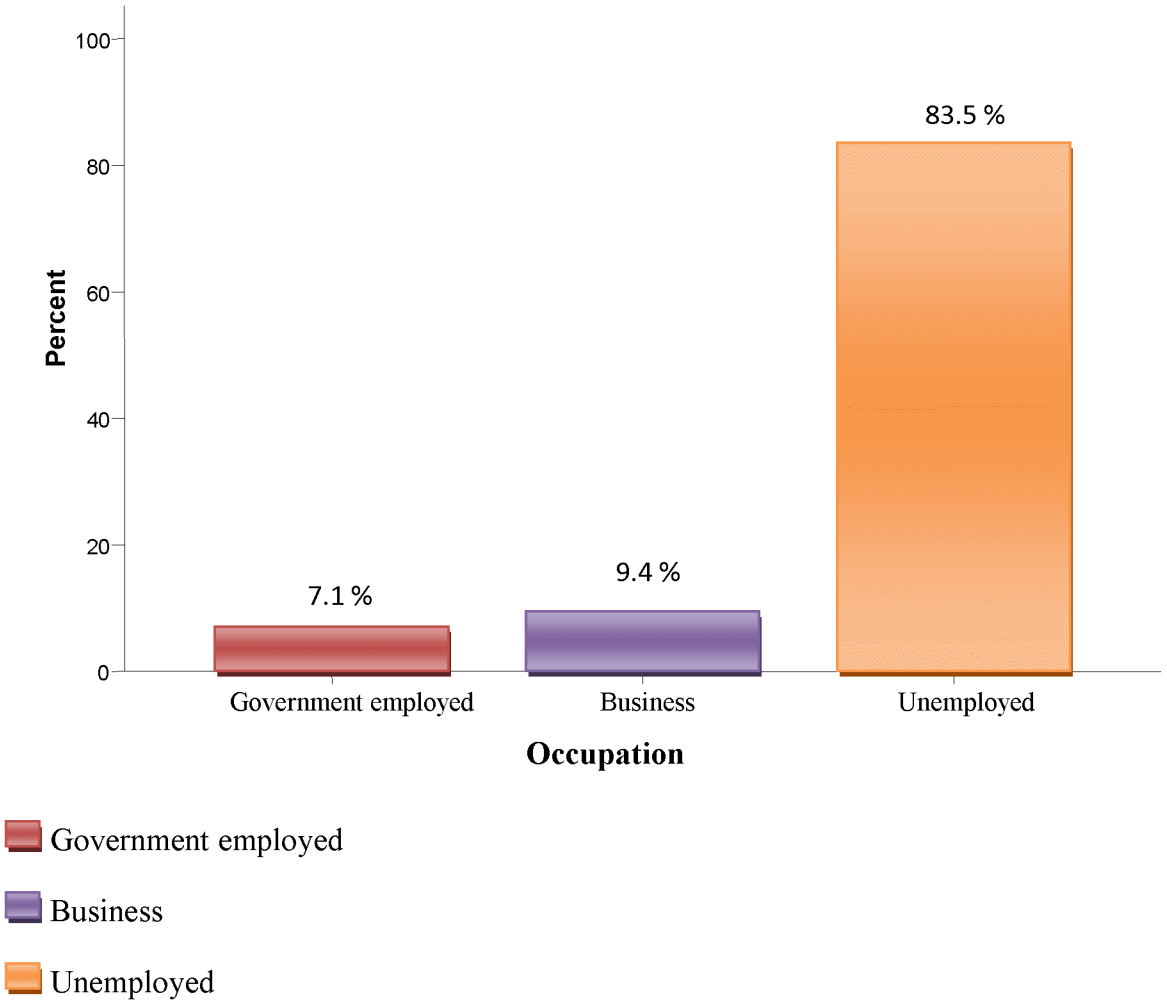
Out of 85 samples, 39 (45.9%) of them do not have children, and 46 (54.1%) of them have children.

Figure 1.5: Marital status of parents



Out of 85 samples, parents of 27 (31.8%) samples had been married, 35 (41.2%) were divorced.Fathers of 15 (17.6%) of them were deceased, while mothers of 2 (2.4%) of them were deceased, and both parents of 6 (7.1%) samples were deceased.

Figure-1.6: Occupation



Out of the 85 samples, 7.1% were unemployed, 9.4% were doing a business, and 83.5% were unemployed.

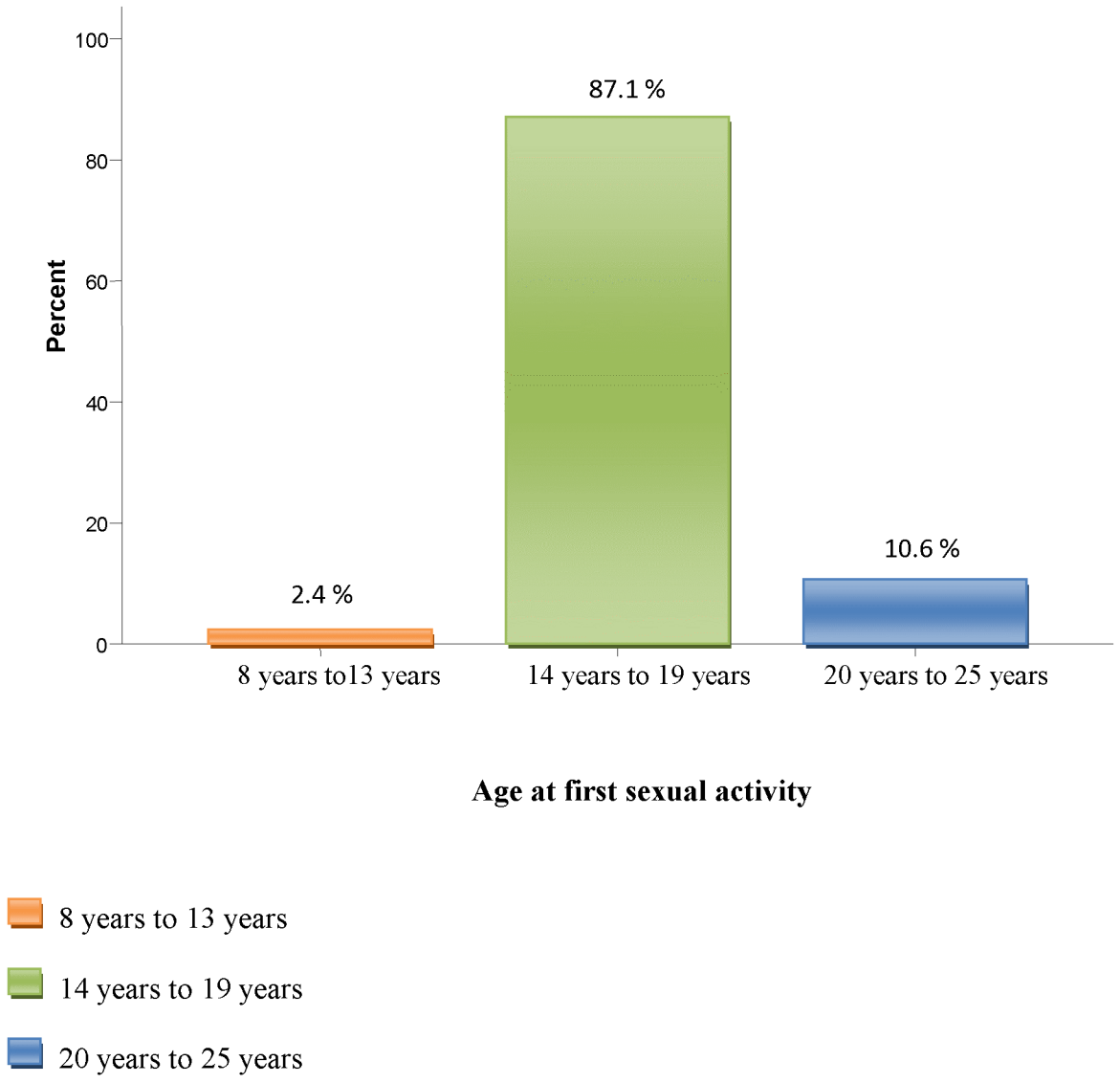
SEX WORK PROFILE

The sex work profile of the present study subjects are presented in Table-2 and the bar charts of each of the profiles are presented in Figure-2.1 Age of first sexual activity, Figure-2.2 Condom use, Figure-2.3 Abortion status, Figure-2.4 Sexual orientation, Figure-2.5 Average income per client / customer, Figure-2.6 Number of days per week engaged in sex work, Figure-2.7 Number of client / customer in a week, Figure-2.8 Enjoyment of sex work, Figure-2.9 Neglect by others they know, Figure-2.10 Neglect by society, Figure- 2.11 Violence, Figure-2.12 Threats, Figure-2.13 Rape, and Figure- 2.14 Force labor.

Table-2: Sex work profile

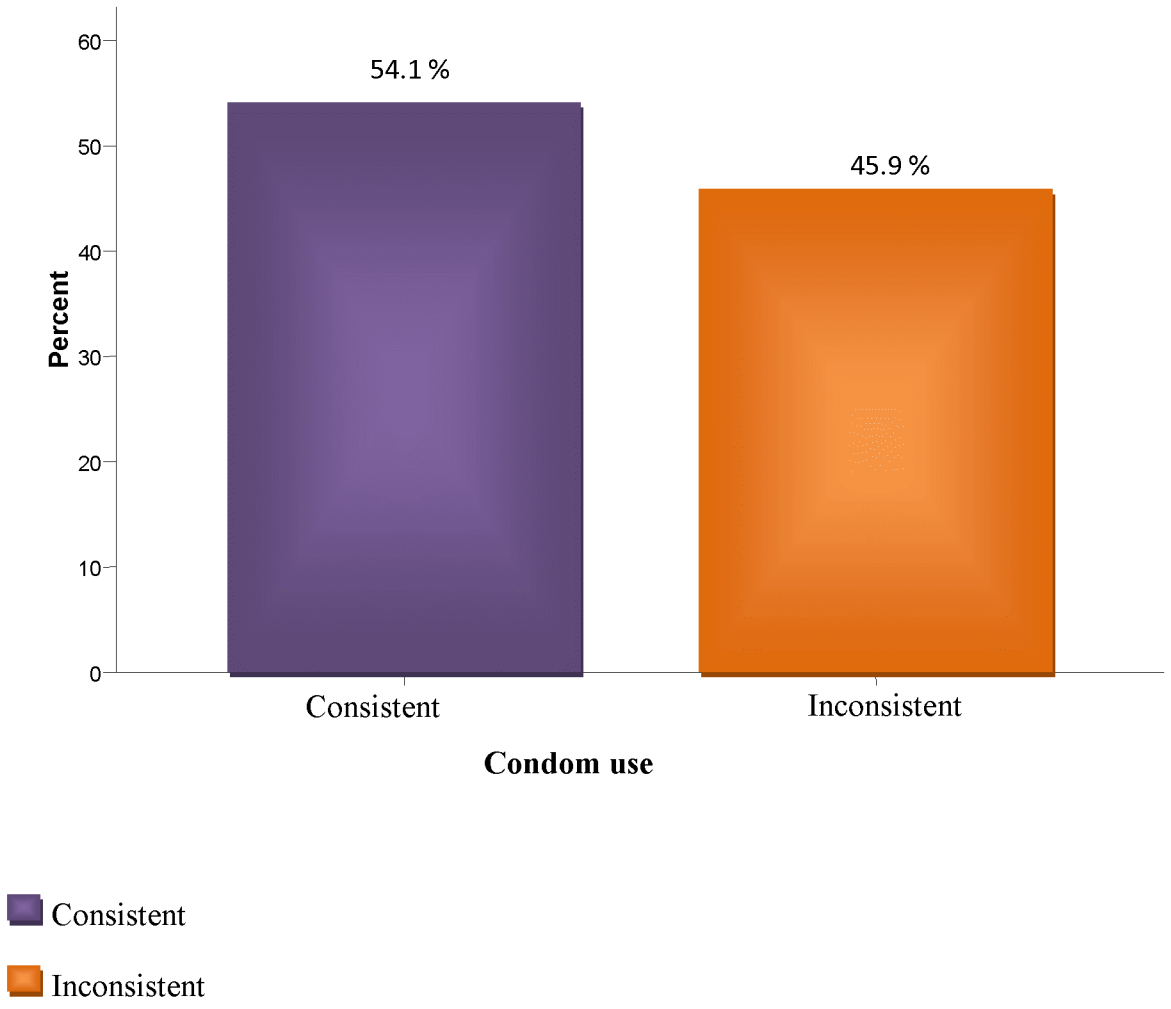
		Percentage
Age at first sexual activity	8 years to13 years	2.4%
	14 years to 19 years	87.1%
	20 years to 25 years	10.6%
Condom use	Consistent	54.1%
	Inconsistent	45.9%
Abortion status	Had had abortion	10.6%
	Never had abortion	89.4%
Sexual orientation	Homosexual	32.9%
	Heterosexual	67.1%
Average income per client / customer	Rs100 to Rs 1000	89.4%
	Rs1100 to Rs 2000	3.5%
	Rs 2100 to Rs 3000	4.7%
	Rs3100 to Rs 4000	2.4%
Number of days per week engaged in sex work	1 day	3.5%
	2 days to 3 days	17.6%
	4 days to 5 days	34.1%
	6 days to 7 days	44.7%
Number of clients / customers in a week	1 to 5 customers	8.2%
	6 to 10 customers	24.7%
	11 to 15 customers	35.3%
	16 to 20 customers	8.2%
	21 to 25 customers	20.0%
	26 to 30 customers	1.2%
	31 to 35 customers	1.2%
	41 to 45 customers	1.2%
Enjoyment of sex work	Enjoyed	7.1%
	Sometimes	4.7%
	Never enjoyed	88.2%
Neglect by others they know	Felt neglected	55.3%
	Did not feel neglected	44.7%
Neglect by society	Felt neglected	50.6%
	Did not feel neglected	49.4%
Violence	Yes	65.9%
	No	34.1%
Threats	Yes	25.9%
	No	74.1%
Rape	Yes	3.5%
	No	96.5%
Force labor	Yes	1.2%
	No	98.8%

Figure 2.1: Age at first sexual activity



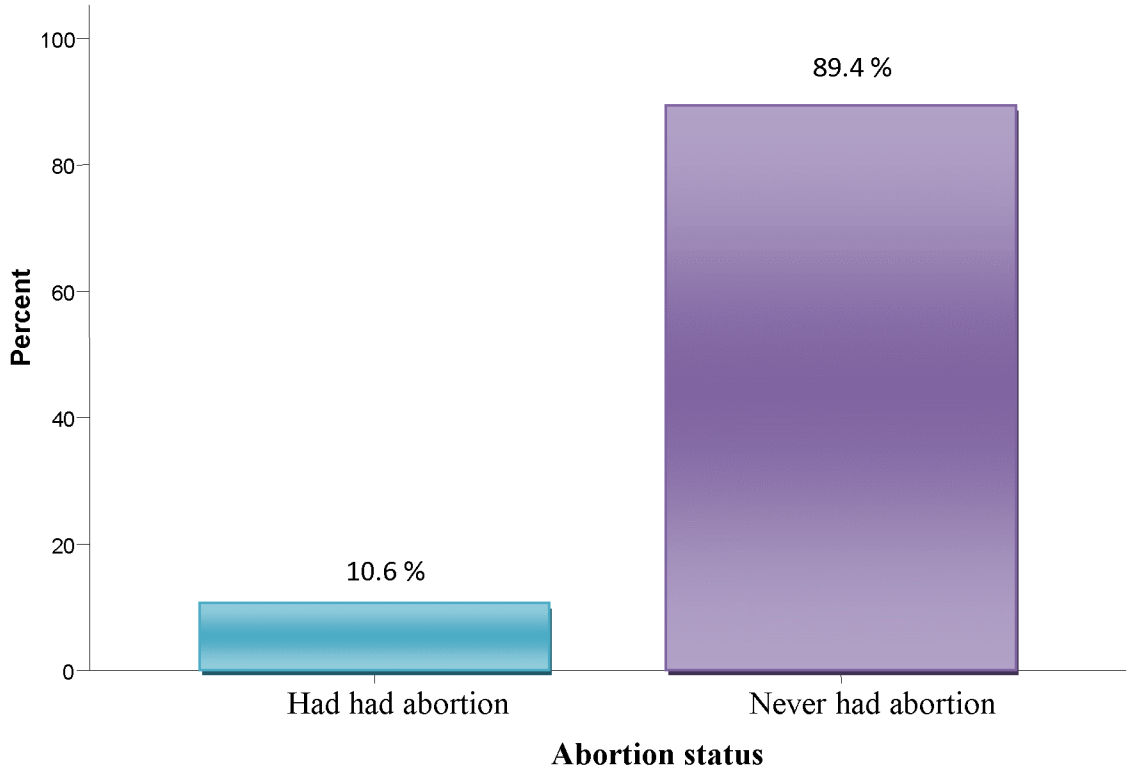
Out 0f 85 samples, 2 (2.4%) had their first sexual activity at the age of between 8 years to13 years, 74 (87.1%) were at the age of 14 years to 19 years, and 9 (10.6%) were at the age of 20 years to 25 years.

Figure 2.2: Condom use



Out of 85 samples, 46 (54.1%) consistently used condom while having sex, and 39 (45.9%) had used condom inconsistently.

Figure 2.3: Abortion status

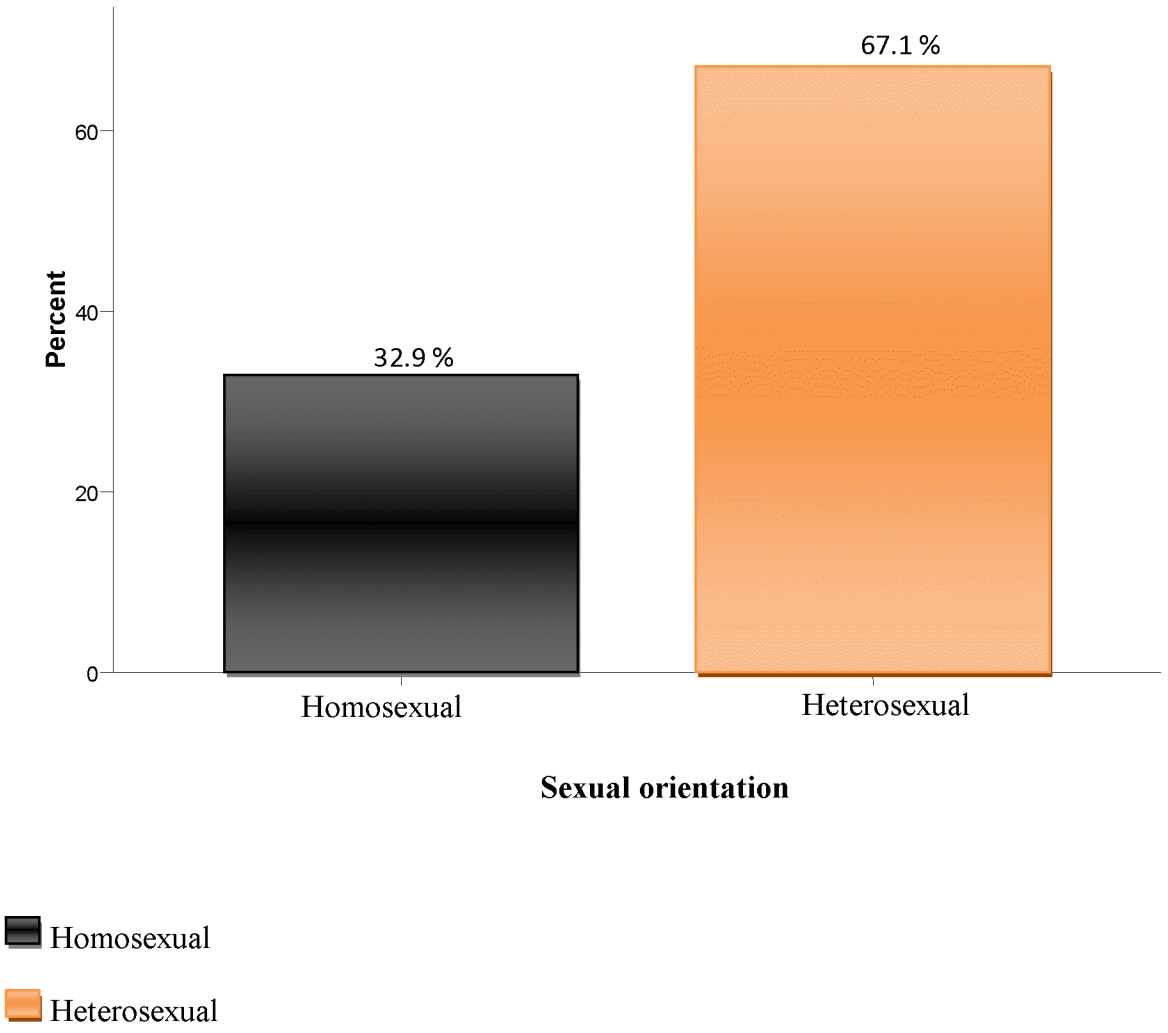


Had had abortion

Never had abortion

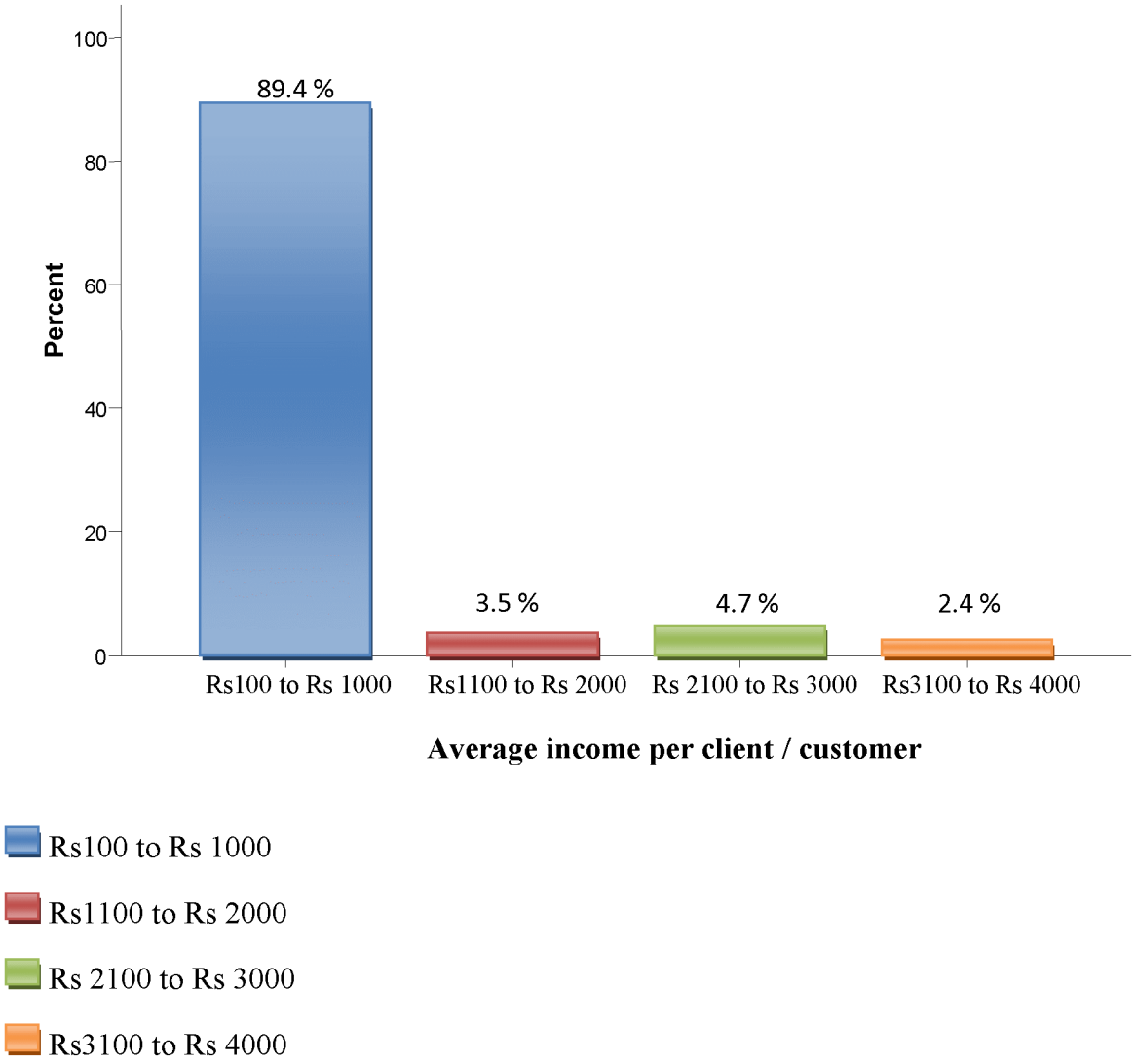
Out of the 85 samples, 9 (10.6%) had had abortion due to several reasons, and 76 (89.4%) of them have never had abortion.

Figure 2.4: Sexual orientation



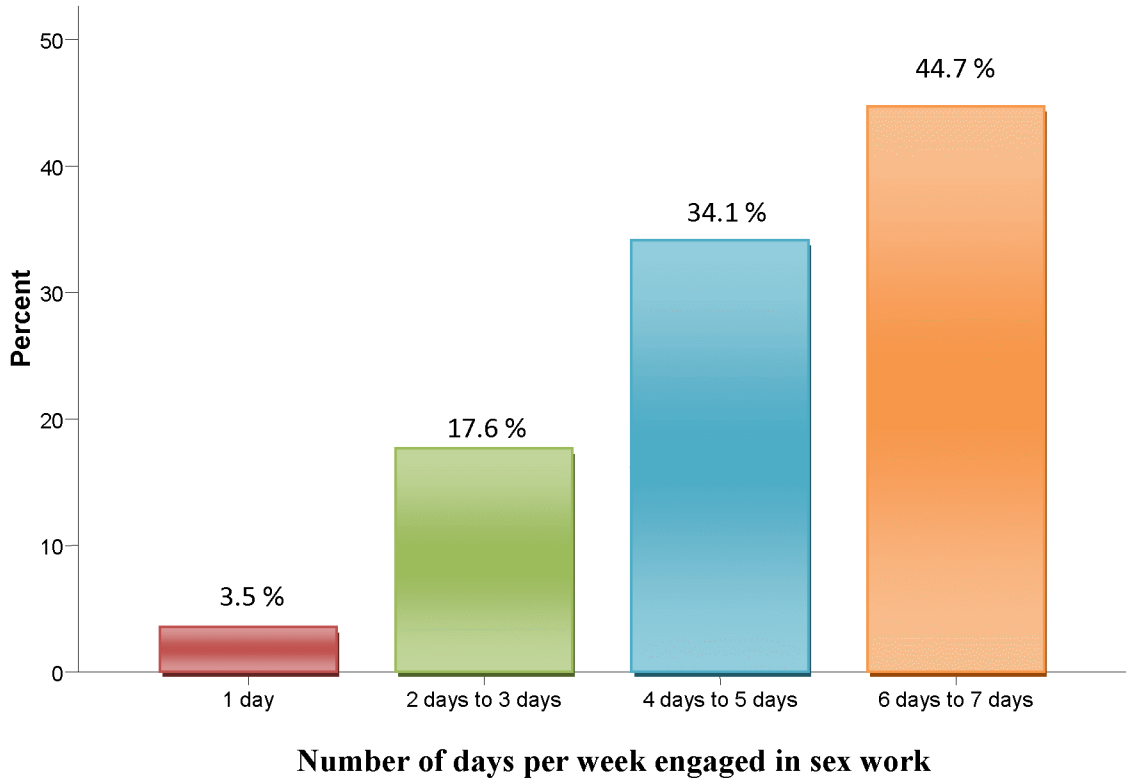
Out of the 85 samples, 28 (32.9%) of them reported that they had same sex partners which indicates homosexuality, while 57 (67.1%) of them had never had same sex partners in their lifetime which indicates heterosexuality.

Figure 2.5: Average income per client / customer



Out of 85 samples, 76 (89.4%) of them reported getting between Rs100 to Rs 1000 per client, 3 (3.5%) reported getting between Rs1100 to Rs 2000, 4 (4.7%) reported getting between Rs 2100 to Rs 3000, and 2 (2.4%) reported between Rs3100 to Rs 4000 per customer.

Figure 2.6: Number of days per week engaged in sex work



1 day

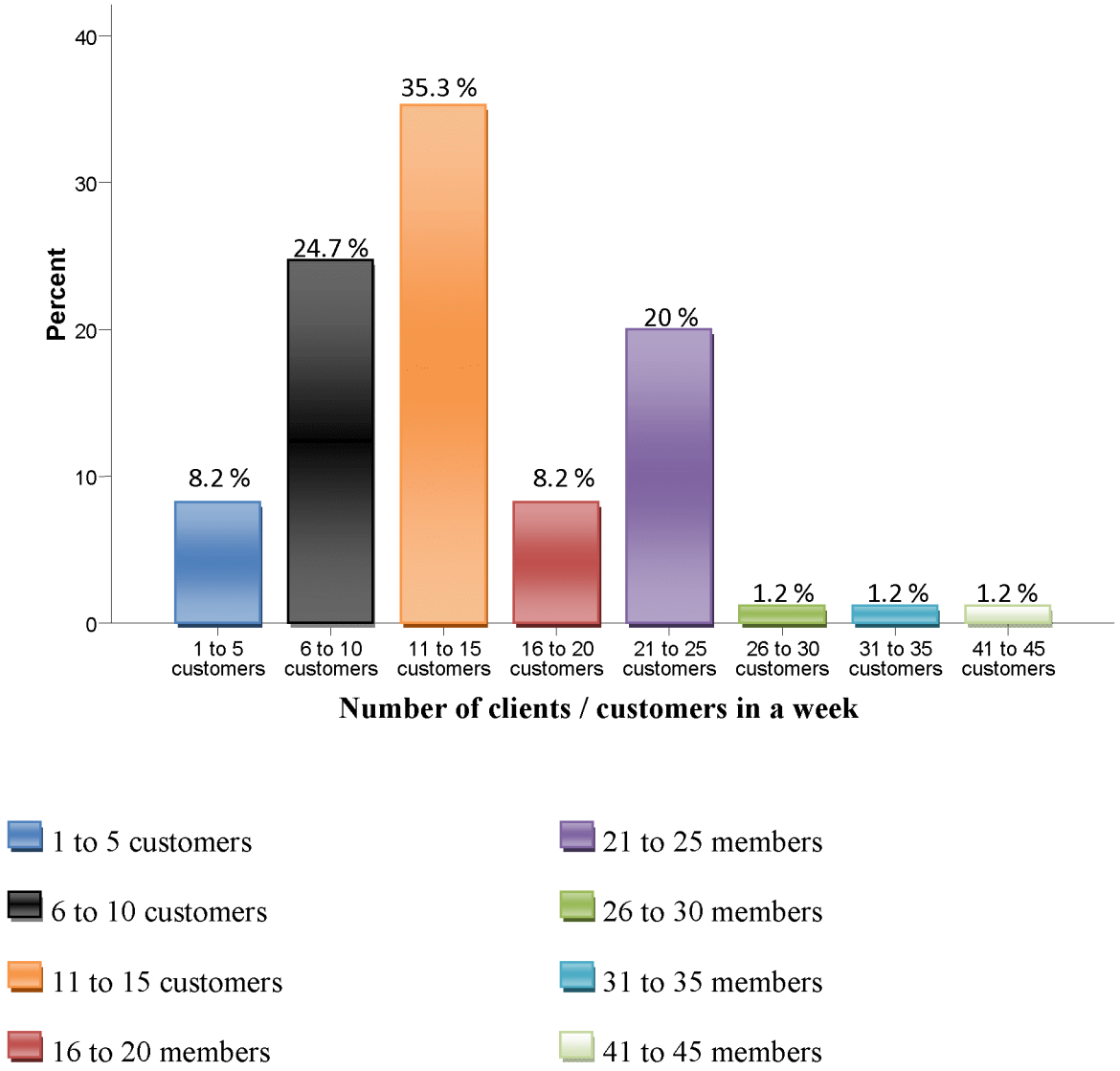
2 days to 3 days

4 days to 5 days

6 days to 7 days

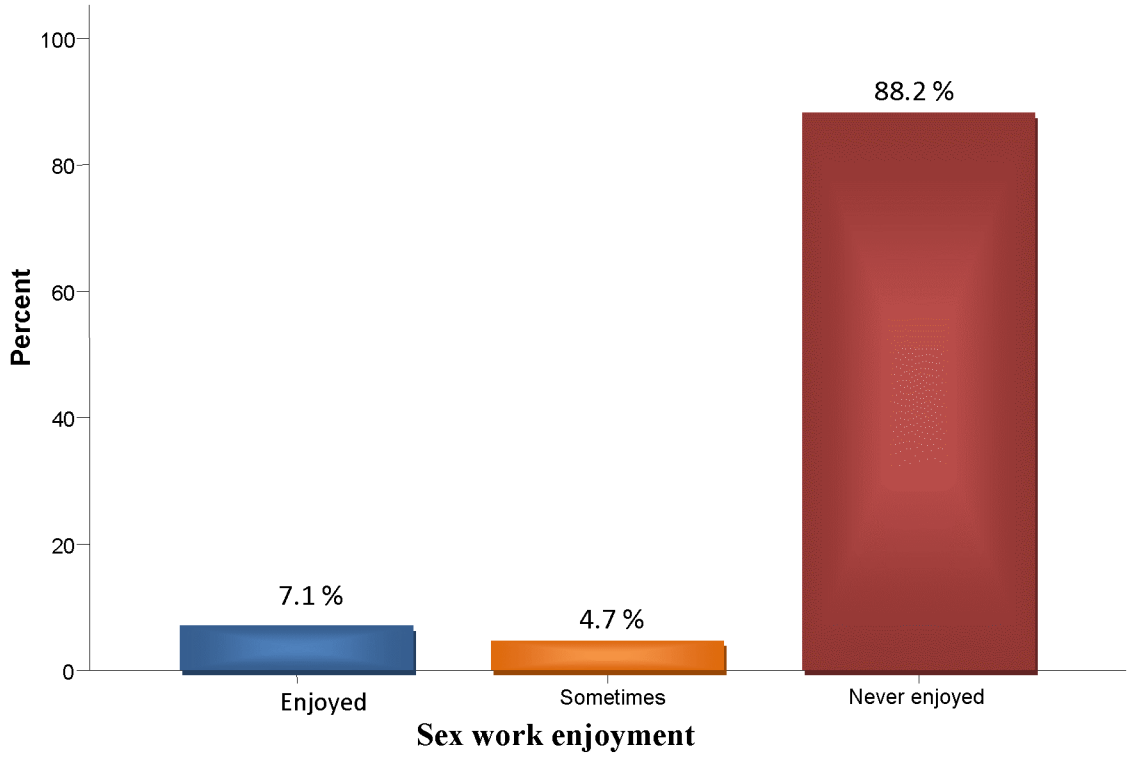
Out of the 85 samples, 3 (3.5%) of them reported that they engaged in sex work for only 1 day in a week, 15 (17.6%) reported 2days to 3days in a week, 29 (34.1%) reported 4 days to 5 days in a week, and 38 (44.7%) reported 6 days to 7 days in a week.

Figure 2.7: Number of clients/ customers in a week



Out of the 85 samples, 7 (8.2%) of the samples reported having 1 – 5 customers per week, 21 (24.7%) reported 6 – 10 customers per week, 30 (35.3%) reported 11 – 15 customers per week, 7 (8.2%) reported 16 – 20 customers per week, 17 (20.0%) reported 21 – 25 customers per week, 1 (1.2%) reported 26 – 30 customers per week, 1 (1.2%) reported 31 – 35 customers per week, and 1 (1.2%) reported 41 – 45 customers per week.

Figure - 2.8: Sex work enjoyment



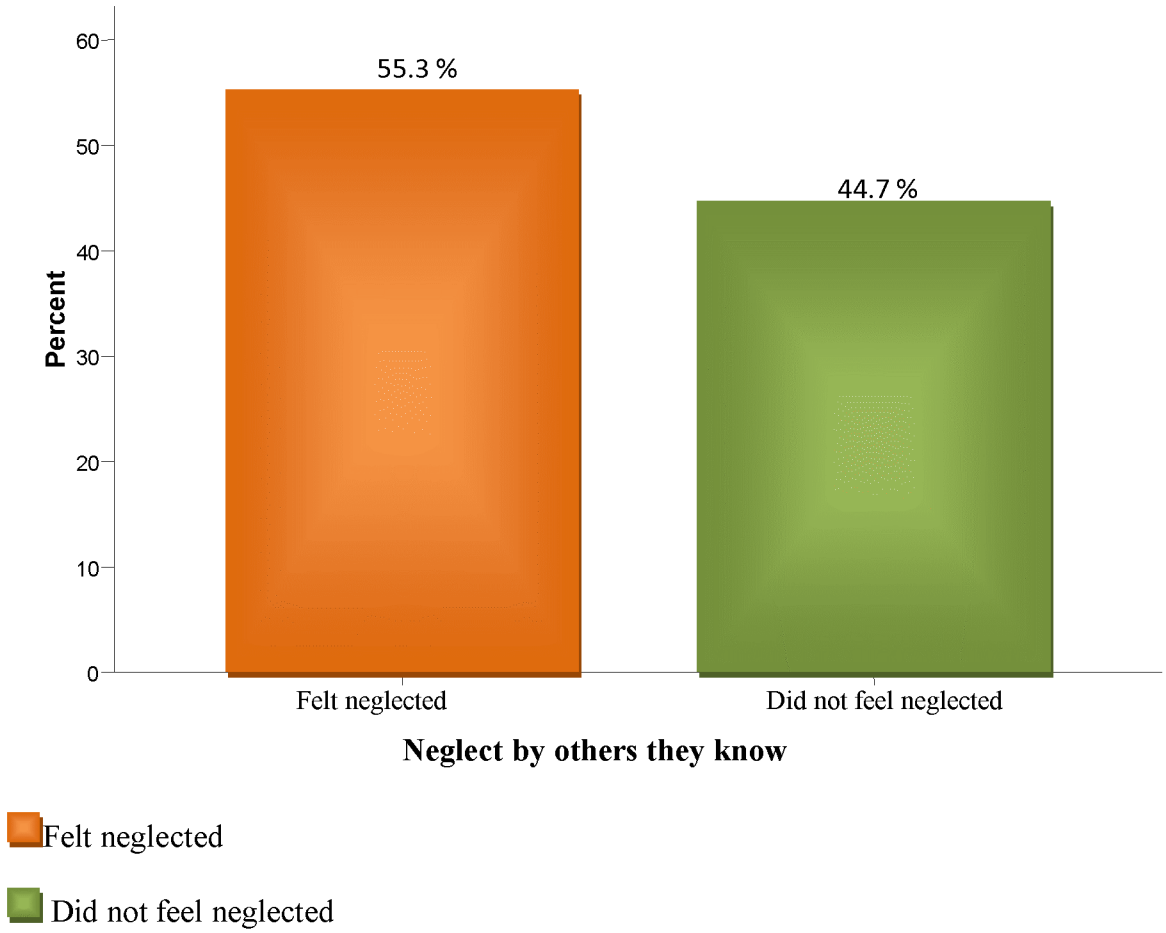
Enjoyed

Sometimes

Never enjoyed

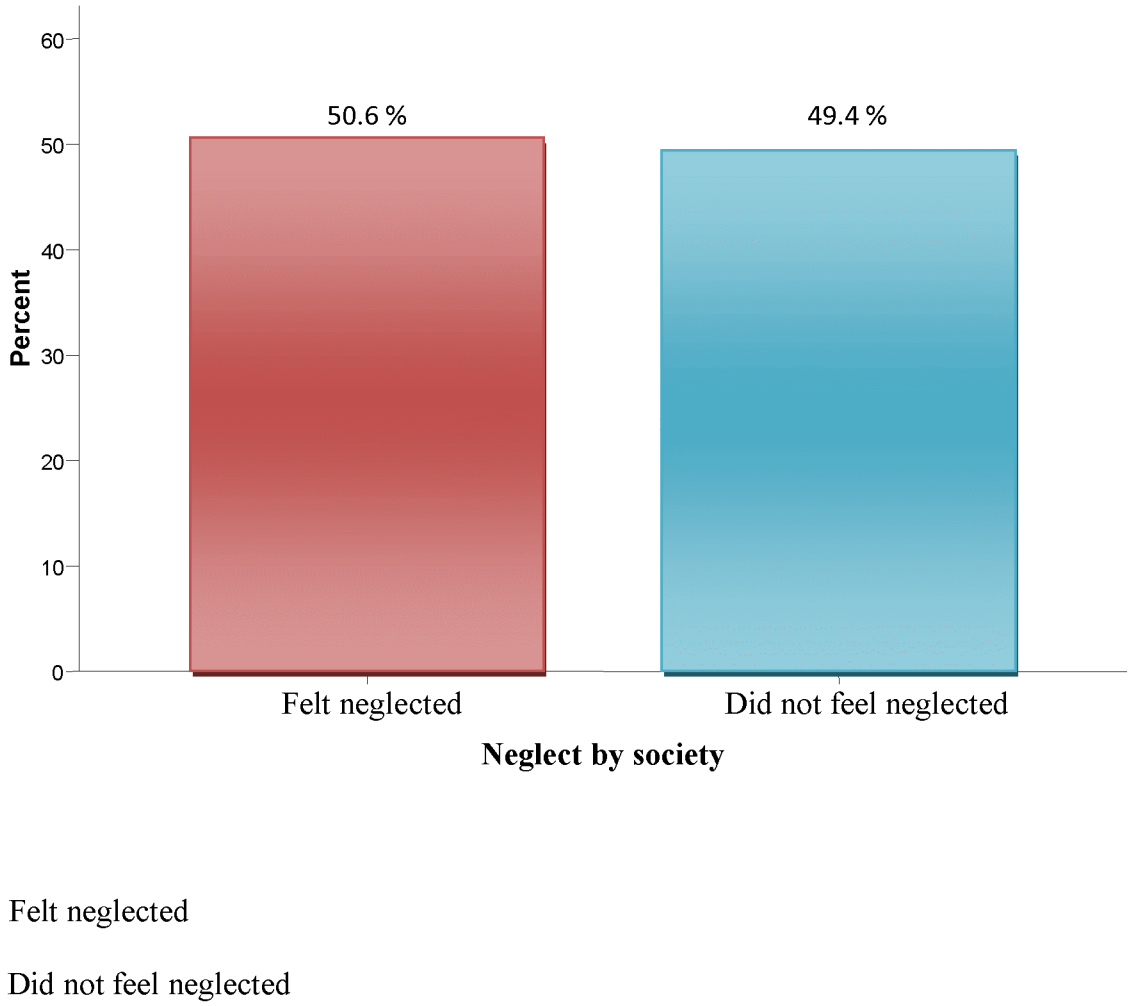
Out of the 85 samples, 6 (7.1%) enjoyed sex work, 4 (4.7%) sometimes enjoyed sex work, and 75 (88.2%) them never enjoyed sex work.

Figure - 2.9: Neglect by others they know



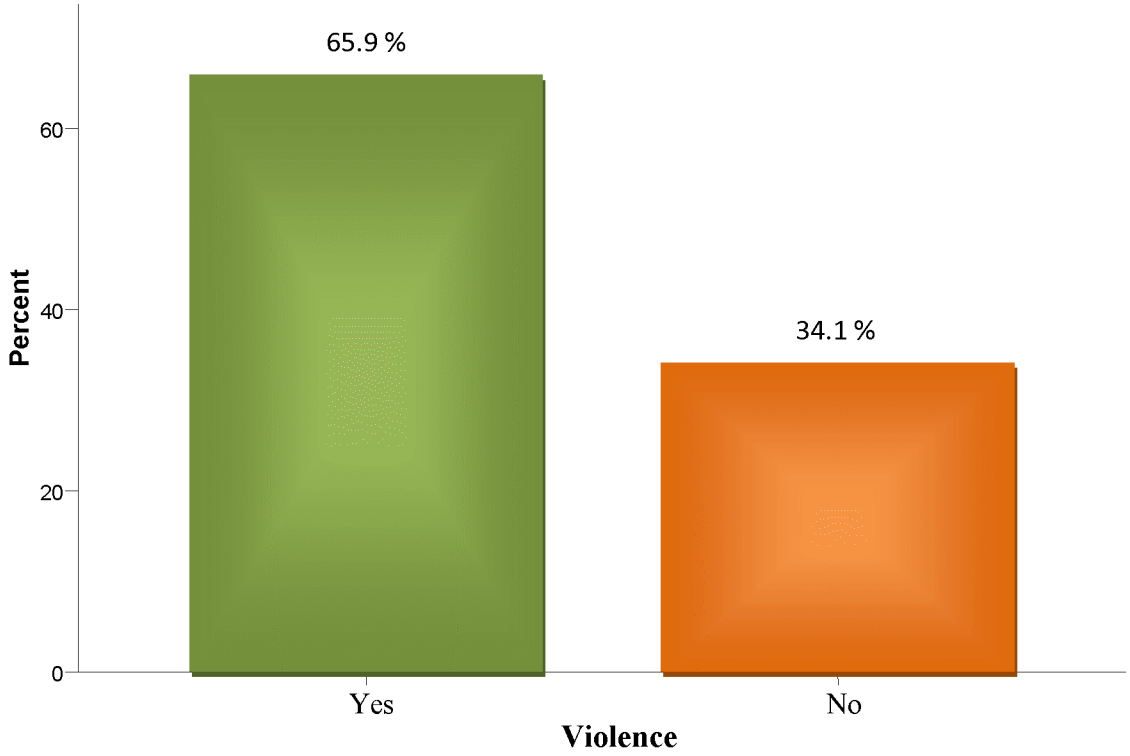
Out of the 85 samples, 47 (55.3%) felt that they are neglected by others they know, and 38 (44.7%) didn't feel neglected.

Figure-2.10: Neglect by society



Out of the 85 samples, 43 (50.6%) felt that they are neglected by others they know, and 42 (49.4%) didn't feel neglected.

Figure-2.11: Violence

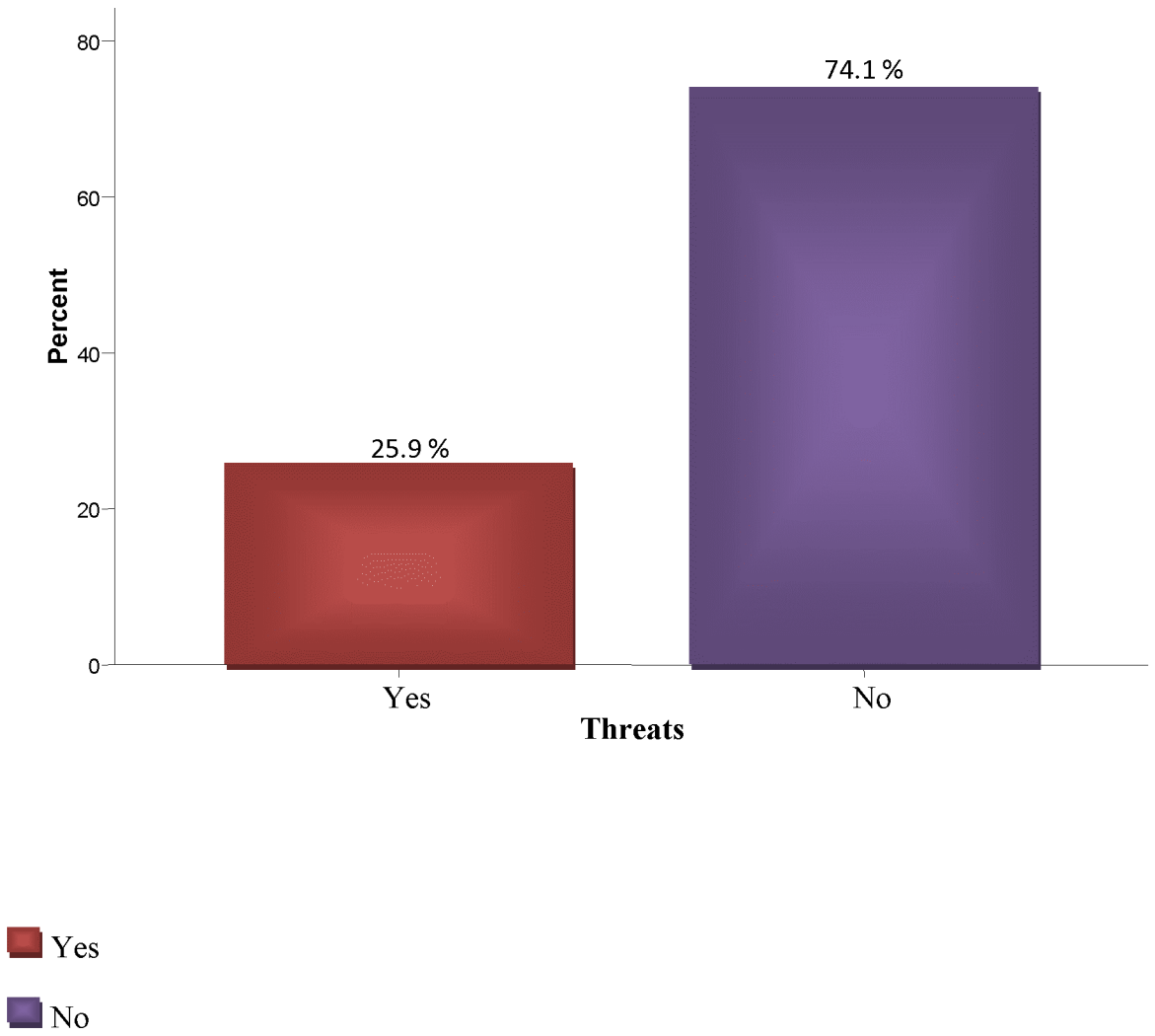


Yes

No

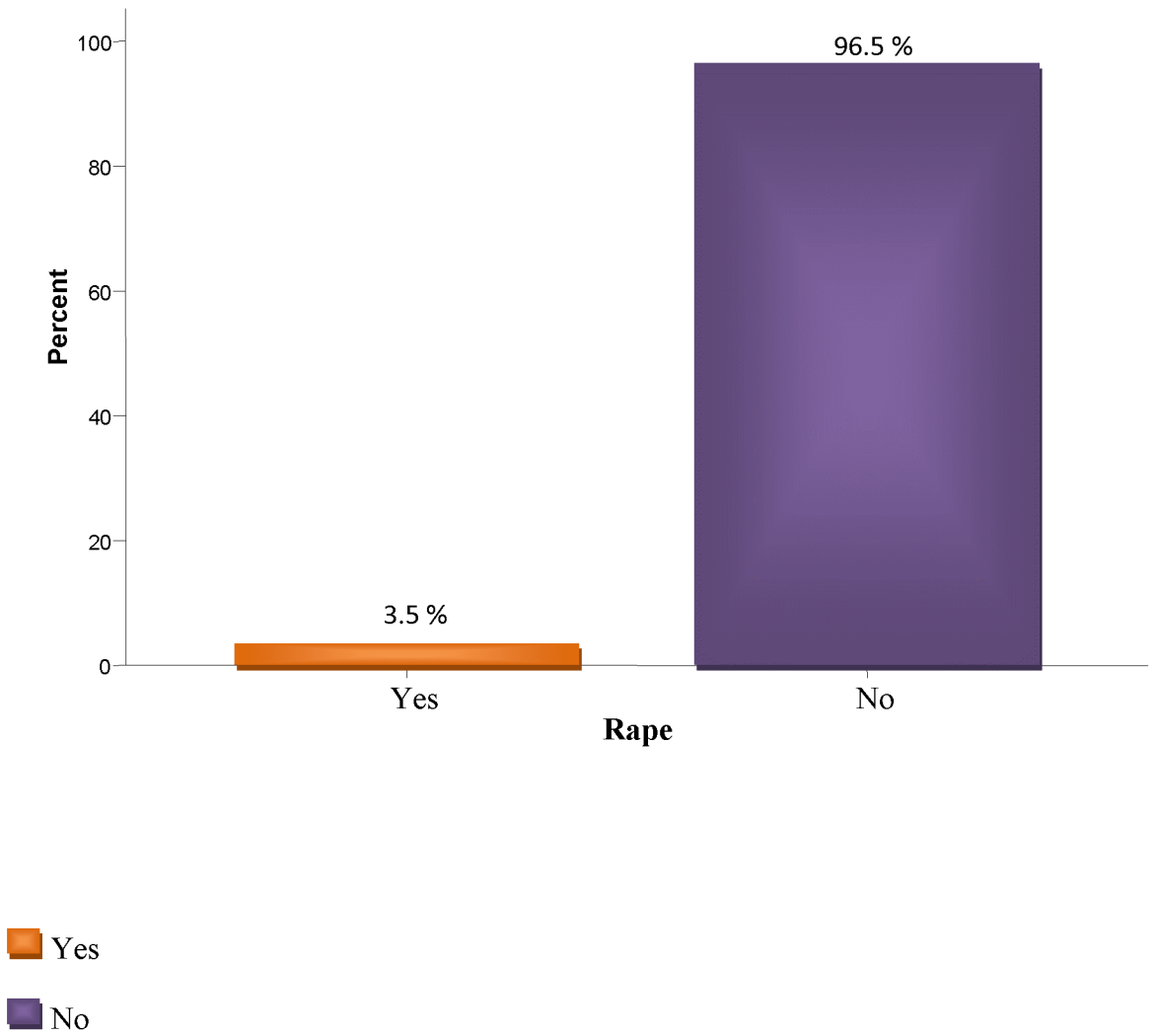
Out of 85 samples, 65.9% had faced violence while 34.1% had never faced it.

Figure-2.12: Threats



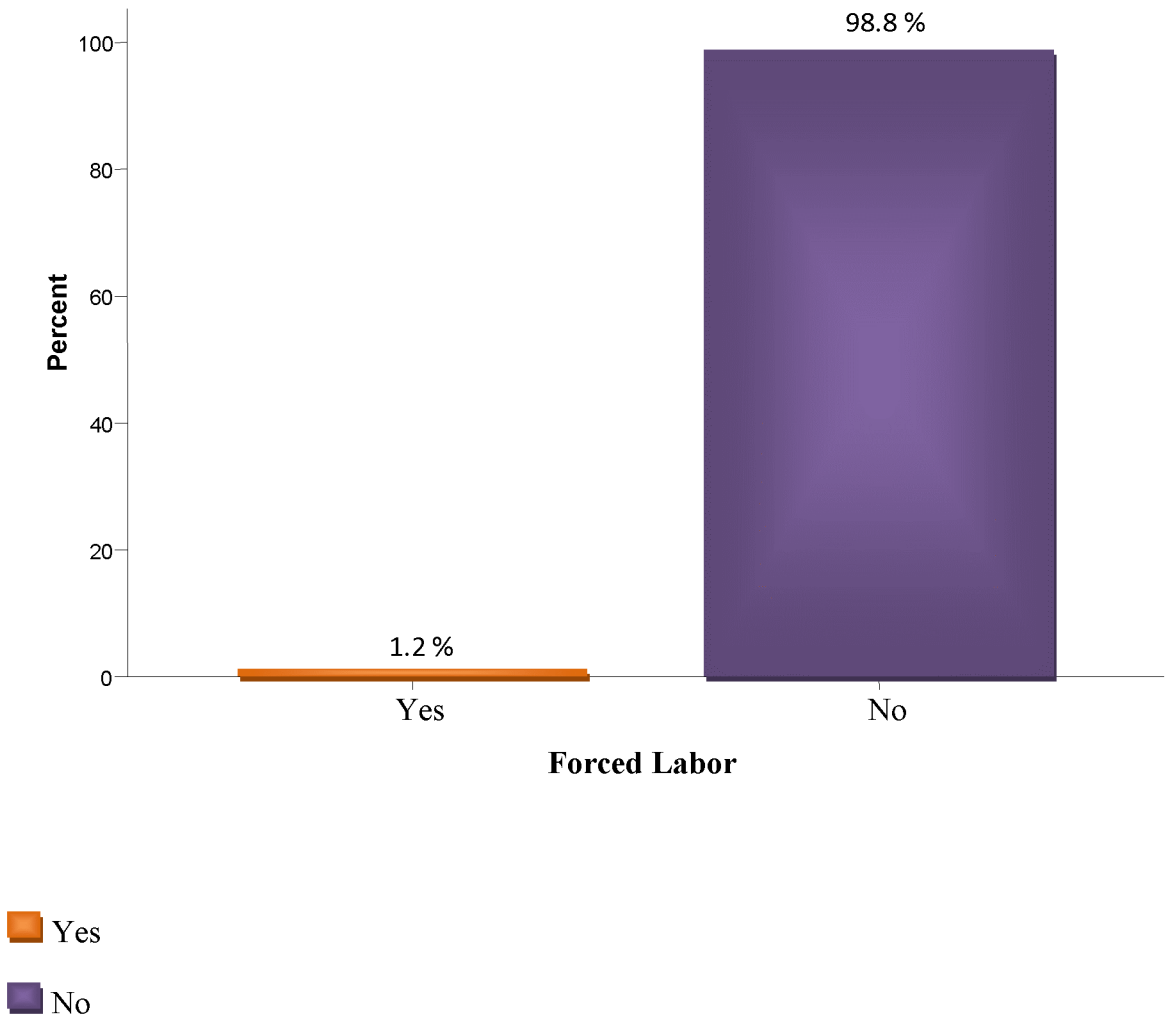
Out of the 85 samples, 22 (25.9%) samples had faced threats while 63 (74.1%) samples had never faced it.

Figure-2.13: Rape



Out of the 85 samples, 3 (3.5%) were raped, while 82 (96.5%) were not.

Figure-2.14: Force labor



Out of the 85 samples, 1 (1.2%) of the samples had faced forced labor, while 84 (98.8%) of the samples had not.

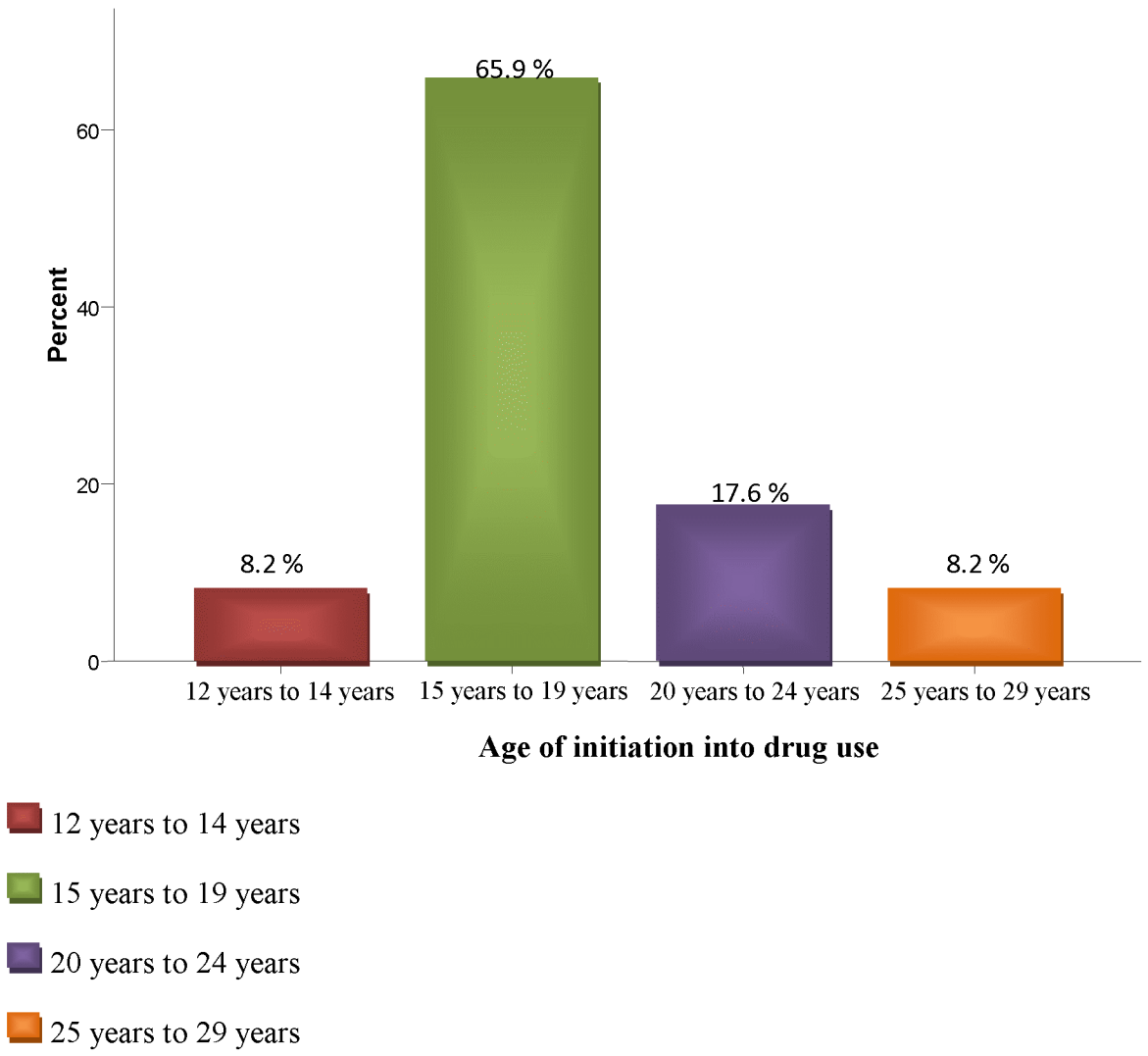
DRUG USE PROFILE

The drug use profile of the present study samples are presented in Table-3.

Table- 3: Drug use profile

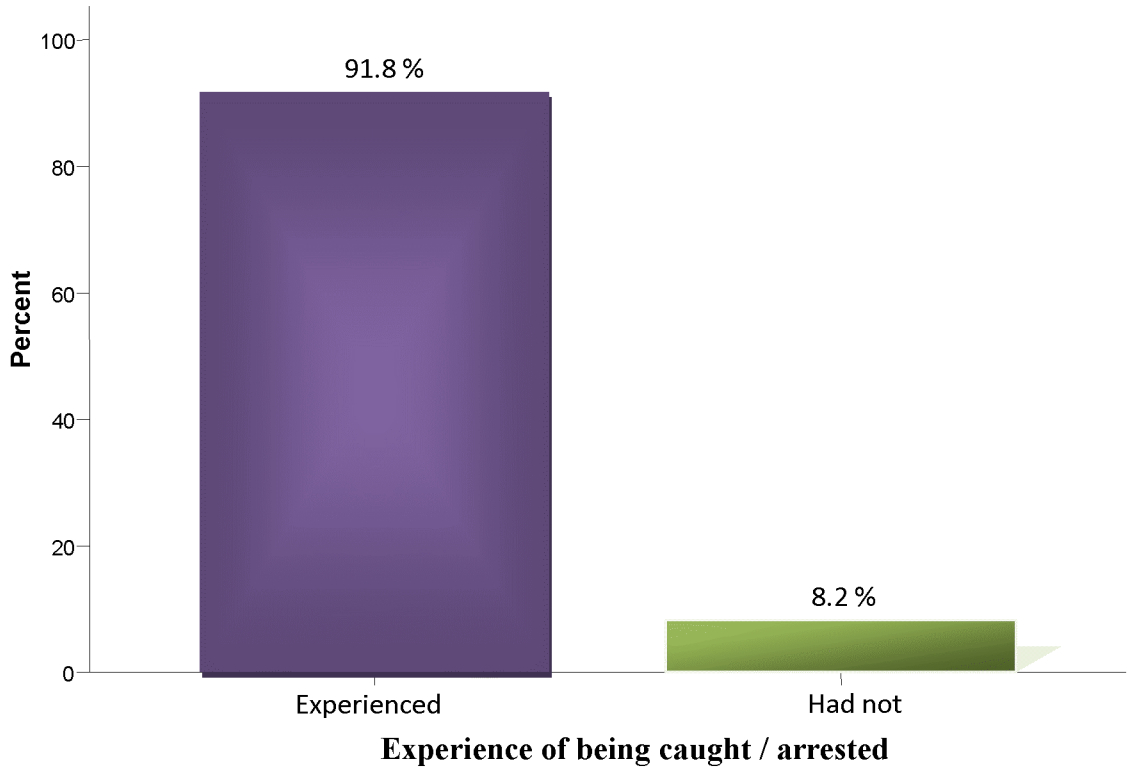
		Percentage
Age of initiation into drug use	12 years to 14 years	8.2%
	15 years to 19 years	65.9%
	20 years to 24 years	17.6%
	25 years to 29 years	8.2%
Experienced of being caught / arrested	Yes	91.8%
	No	8.2%
Syringe sharing	Shared	42.4%
	Never shared	57.6%

Figure 3.1: Age of initiation into drug use



Out of 85 samples, 7 (8.2%) had used drugs for the first time at the age of 12 years to 14 years, 56 (65.9%) were at the age of 15 years to 19 years, 15 (17.6%) were at the age of 20 years to 24 years, and 7 (8.2%) were at the age of 25 years to 29 years.

Figure 3.2: Experience of being caught / arrested

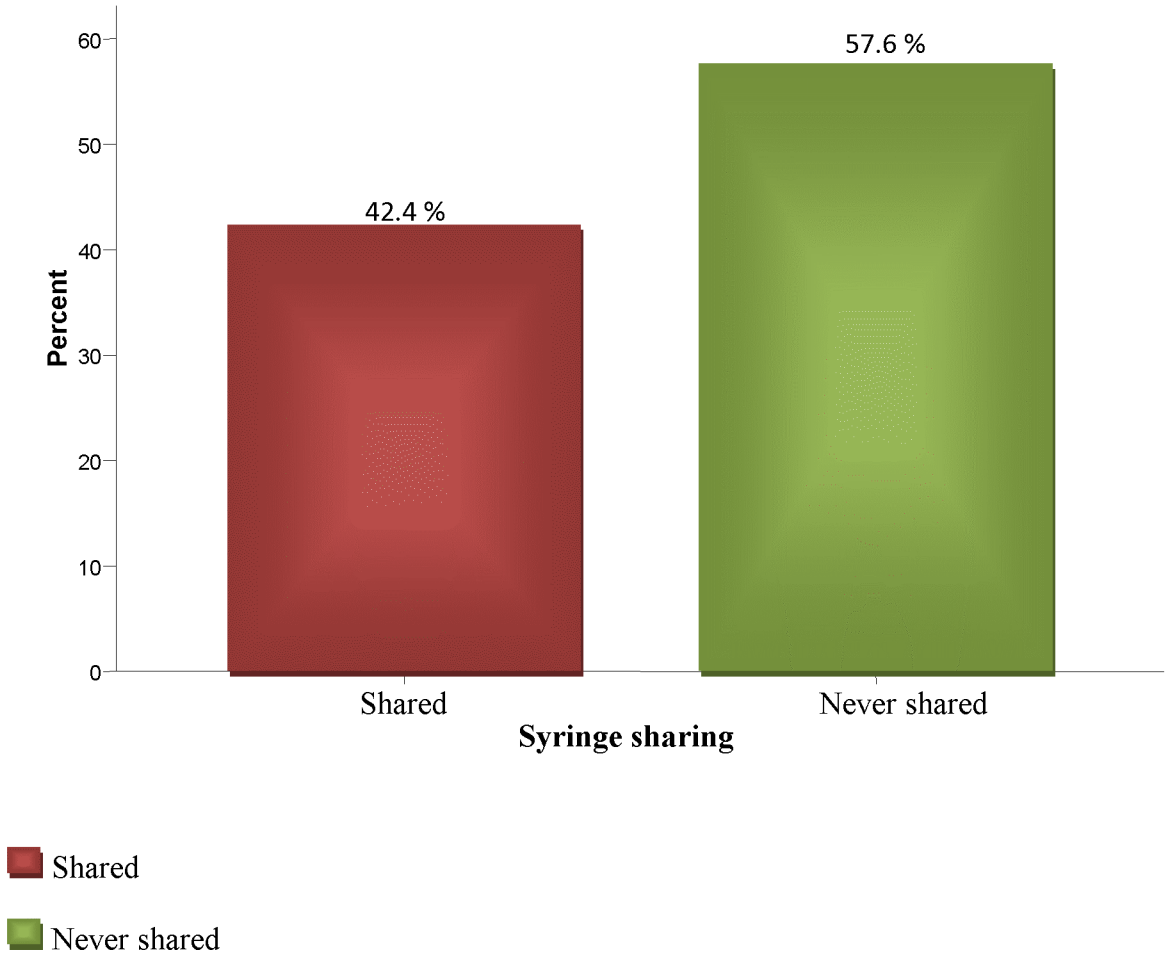


Experienced

Had not

Out of the 85 samples, 78 (91.8%) have experienced caught, and 7 (8.2%) had not.

Figure 3.3: Syringe sharing



Out of 85 samples, 36 (42.4%) reported that they had shared syringes with other drug users, and 49 (57.6%) of them reported that they had never shared syringes.

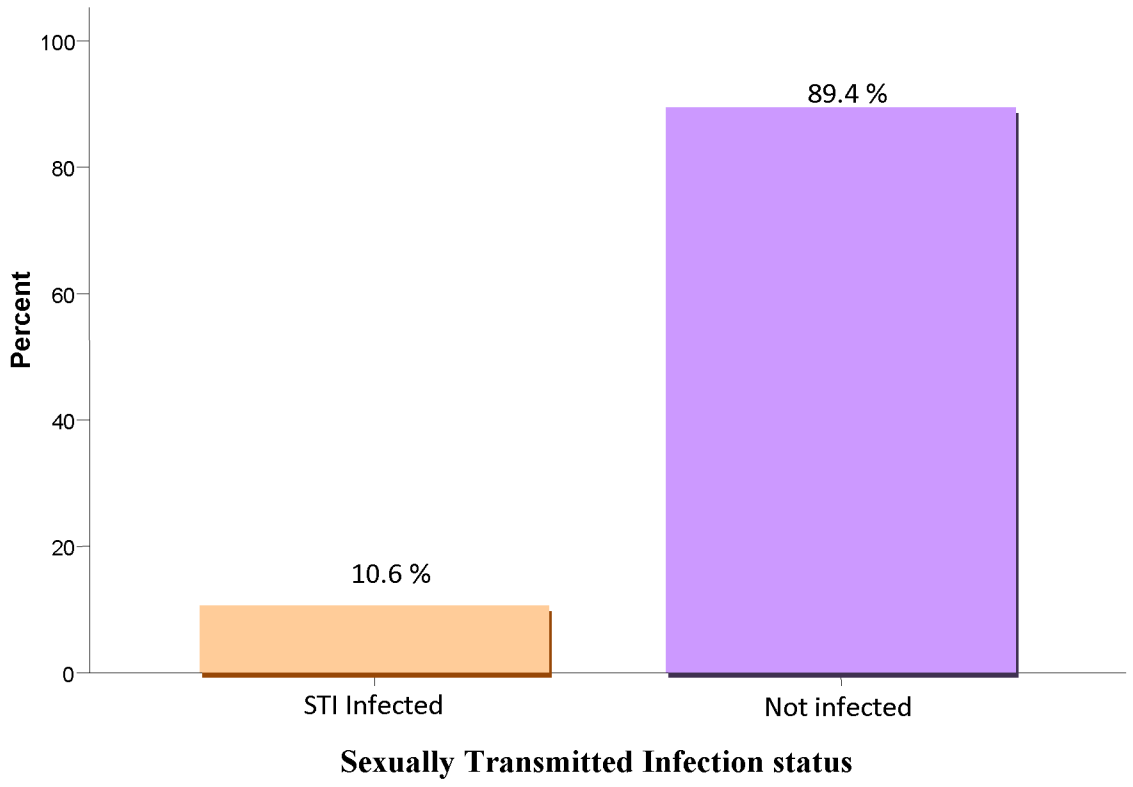
HEALTH STATUS PROFILE

The health status profiles of the present study subjects are presented in Table – 4.

Table – 4: Health status

		Percentage
Sexually Transmitted Infection (STI) Status	STI infected	10.6%
	Not infected	89.4%
Human Immune deficiency Virus (HIV) Status	Positive	35.3%
	Negative	64.7%
Hepatitis Status	Hepatitis infected	10.6%
	Not infected	89.4%
Abscess status	Abscessed	28.2%
	Did not abscess	71.8%

Figure-4.1: Sexually Transmitted Infection status

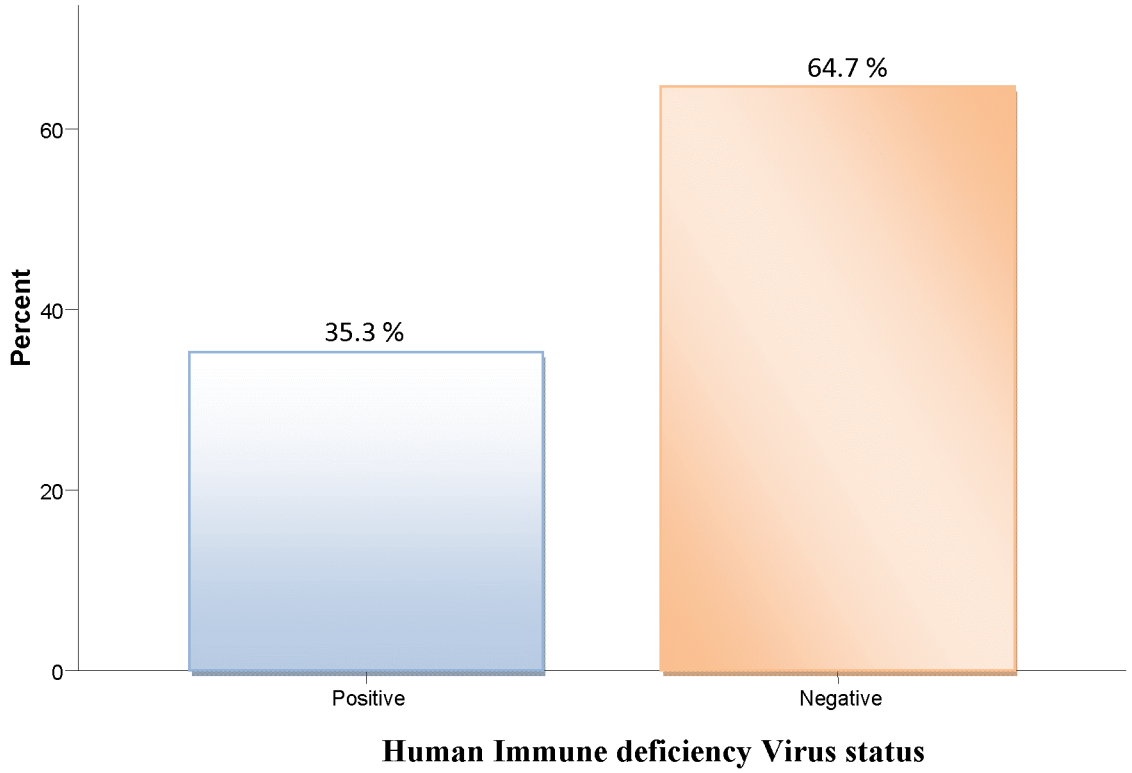


STI infected

Not infected

Out of 85 samples, 9 (10.6%) were STI infected, while 76 (89.4%) were not infected.

Figure-4.2: Human Immune deficiency Virus status

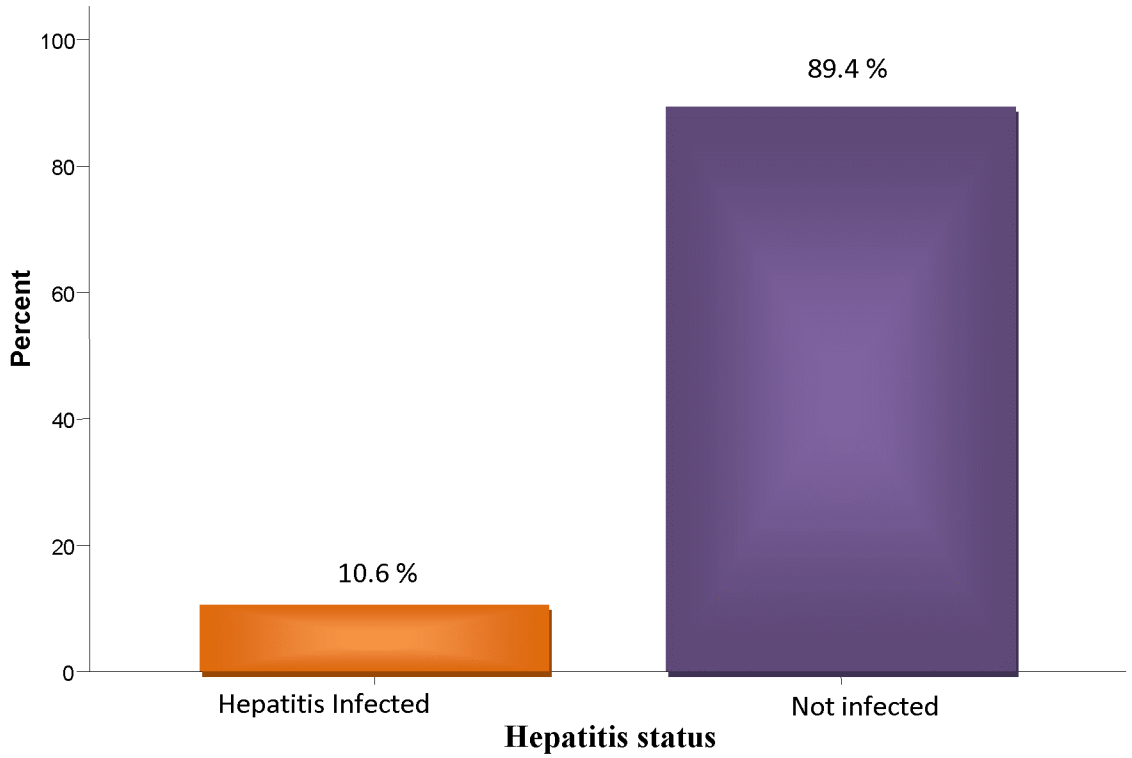


Positive

Negative

The HIV infected among the samples were 30 (35.3%), and 55 (64.7%) were not.

Figure-4.3: Hepatitis status

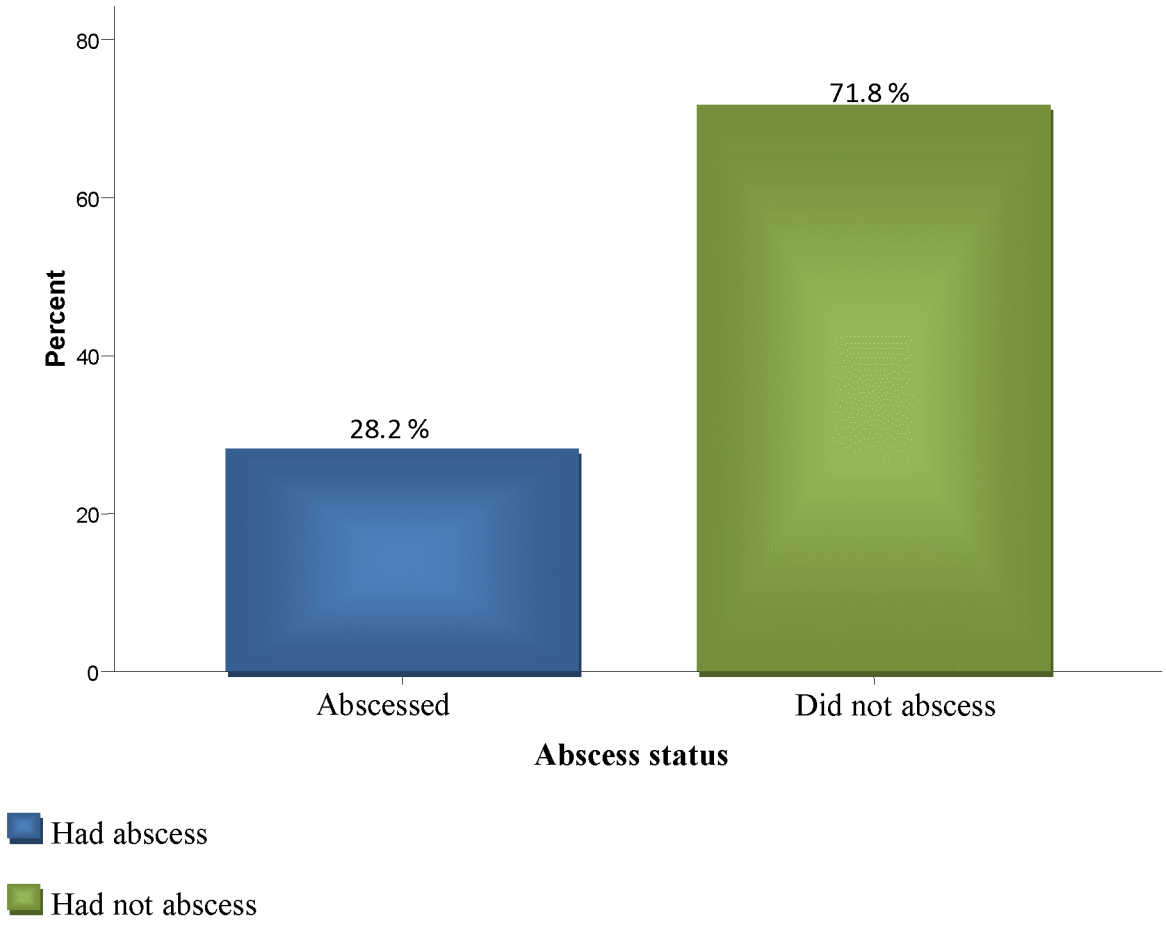


Hepatitis infected

Not infected

Out of 85 samples, 9 (10.6%) were hepatitis infected while 76 (89.4%) were not.

Figure-4.4: Abscess status.



Out of 85 samples, 24 (28.2%) had abscess, while 61 (71.8%) had not.

INTERVIEW SCHEDULE

Cannabis

The patterns of cannabis use of the present study samples are presented in Table - 5 (a). The numbers of days of cannabis use if used in last 30 days are presented in Table – 5 (b). The age of first cannabis use of the study samples are presented in Table – 5 (c).

Table-5 (a): Pattern of cannabis use

Cannabis use pattern		Percentage
Ever in lifetime	YES	89.4%
	NO	10.6%
Last one year	YES	47.1%
	NO	52.9%
Last 30 days	YES	28.2%
	NO	71.8%

Out of the 85 subjects, 89.4% had ever used cannabis, 47.1% had used in last year, and used within last 30 days was reported by 28.2% of the subjects.

Table – 5 (b): Numbers of days of cannabis used in last 30 days

SL. No	Number of days the cannabis used in last 30 days	Percentage
1	Did not use.	71.8%
2	1 days to 5 days	11.7%
3	6 days to 10 days	3.5 %
4	11 days to 15 days	2.4%
5	16 days to 20 days	1.2%
6	21 days 25 days	1.2%
7	26 days to 30 days	8.2%

Among the 85 subjects, 71.8% did not use, 11.7% used for 1 day to 5 days within last 30 days, 3.5 % used for 6 days to 10 days, 2.4% used for 11 days to 15 days, 1.2% used for 16 days to 20 days, 1.2% used for 21 days 25 days, and 8.2% used for 26 days to 30 days.

Table – 5 (c): Age of first cannabis use

SL. No	Age of first cannabis use	Percentage
1	12 years to 15 years	15.2%
2	16 years to 19 years	35.3%
3	20 years to 23 years	27.1%
4	24 years to 27 years	5.9%
5	28 years to 32 years	5.9%
6	Never used	10.6%

Among the 85 subjects, 10.6% have never used cannabis, 15.2% had used for the first time at the age of between 12 years to 15 years, 35.3% used at the age of 16 years to 19 years, 27.1% used at the age of 20 years to 23 years, 5.9% used at the age of 24 years to 27 years, and 5.9% used at the age of 28 years to 32 years.

Heroin / Number-4

Table – 6 (a) shows the pattern of heroin / number – 4 uses of the samples. Table – 6 (b) shows the number of days of the heroin / number-4 use if used in last 30 days. The age of first heroin / number – 4 use of the samples are presented in table – 6 (c).

Table -6 (a): Pattern of heroin / number – 4 use.

Heroin / Number-4 use pattern		Percent
Ever in lifetime	YES	91.8%
	NO	8.2%
Last one year	YES	62.4%
	NO	37.6%
Last 30 days	YES	48.2 %
	NO	51.8%

Out the 85 subjects, 91.8% had ever used Heroin / Number-4, 62.4% had used in last year, and used within last 30 days was reported by 48.2% of the subjects.

Table -6 (b): Number of days of heroin / number4 used in last 30 days

SL.No	Number of days the Heroin / Number-4 used in last 30 days	Percentage
1	Did not used	51.8%
2	1 days to 5 days	2.3%
3	6 days to 10 days	2.4%
4	11 days to 15 days	8.2%
5	16 days to 20 days	12.9%
6	21 days 25 days	5.9%
7	26 days to 30 days	16.5%

Out of the 85 subject, 51.8% did not use heroin / number - 4, 2.3% used for 1 day to 5 days within last 30 days, 2.4 % used for 6 days to 10 days, 8.2% used for 11 days to 15 days, 12.9% used for 16 days 20 days, 5.9% used for 21 days to 25 days, and 16.5% used for 26 days to 30 days.

Table – 6 (c): Age of first heroin / number-4 use

SL. No	Age of first Heroin / Number-4 use	Percentage
1	Never used	8.2%
2	13 years to 17 years	18.8%
3	18 years to 22 years	48.3%
4	23 years to 27 years	18.8 %
5	28 years to 32 years	4.7%
6	33 years to 37 years	1.2%

Out of the 85 subjects, 8.2% have never used Heroin / Number-4, 18.8% had used for the first time at the age of between 13 years to 17 years, 48.3% used at the age of 18 years to 22 years, 18.8% at the age of 23 years to 27years, 4.7% used at the age of 28 years to 32 years, and 1.2% used at the age of 33 years to 37 years.

Parvon / Proxyvon

The pattern of parvon / proxyvon use of the study subjects are presented in Table – 7 (a). The numbers of days of the parvon / proxyvon use are presented in Table - 7 (b). The age of first parvon / proxyvon use of the subjects are presented in table – 7 (c).

Table – 7 (a): Pattern of parvon / proxyvon use

Parvon / Proxyvon use pattern		Percentage
Ever in lifetime	YES	94.1 %
	NO	5.9%
Last one year	YES	60.0%
	NO	40.0%
Last 30 days	YES	49.4%
	NO	50.6%

Out of the 85 samples, 94.1 % had used Parvon / Proxyvon, 60.0% had used in last year, and used within last 30 days was reported by 49.4% of the samples.

Table – 7 (b): Number of days the parvon / proxyvon use if used in last 30 days

SL.No	Number of days the Parvon / Proxyvon used in last 30 days	Percentage
1	Not used	50.6%
2	1 days to 5 days	1.6%
3	6 days to 10 days	4.2%
4	11 days to 15 days	7.1%
5	16 days to 20 days	7.1%
6	21 days to 25 days	8.2%
7	26 days to 30 days	21.2%

Out of the 85 subjects, 50.6% did not use, 1.6% used for 1 day to 5 days within last 30 days, 4.2 % used for 6 days to 10 days, 7.1% used for 11 days to 15 days, 7.1% used for 16 days to 20 days, 8.2% used for 21 days 25 days, and 21.2% 26 years to 30 years days.

Table – 7(c): Age of first parvon / proxyvon use

SL.No	Age of first Parvon / Proxyvon use	Percentage
1	Never used	5.9%
2	13 years to 16 years	20.0%
3	17 years to 20 years	42.4%
4	21 years to 24 years	23.5%
5	25 years to 29 years	8.2%

Out of the 85 subjects, 5.9% have never used parvon / proxyvon, 20.0% had used for the first time at the age of between 13 years to 16 years, 42.4%% used at the age of 17 years to 20 years, 23.5% used at the age of 21 years to 24 years, and 8.2% used at the age of 25 years to 29 years.

Pharmaceutical sedatives

Pattern of the pharmaceutical sedatives use are presented in Table – 8 (a). Numbers of days the pharmaceutical sedatives use if used in last 30 days are presented in Table – 8 (b). The age of first pharmaceutical sedatives use of the samples are presented in Table - 8 (c).

Table – 8 (a): Pattern of the pharmaceutical sedatives use

Pharmaceutical sedatives		Percentage
Ever in lifetime	YES	68.2%
	NO	31.8%
Last one year	YES	37.6%
	NO	62.4%
Last 30 days	YES	22.4%
	NO	77.6%

Out of the 85 subjects, 68.2 % had used Pharmaceutical sedatives, 37.6% used in last year, and used within last 30 days was reported by 22.4% of the subjects.

Table – 8 (b): Numbers of days of pharmaceutical sedatives used if used in last 30 days

SL. No	Number of days the Pharmaceutical sedatives used in last 30 days	Percentage
1	Did not used	77.6%
2	1 days to 5 days	5.9%
3	6 days to 10 days	2.4%
4	11 days to 15 days	1.2%
5	16 days to 20 days	4.7%
6	21 days to 25 days	4.7%
7	26 days to 30 days	3.5%

Out of the 85 subjects, 77.6% never used or did not used, 5.9% used for 1 day to 5 days within last 30 days, 2.4% used for 6 days to 10 days, 1.2% used for 11 days to 15 days, 4.7% used for 16 days to 20 days, 4.7% used for 21 days 25 days, and 3.5% 26 years to 30 years days.

Table – 8 (c): Age of first pharmaceutical sedatives use

SL.No	Age of first Pharmaceutical sedatives use	Percentage
1	Never used	31.8%
2	13 years to 16 years	10.6%
3	17 years to 20 years	42.4%
4	21 years to 24 years	5.9%
5	25 years to 29 years	9.4%

Out the 85 subjects, 31.8% have never used Pharmaceutical sedatives, 10.6% had used for the first time at the age of between 13 years to 16 years, 42.4% used at the age of 17 years to 20 years, 5.9% used at the age of 21 years to 24 years, and 9.4% used at the age of 25 years to 29 years.

Drugs which have been used daily for one month at any point of time

Drugs which have been used daily by the subjects for one month at any point of time are presented in Table –9.

Table – 9: Drugs which have been used daily for one month at any point of time

Sl. No	Drugs which have been used for one month at any point of time	No. of responses	
		Yes	No
1	Cannabis	22.4%	77.6%
2	Heroin	68.2%	31.8%
3	Pharmaceutical preparation	84.7%	15.3%

Among the 85 subjects, 22.4% samples had used cannabis for one month at any point of time, 68.2% had used heroin for one month at any point of time, and 84.7% had used pharmaceutical sedatives for one month at any point of time.

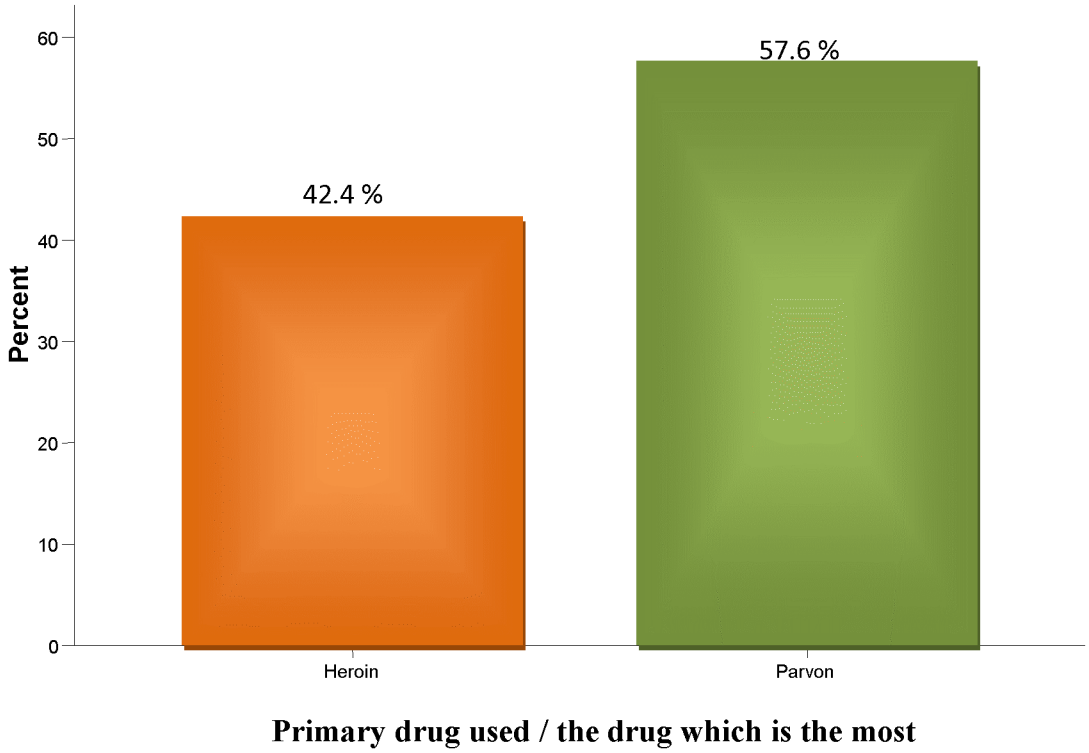
Primary drug used / the drug which is the most preferred

The primary drug of use or the drug which is the prefer most by the subjects are presented in Table – 10 and Figure 10.1.

Table –10: Primary drug used / the drug which is the most preferred

	Responses	
	Heroin / number-4	Parvon / proxyvon
Primary drug ofuse or the drug which is prefer themost	42.4%	57.6%

Figure- 10.1: Primary drug used / the drug which is the most preferred



Heroin Parvon

Out of 85 subjects,heroin / number-4 have been preferred most by 42.4% of the samples, while 57.6% have preferred parvon / proxyvon.

Procurement

Procurement of primary drug used of the subjects is presented in Table – 11.

Table-11: Procurement

	No. of Respondents					
	Tobacco / wine shop	Pharmacy or chemist shop	Any other shop	From a drug peddler	From friends	Drug peddler themselves
Place where the primary drug of used procures	1.2%	3.5%	0	70.6%	16.5%	8.2%

Out of 85 subjects, 1.2% of the samples reported that they have procured their primary drug of use from tobacco / wine shop, 3.5% subjects have procured from pharmacy or chemist shop, 70.6% subjects have procured from a drug peddler, 16.5% have procured from friends, 8.2% reported that they themselves were a drug peddler.

Attitudes towards drug use

The subjects' attitudes towards drug use are presented in Table – 12.

Table-12: Attitudes towards drug use

	No. of Respondents	
	Yes	No
Think thatdruguseisharmful	91.8%	8.2%

Out of 85 samples, 91.8% of the samples have considered drug use as harmful, while 8.2% did not.

Experiences due to drug use

The subjects' experiences due to drug use are presented in table – 13.

Table – 13: Experiences due to drug use

Sl.No	Experiences due to drug use	No. of Respondents	
		Yes	No
1	Intoxication that impaired performance	82.4%	17.6%
2	Driven a vehicle after intoxicating drug.	32.9%	67.1%
3	Got into a fight under the effect of drugs	72.9%	27.1%
4	Indulged in sexual behavior under the effect drugs	78.8%	21.2%
5	Had sexual activity to get drugs or money for drugs	95.3%	4.7%
6	Experienced some physical problems due to drug use	84.7%	15.3%
7	Experienced sadness or anxiety due to drug use or problems related to drug use	92.9%	7.1%
8	Got into legal problems due to drug use (caught by the police even if case not registered or caught by the community).	90.6%	9.4%

Out of 85 samples, 82.4% have experienced intoxication that impaired performance. 32.9% samples reported that they had driven a vehicle after intoxicating drugs, 72.9% samples reported that they had fought under the effect of drugs, 78.8% samples reported that they had indulged in sexual behavior under the effect of drugs, 95.3% samples reported that they had sexual activity to get drugs or money for drugs, 84.7% samples reported that they have experienced physical problems due to drug use, 92.9% samples reported that they have experienced sadness or anxiety due to drug use or problems related to drug use, 90.6% samples reported that have experienced legal problems due to drug use (caught by the police even if case not registered or caught by the community).

Tolerance and withdrawal

The subjects' experiences of tolerance and withdrawal are presented in table – 14.

Table- 14: Tolerance and withdrawal

	No. of Respondents	
	Yes	No
Indicator of tolerance	23.5%	76.5%
Indicator of withdrawal	84.7%	15.3%

Out of 85 participants, 23.5% reported that they have experienced tolerance. 84.7% of the participants reported that they experienced somediscomfort whenever they donottakethe drug/ takereduced amount of thedrug (Indicatorofwithdrawal).

Ever considered stopping/reducing use of drugs in the last month

Table -15: Ever considered stopping/reducing use of drugs in the last month

	No. of Respondents	
	Yes	No
Ever considered stopping/reducing use of drugs in the last month	85.9%	14.1%

Out of 85 samples, 85.9% of the samples reported that they had considered stopping / reducing use of drugs in the last month, while 14.1% had not.

Ever been able to stop use of drugs

Table-16: Ever been able to stop use of drugs

	No. of Respondents	
	Yes	No
Everbeen abletostopuseof drugs	89.4%	10.6%

Out of 85 participants, 89.4% participants reported that they have ever been able to stop use of drugs, while 10.6% reported that they have never been able to stop.

If ever been able to stop use of drugs, for how many months (in the most recent attempt)

Table – 17: If ever been able to stop use of drugs, for how many months (in the most recent attempt)

	No. of Respondents			
	Less than one month	Between 1 to 3 months	More than 3 months	Not applicable
Number of months	22.4%	21.2%	44.7%	11.8%

Out of 85, 22.4% participants reported that they had stopped use of drugs for less than one month in their most recent attempt, 21.2% reported that that they had stopped use of drugs for between 1 to 3 months in their most recent attempt, 44.7% reported that they had stopped use of drugs for more than 3 months in their most recent attempt, while 11.8% samples did not remembered the exact duration.

Need some help for stopping/reducing use of drugs.

Table-18: Need some help for stopping/reducing use of drugs

	No. of Respondents			
	No, I do not think that I have a problem	Yes, I have a problem, but I can quit on my own	Yes, I want to quit but would need some help for quitting	Any other (Specify)
Need some help for stopping/reducing use of drugs	21.2%	30.6%	48.2%	0

Out of 85, 21.2% participants did not think that they have a problem in stopping/reducinguse ofdrugs, 30.6% of the samples reported that they have a problem but they can quit on their own, 48.2% reported that they want to quit but would need some help for quitting.

Ever received any help for stopping/reducing use of drugs

Any help for stopping / reducing use of drugs by the subjects are presented in table – 19.

Table-19: Ever received any help for stopping/reducing use ofdrugs

	No. of Respondents				
	No, I never looked for it	Yes, some had advised me to stop but I did not visit a doctor	Yes, I have seen a doctor for treatment of drug use, but was not admitted	Yes, I have seen a Doctor for treatment of drug use and was hospitalized too.	Any other (Specify)
Everreceived anyhelpfor stopping/reducinguse ofdrugs	55.3%	12.9%	11.8%	20.0%	0

Out of 85 samples, 53.3% of the samples reported that they have never received any help for stopping /reducing use of drugs and even never looked for it, 12.9% reported that some had advised them to stop but did not visit a doctor, 11.8% reported that they have seen a doctor for treatment of drug use, but was not admitted, 20.0% reported that they have seen a doctor for treatment of drug use and was hospitalized too.

Experienced of difficulty inquitting

Difficulties that the subjects' have experienced in quitting are presented in table – 20.

Table-20: Difficulty experience in quitting

Difficulty experienceinquitting	No. of Respondents								
	Craving	Peer pressure	Easy availability of drugs	Difficult to tolerate withdrawal	Difficult to survive on street without drugs	Difficult to cope with stress	Feeling hurt	Enjoy drugs	Not applicable
	81.2%	22.4%	42.4%	56.5%	54.1%	62.4%	1.2%	1.2%	2.4%

Out of 85 participants, 81.2% reported that they have experienced difficulty of craving in quitting, 22.4% reported peer pressure, 42.4% reported easy availability of drugs, 56.5% reported that they had difficulty in withdrawal, 54.1% reported that they had difficulty in surviving on street without drugs, 62.4% reported that they had difficulty in coping with stress, 1.2% reported hurt feeling, 1.2% reported that they enjoyed drugs, and 2.4% were unable answer.

Multidimensional Perceived Social Support

Table-21: Levels of Perceived Social Support for Female Sex Workers – Intravenous Drug Users.

Category	Percentage
Low	40.0%
Moderate	47.1%
High	12.9%

Out of the 85, 40% respondents fall under the category of low, 47.1% fall under the category of moderate, and 12.9% fall under the category of high.

General Health Questionnaire -12

Table-22: Level of Mental Health of Female Sex Workers – Intravenous Drug Users.

Category	Percentage
Low	12.9%
Moderate	85.9%
High	1.2%

Out of the 85 respondents, 12.9% had fall under the category of low, 85.9% falls under the category of moderate, and 1.2% falls under the category of high.

CORRELATION BETWEEN PERCEIVED SOCIAL SUPPORT AND MENTAL HEALTH

Table-23: Correlation between perceived social support and mental health.

Correlations				
			PERCEIVED SOCIAL SUPPORT	MENTAL HEALTH
Spearman's rho	PERCEIVED SOCIAL SUPPORT	Correlation Coefficient	1.000	-.024
		Sig. (2-tailed)	.	.829
		N	85	85
	MENTAL HEALTH	Correlation Coefficient	-.024	1.000
		Sig. (2-tailed)	.829	.
		N	85	85

Spearman's Correlation coefficient between Perceived Social Support and Mental health shows that there is no significant relationship between these two variables.

CORRELATION BETWEEN INJECTING DRUG USE AND MENTAL HEALTH

Table-24: Correlation between injecting drug use and mental health

Correlations				
			MENTAL HEALTH	INJECTING DRUG USE
Spearman's rho	MENTAL HEALTH	Correlation Coefficient	1.000	.235*
		Sig. (2-tailed)	.	.030
		N	85	85
	INJECTING DRUG USE	Correlation Coefficient	.235*	1.000
		Sig. (2-tailed)	.030	.
		N	85	85
*. Correlation is significant at the 0.05 level (2-tailed).				

Spearman's Correlation coefficient shows that there is a significant relationship between mental health and injecting Drug use. This indicated that injecting drug use can lead to mental health problems or mental health problems can leads to injecting drug use.

CORRELATION BETWEEN INJECTING DRUG USE AND PERCEIVED SOCIAL SUPPORT

Table – 25: Correlation between injecting drug use and perceived social support.

Correlations				
			INJECTING DRUG USE	PERCEIVED SOCIAL SUPPORT
Spearman's rho	INJECTING DRUG USE	Correlation Coefficient	1.000	.066
		Sig. (2-tailed)	.	.547
		N	85	85
	PERCEIVED SOCIAL SUPPORT	Correlation Coefficient	.066	1.000
		Sig. (2-tailed)	.547	.
		N	85	85

Spearman's Correlation coefficient between Perceived Social Support and Injecting Drug use shows that there is no significant relationship between these two variables.

PSYCHOMETRIC PROPERTIES OF THE MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

Table – 26: Psychometric properties of the multidimensional scale of perceived social support.

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.742
		N of Items	6[a]
	Part 2	Value	.699
		N of Items	6[b]
	Total N of Items		12
Correlation Between Forms			.802
Spearman-Brown Coefficient	Equal Length		.890
	Unequal Length		.890
Guttman Split-Half Coefficient			.889

a. The items are: Perceived Social Support item 1, Perceived Social Support item 2, Perceived Social Support item 3, Perceived Social Support item 4, Perceived Social Support item 5, and Perceived Social Support item 6.

b. The items are: Perceived Social Support item 7, Perceived Social Support item 8, Perceived Social Support item 9, Perceived Social Support item 10, Perceived Social Support item 11, and Perceived Social Support item 12.

Psychometric properties of the Multidimensional scale of perceived social support is

Cronbach's Alpha.742 which is considered to be robust.

PSYCHOMETRIC PROPERTIES OF GENERAL HEALTH QUESTIONNAIRE (GHQ) - 12

Table – 27: Psychometric properties of the General health questionnaire (GHQ) - 12

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.754
		N of Items	6[a]
	Part 2	Value	.851
		N of Items	6[b]
	Total N of Items		12
Correlation Between Forms			-.717
Spearman-Brown Coefficient	Equal Length		-5.064[c]
	Unequal Length		-.835[c]
Guttman Split-Half Coefficient			-4.593

a. The items are: Mental Health item 1, Mental Health item 2, Mental Health item 3, Mental Health item 4, Mental Health item 5, and Mental Health item 6.

b. The items are: Mental Health item 7, Mental Health item 8, Mental Health item 9, Mental Health item 10, Mental Health item 11, and Mental Health item 12.

c. The correlation between forms (halves) of the test is negative. This violates reliability model assumptions. Statistics which are functions of this value may have estimates outside theoretically possible ranges.

Psychometric properties of the General health questionnaire (GHQ) - 12 is Cronbach's Alpha.754 respectively which is considered to be robust.

CHAPTER – V

SUMMARY AND CONCLUSION

In view of the theoretical foundation and empirical findings pertaining to drug use, mental health and social support of female sex workers, the main aim of the present study is to explore pattern of drug use, perceived social support, and mental health of female sex workers who are Intravenous Drug Users (IDU) in Aizawl, capital of Mizoram.

This chapter attempts a brief summary of the whole study and some conclusions drawn based on the results and the findings.

Within group research design was used in the study. The present study has been designed with four – fold objectives: (i) to present a profile of the Female Sex Workers (FSW) – Intravenous Drug Users (IDU). (ii) to highlight the pattern and types of drug use. (iii) to examine the mental health status. (iv) to identify the sources of social support.

The study incorporated purposive sampling procedure. Keeping in view the objectives of the study, 85 Female Sex Workers who are Intravenous Drug Users with age ranging between 13 to 40 years were randomly selected for the conduct of the study without distinguishing the context in which sex work is provided, who have been registered in different centers in Aizawl, the capital of Mizoram, namely - Volunteers for Community Mental Health (VOLCOMH), Agape Drop In Centers, Chawnpui Bethel Camping Centers, Grace Home, and Protective Home which is the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram.

To meet the objectives of the present study on "Pattern of Drug Use, Perceived Social Support, and Mental Health of Female Sex Workers – Intravenous Drug Users in Aizawl", the following measures were incorporated: 1. General Health Questionnaire (GHQ) – 12, Goldberg (1992), 2. Multidimensional Scale of Perceived Social Support (MDPSS), Zimet, Dahlem, Zimet & Farley (1988), 3. Interview Schedule for Pattern of Drug Use (NCPCR, 2012), and Socio-demographic sheets including - demographic profile, sex work profile, drug

use profile, and health status profile. Since this is the first endeavor to study the pattern of drug use, perceived social support and mental health of Female Sex Workers who are Intravenous Drug Users in Aizawl, capital of Mizoram, the researcher felt it necessary to include the Socio-demographic profiles in a detailed manner to give the reader a perspective of the Female Sex Workers who are Intravenous Drug Users and their background, and to provide a backdrop/reference for further studies in this population.

Demographic Characteristics of the female sex workers

Age

Approximately half of the samples (41.2%) of the samples were at the age of between 21 years to 25 years, followed by 26 years to 30 years (34.1%), followed by 31 years to 35 years (9.4%), followed by 36 years to 40 years (8.2%), and then 15 years to 20 years (7.1%).

Marital status

Approximately half of the samples had been divorced (49.4%). Roughly equal percentages of the samples were single (25.9%) and married (22.4%). A few of them were widowed (2.4%).

Number of children

54.1% of the sample had children and 45.9% did not have children.

Education

All the samples were literate and more than half of the samples (50.6%) had completed high school, 30.6% middle school, 14.1% higher secondary school, 3.5% were graduates, and only 1.2%studied only up till Primary School.

Occupation

The majority of the samples were unemployed (83.5%), 7.1% were government employed, and 9.4% were doing a small business.

Marital status of parents

Parents of the majority of the samples were divorced (41.2%). Parents of the 31.8% had been married. This is followed by father deceased (17.6%), both parents deceased (7.1%), and mother deceased (2.4%).

Sex Work Profile and Behavior

Age at first sexual activity

Overall, the majority (87.1%) of the samples had their first sexual activity at the age of 14 years to 19 years, which is followed by the age group of between 20 years to 25 years (10.6%), and 2.4% for between 8 years to 13 years.

Abortion status

The majority of the participants (89.4%) have never had abortion, but 10.6% of the participants had abortion due to several reasons (10.6%).

Enjoyment of sex work

Majority of the samples (88.2%) reported that they never enjoyed sex work. Only a 7.1% of the samples reported that they enjoyed sex work and 4.7% of the samples sometimes enjoyed sex work.

Sexual Orientation

Approximately one third of the samples (32.9%) had same sex partner (homosexual), while more than two third of the samples (67.1%) never had same sex partner (heterosexual).

Average income per customer

Majority of the samples (89.4%) reported getting between Rs100 to Rs 1000, followed by Rs 2100 to Rs 3000 (4.7%), followed by Rs1100 to Rs 2000 (3.5%), and then Rs3100 to Rs 4000 (2.4%). Although their rates per customer were different depending on several conditions including the conditions of their customers, the samples have reported their average income per customer.

Number of days per week engaged in sex work

Out of 85, thirty eight participants (44.7%) generally engaged in sex work for 6 days to 7 days, twenty nine participants (34.1%) reported 4 days to 5 days, fifteen participants (17.6%) reported 2 days to 3 days, and only three participants (3.5%) reported only one day in a week.

Number of clients/ customers in a week

The number of the participants' clients / customers is different. These might depend on their attractiveness, class, number of days they are engaged in sex work in a week, and even luck as well. Almost thirty samples (35.3%) reported having 11 to 15 customers per week, twenty one samples (24.7%) reported 6 to 10 customers per week, seventeen samples (20.0%) reported 21 to 25 customers per week, each of the seven samples (8.2% each) of the samples reported 1 to 5 customers per week and 16 to 20 customers, one of the samples (1.2%) reported 26 to 30 customers, one of the samples (1.2%) reported 31 to 35 customers, one of the samples (1.2%) reported 41 to 45 customers.

Risk Behaviors

Condom use

More than half of the samples (54.1%) consistently used condom while having sex, while almost half of the samples (45.9%) inconsistently used condom.

Syringe sharing

More than one third (42.4%) of the samples had shared syringe with other drug users.

Sexually Transmitted Infection/ HIV status/ Hepatitis/ Abscess

Out of 85 respondents, nine (10.6%) respondents had Sexually Transmitted Infections (STI), thirty (35.3%) respondents were Human Immune deficiency Virus (HIV) positive , nine (10.6%) respondents were hepatitis infected, and twenty four (28.2%) had abscess.

Neglect by others they know/ Neglect by society

More than half of the samples (55.3%) reported that they are not supported and are neglected by family and others they know and even more than half of the samples (50.6%) reported that they are also not supported and neglected by society.

Incidence of Violence, Threats, Rape, Forced Labour, and Caught

Approximately two third of the samples had been subjected to violence (65.9%), approximately one fourth of the samples had faced threats (25.9%), 3.5% of the samples had been raped, and one of the samples had been subjected to forced labor (1.2%). Majority of the participants (91.8%) had experienced being arrested.

Drug use Profile

Age of initiation into drug use

Approximately two third (65.9%) of the samples had used drugs for the first time at the age of 15 years to 19 years, more than one seventh (17.6%) of the samples were at the age of 20 years to 24 years, seven samples (8.2%) were at the age of 12 years to 14 years, and seven samples (8.2%) were at the age of 25 years to 29 years.

Drugs use:

a) Cannabis

Nine (10.6%) samples had never used cannabis. Thirty (35.3%) samples had used cannabis for the first time at the age of 16 years to 19 years, twenty-three (27.1%) samples had used at the age of 20 years to 23 years, 15.2% samples had used at the age of 12 years to 15 years, five (5.9%) samples had used at the age of 24 years to 27 years, and other five (5.9%) samples had used at the age of 28 years to 32 years.

Majority (89.4%) of the samples had ever used cannabis, forty (47.1%) samples had used in last year, and twenty four (28.2%) samples had used within last 30 days. Overall, majority (71.8 %) of the samples did not use cannabis within last 30 days, 11.7 % samples had used for 1 day to 5 days within last 30 days, followed by seven (8.2%) samples used for 26 days to 30 days, followed by two (2.4%) samples used for 11 days to 15 days, followed by three (3.5 %) samples used for 6 days to 10 days, only one (1.2%) used for 16 days to 20 days, only one (1.2%) samples used for 21 days 25 days.

b) Heroin / Number 4

Out of 85 samples, 8.2% of the sample had never used heroin / number-4. Overall, almost half (48.3%) of the sample had used heroin / number-4 for the first time at the age of

18 years to 22 years, sixteenth (18.8%) samples had used at the age of 13 years to 17 years, other sixteenth (18.8%) samples had used at the age of 23 years to 27 years, fourth (4.7%) samples had used at the age of 28 years to 32 years, and one (1.2%) samples had used at the age of 33 years to 37 years.

The majority (91.8%) of the samples had ever used heroin / number -4, more than half (62.4%) of the samples had used within last year, and more than half (48.2 %) of the samples had used within last 30 days.

Overall more than half (51.8%) of the samples did not used heroin/number-4 within last 30days, followed by fourteen samples (16.5%) had used for 26 days to 30 days, followed by eleven (12.9%) samples had used for 16 days to 20 days, followed by seven samples (8.2%) had used for 11 days to 15 days, five (5.9%) samples had used for 21 days 25 day, three (2.3%) samples had used for 1 days to 5 days, and only two (2.4%) samples had used for 6 days to 10 days.

b) Pharmaceutical Drugs

i) **Parvon/ proxyvon**

Thirty-sixth (42.4%) samples had used parvon / proxyvon for the first time at the age of 17 years to 20 years, twenty (23.5%) samples used at the age of 21 years to 24 years, seventeen (20.0%) samples used at the age of 13 years to 16 years, seven (8.2%) had used at the age of 25 years to 29 years, and five (5.9%) had never used it.

The majority (94.1%) of the samples had ever used parvon / proxyvon, and even the majority (60.0%) of the samples had used within last year. Overall, approximately half (49.4%) of the samples had used within last 30 days. Overall, 50.6% samples did not used parvon /proxyvon within last 30 days, eighteen (21.2%) of the samples had used for 26 days

to 30 days, seven (8.2%) of the samples had used for 21 days to 25 days, six (7.1%) had used for 11 days to 15 days, and other six (7.1%) samples had used for 16 days to 20 days.

ii) **Sedatives**

Twenty-seven (31.8%) of the samples had never used pharmaceutical sedatives. Thirty six (42.4%) samples had used pharmaceutical sedatives for the first time at the age of 17 years to 20 years, nine (10.6%) samples had used at the age of 13 years to 16 years, eight (9.4%) samples used at the age of 25 years to 29 years, and five (5.9%) samples used at the age of 21 years to 24 years.

The majority (68.2%) of the samples had ever used pharmaceutical sedatives. Thirty two (37.6%) of the samples had used within last year and 19 samples had used (22.4%) within last 30 days.

Overall, the majority (77.6%) of the samples did not used pharmaceutical sedatives within last 30 days, five (5.9%) samples had used it for 1 day to 5 days, four (4.7%) samples had used it for 16 days to 20 days, other four (4.7%) samples had used it for 21 days to 25 days, three (3.5%) samples had used it for 26 days to 30 days, two (2.4%) samples had used it for 6 days to 10 days, and one samples (1.2%) had used it for 11 days to 15 days.

Nineteen (22.4%) samples had used cannabis for one month at any point of time, while the majority (77.6%) of the samples had not. The majority (68.2%) of the samples had used heroin / number-4 for one month at any point of time, and even pharmaceutical sedatives had been used for one month at any point of time by the majority (84.7%) of the samples.

Primary drug used / the drug which is the most preferred

Since either or both heroin / number-4 and parvon / proxyvon have been used by all samples, they were compared to be classified it as primary drug of use. Overall, the majority (57.6%) of the samples had preferred most parvon / proxyvon, and the rest of the samples (42.4%) had preferred most heroin / number -4.

Procurement

As reported by the samples, the majority (70.6%) of the samples had procured their primary drug of abuse from a drug peddler, fourteen (16.5%) samples had procured from friends, seven (8.2%) samples were a drug peddler, three (3.5%) samples had procured from pharmacy or chemist shop, and one (1.2%) samples had procured from tobacco/wine shop.A study among FSWs in Tijuana and Cd. Juarez, situated on the Mexico-U.S. border, observed that FSWs who injected drugs tended to have social networks that may perpetuate their drug use. FSW-IDUs were more than twice as likely to report that most of the sex workers they knew injected drugs, which could suggest a group dynamic through which women buy and use drugs together (Strathdee et al, 2008).

Adverse Health and Legal Consequences

The majority (91.8%) of the samples have considered drug use as harmful. Overall, the majority of the samples (82.4%) have experienced intoxication that impaired performance, twenty-eight (32.9%) of the samples had driven a vehicle after intoxicating drugs, the majority (72.9%) of the samples had fought under the effect of drugs, majority (78.8%) of samples had indulged in sexual behavior under the effect of drugs, majority (95.3%) samples had sexual activity to get drugs or money for drugs, majority (84.7%) of the samples have experienced physical problems due to drug use, majority (92.9%) of samples have experienced sadness or anxiety due to drug use or problems related to drug use, majority

(90.6%) of samples have experienced legal problems due to drug use (caught by the police even if case not registered or caught by the community).

Tolerance and Withdrawal

Twenty (23.5%) samples have experienced tolerance, while the majority (84.7%) of the samples has experienced withdrawal.

Self -Treatment and Treatment Seeking Behavior

The majority (85.9%) of the participants had considered stopping / reducing use of drugs in the last month, even the majority (89.4%) of the samples have ever been able to stop use of drugs. Thirty eight (44.7%) reported that they had stopped using drugs for more than 3 months in their most recent attempt, followed byeighteen (21.2%) who reported that that they had stopped use of drugs for between 1 to 3 months followed by nineteen (22.4%) reporting that they had stopped use of drugs for less than one month, and ten (11.8%) did not remembered the exact duration.

Almost half (48.2%) of the samples reported that they wanted to stop using drugs but would need some help for quitting, twenty-six (30.6%) reported that they accepted that they have a problem but that they could quit on their own, and eighteen (21.2%) did not think that they have a problem in stopping/reducinguse ofdrugs.

The majority (55.3%) of the sample reported that they have never received any help for stopping /reducing use of drugs and have never seek for help, seventeen (20.0%) samples of the samples reported that they have consulted a doctor for treatment of drug use and were given treatment, eleven (12.9%) of the samples reported that they had received advice and information to stop drug use but had not done anything, ten (11.8%) of the samples reported that they have seen a doctor for treatment of drug use, but had not been given treatment.

The sample reported that they had experienced several difficulties when trying to stop drug use. The majority 81.2% reported that they had experienced craving in quitting, nineteen (22.4%) samples reported peer influence as their difficulty in quitting, thirty six (42.4%) reported easy availability of drugs, majority (56.5%) of the samples reported that they had difficulty in tolerating withdrawal, more than half (54.1%) of the samples had difficulty in surviving on street without drugs, (62.4%) of the samples had difficulty in coping with stress, one (1.2%) samples reported feeling of hurt, one (1.2%) samples reported enjoying drugs in her difficulty in quitting, and difficulty in quitting of two (2.4%) samples were inapplicable.

Perceived Social Support and General Health Questionnaire-12

The majority (47.1%) of the samples had a moderate acuity, thirty-fourth (40%) had low acuity and eleventh (12.9%) had high acuity. The majority (85.9%) had moderate mental health, followed by (12.9%) low mental health, and (1.2%) had a good mental health.

Correlation coefficient of Perceived Social Support and Mental Health

The Spearman's Correlation coefficient between Perceived Social Support and Mental health shows that there is no significant relationship between these two variables which shows that each does not have any effect on each other. Spearman's Correlation coefficient between Perceived Social Support and Injecting Drug use shows that there is no significant relationship between these two variables which indicated that they have no any effect on each other. Spearman's Correlation coefficient shows that there is a significant relationship between mental health and injecting drug use. This indicated that injecting drug use can lead to mental health problems or mental health problems can leads to injecting drug use.

Psychometric properties of the Multidimensional scale of perceived social support and General health questionnaire (GHQ) - 12 are Cronbach's Alpha.742 and .754 respectively

which are considered to be robust and reliable and valid for use in the population under study.

The last two decades have seen an increasing interest in the study of sex workers as a marginalized group at increased risk for poorer mental and physical health outcomes, inequitable access to housing and the problematic use of illicit drugs (Vanwesenbeeck, 2001). Substance/drug use is prevalent among sex workers. Most of them are addicted to drugs, and many were forced into sex work against their will. However, it's important to avoid generalizing about how women get into sex work. Studies show that large numbers of sex workers were sexually abused during their childhood. It is the fact of the sexual abuse, more than anything else, that seems to underlay how and why some of them become sex workers. These are the people most likely to be addicted to drugs as well as to develop, or already have, serious health problems, not the least of which is HIV as well as other STDs. Then there are women who see sex work as their way out of poverty. Most enter sex work out of economic necessity While they may choose to sell themselves, it is economic necessity that drives them (Schwartz, 2011). The link between substance abuse and sex work is hard to pinpoint though there are a variety of factors that are common to both including homelessness, unstable family lives, socio-economic deprivation, disrupted schooling, local authority care and confidence and esteem issues (May & Hunter, 2006). Sexual risk behavior related to drug use should not just be considered within the bounds of sex work. While the impact of drugs on sexual behavior may vary by drug, length of use, sexual identity, and other factors, there are a number of effects related to drug use that could influence unsafe sexual behavior. FSWs may be more likely to acquiesce to requests for unsafe sex in order to earn more money to support their drug addiction (Strathdee et al, 2008).Research literature has revealed that substance abuse is one of the major factors.

Injection drug use (IDU) is common in sex workers in many locations (Vanwesenbeeck, 2001; Rekart, 2002; Aral, & St Lawrence, 2002; Romero-Daza et al, 2003; Braitstein et al, 2003; UNAIDS, 2002; Persaud et al, 2000). Although injecting drug users constitute a risk group in themselves, there is also an overlap between drug addiction and those involved in sex work (May & Hunter, 2006). Although there are several studies examining the prevalence of drug use and risk behavior of FSWs-IDU, there has been less attention given on the pattern and types of their drug use. FSW-IDUs demonstrate exclusive sensitivity due to being able contract infectious diseases from the routes of both the sexual and injection. FSW-IDUs exhibit particular vulnerability because they can acquire communicable infections through both the sexual and the injection routes; this subgroup may also act as a bridge through which HIV and other sexually transmitted infections (STIs) are spread from higher-prevalence to lower-prevalence populations (Strathdee et al, 2011; Hamers, & Downs, 2003; Liu et al, 2006). FSWs are even more likely to accept a demand for unprotected sex to acquire more money in order to sustain their drug use and may be more likely to acquiesce to requests for unsafe sex in order to earn more money to support their drug addiction (Strathdee et al, 2008). Individuals who fall into both categories are therefore particularly vulnerable to HIV and are perhaps doubly stigmatized (May & Hunter, 2006). Research and surveys done on CSW's has revealed that the health seeking behavior and knowledge of HIV is very low in the CSW population. Also that the attitude of the communities towards CSW's is negative. These studies have thrown light on an issue that is generally not discussed in Mizoram. This paucity of relevant literature reveals that there is need to systematically document the problems and needs of Female Sex workers in Mizoram. The present study has laid the basic foundation for further in depth studies. Several important factors associated with being a female sex worker who uses drugs were identified in this

study and these findings could be used as baseline information for further in-depth research studies and to plan more effectively targeted intervention strategies.

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APPENDICES

APPENDIX - I

INTERVIEW SCHEDULE

I ruihtheihthil tih chungchang ka hre duh dawn ani. Entirnan - Heng ruihtheihthilte hi a hun tarlanah te hian i ti em?
A hun tarlan chhungah hian vawikhat chauh pawh Ti mahse a chhanna milah i thai (√) dawn nia.

1.Cannabis (Bhang, Charas, Ganja,sulpha):

I tichhin tawh em? (Everin lifetime) 1= Aw 2= Aih
Nikum chhungin (Last1year) 1= Aw 2= Aih
Ni 30 kalta chhungin (Last30 days) 1= Aw 2= Aih
Tih hmasak ber kum (Age at first use (in years)) .....
Ni 30 kalta chhungin I ti anih chuan ni engzatnge i tih? (If used in last 30 days, number of days the drug used). .....

2.Heroin(Smack,brown sugar) / Number - 4:

I tichhin tawh em? (Everin lifetime) 1= Aw 2= Aih
Nikum chhungin (Last1year) 1= Aw 2= Aih
Ni 30 kalta chhungin (Last30 days) 1= Aw 2= Aih
Tih hmasak ber kum (Ageatfirst use (in years)) .....
Ni 30 kalta chhungin I ti anih chuan ni engzatnge i tih? (If used in last 30 days, number of days the drug used). .....

3. Parvon / Proxyvon:

I tichhin tawh em? (Everin lifetime) 1= Aw 2= Aih
Nikum chhungin (Last1year) 1= Aw 2= Aih
Ni 30 kalta chhungin (Last30 days) 1= Aw 2= Aih
Tih hmasak ber kum (Ageatfirst use (in years) .....
Ni 30 kalta chhungin I ti anih chuan ni engzatnge i tih? (If used in last 30 days, number of days the drug used). .....

8. Pharmaceutical sedatives (diazepam, nitravet or number 10, alprax, trika etc):

I tichhin tawh em? (Ever in lifetime) 1= Aw 2= Aih
Nikum chhungin (Last 1 year) 1= Aw 2= Aih
Ni 30 kalta chhungin (Last 30 days) 1= Aw 2= Aih
Tih hmasak ber kum (Age at first use (in years) .....
Ni 30 kalta chhungin i ti anih chuan ni engzatnge i tih? (If used in last 30 days, number of days the substance used). .....

A hun tarlan chhungah hian vawikhat chauh pawh ti mahse a chhanna milah I thai (√) dawn nia.

9. Eng damdawite hi nge nitin engtik hunah pawh thlakhat chhung I hman tawh?

1. Cannabis (Bhang, Charas, Ganja, Sulpha)	1=Aw	2=Aih
2. Heroin (Smack, brown sugar) / Number-4	1= Aw	2=Aih
3. Parvon / Proxyvon	1=Aw	2=Aih

10. Damdawi I hman /duh ber (Khawngaihin chhanna pakhat i thai dawn nia).
(The primary substance of use or the substance you prefer the most? (Please tick one response).

1. Heroin (Smack, brown sugar) / Number4	1=Aw	2=Aih
2. Parvon	1=Aw	2=Aih

11. He damdawi hi khawi atangin nge I hmuh?
1. Vaihlo zawrhna dawr (Tobacco shop)
2. Damdawi zawrhna dawr (Pharmacy or chemist shop)
3. Dawr dang engpawh (Any other shop)
4. Damdawi zuar kual vel atangin (From a drug peddler)
5. Thiante atangin (From friends)
6. A dang engpawh …….(Any other)

12. I damdawi hman hi a hlauhawmin I hria em?
1= Aw 2=Aih

A damdawi tih pakhat chauh pawh hlauhawm ti sela 'Aw' tiin a chhanna I dah dawn nia.

Heng ahnuai a mite hi damdawi / zu tih vangin I tawng tawh em?.

13. I thil tih tithuanawptu a ni em?
1= Aw 2= Aih

14. Zu in teuh hnu in motor I khalh tawh thin em?
1= Aw 2= Ai

15. Zu emaw damdawi ruih avangin mi I insualpui tawh em?
1= Aw 2= Aih

16. Zu emaw damdawi ruih vangin mipat hmeichhiatna I hmang thin em?
1= Aw 2= Aih

17. Damdawi emaw zu neih theihna turin mipat hmeichhiatna i hmang tawh em?
1= Aw 2= Aih

18. Zu emaw damdawi avanga taksa lama harsatna tawh te.
1= Aw 2= Aih

19. Damdawi tih vanga lungngaihna emaw hlauhthawnna, emaw damdawi nen inkaihhnawih harsatna.
1= Aw 2= Aih

20. Damdawi tih avanga Dan lama harsatna tawh (Chungthu ziah luh nilo mahse police hauhna emaw khawtlang hauhna).
1= Aw 2= Aih

21. Damdawi I tih tan tirha ruih nana I damdawi/ zu mamawh zat leh tuna ruih nana I mamawh zat ala ngai em?
1= Aw 2= Aih

22. Damdawi I ngheiin emaw I tih tlemin nawm lohna I nei thin em?
    1= Aw 2= Aih
23. Thla hmasa chhungin I damdawi tih hi nghei / tih tlem lam I ngaituah ngai em?
    1= Aw 2=Aih
24. I damdawi tih hi I nghei thei tawh ngai em?
    1= Aw 2= Aih
25. I lo nghei tawh thin anih chuan thla engzatte nge I nghei tawh thin?(Tum hnuhnun berin).
    1. Thlakhat aia tlem (Less than one month)
    2. Thlakhat atanga thlathum inkar (Between 1 to 3 months)
    3. Thlathum aia tam (More than 3 months)
    4. Sawi thei lo (Not applicable)

26. I damdawi tih nghei / ti tlem tur hian tanpui mamawhin I in hria em?
    1. Ai, harsatna neiin ka in hre hran lo.
       (No, I do not think that I have a problem).
    2. Aw, harsatna chu ka neia, mahse keimahin ka nghei thei.
       (Yes, I have a problem, but I can quit on my own).
    3. Aw, nghei ka duha, mahse nghei turin tanpuina ka mamawh ang.
       (Yes, I want to quit but would need some help for quitting).
    4. A dang engpawh (sawi lan tur).
       (Any other (Specify)

27. I damdawi tih nghei / ti tlem turin tanpuina I dawng tawh ngai em?
    1. Ai, ka zawng ngai lo.
    2. Aw, mi thenkhat chuan nghei turin thurawn min pe a, mahse doctor ka hmu lo.
    3. Aw, ka damdawi tih vanga enkawlna la turin doctor ka hmu a, mahse min admit lo.
    4. Aw, ka damdawi tih vanga enkawlna la turin doctor ka hmu a, min admit.
    5. A dang engpawh (sawi lan tur).

28. Nghei turin eng ang harsatna nge I tawh? (Chhanna pakhat aia tam I thai thei ang).
    1. Chak ngawih ngawih (Craving).
    2. Thiante tur / nawrna (Peer pressure).
    3. Damdawi hmuh a awlsam (Easy availability of drugs).
    4. Nghei dawna chiri hi tawrh a har.(Difficult to tolerate withdrawals).
    5. Ka eizawnna leh nitin khawsak dan avangin ruihhlo tello chuan nun harsa ka ti. (Difficult to survive on street without drugs).
    6. Harsatna hmachhawn harsa ka tih thin avangin (Difficult to cope with stress).
    7. Rilru na …… (Feeling hurt).
    8. Damdawi tih nuam ka ti (Enjoy drugs).
    9. Sawi thei lo (Not applicable).

APPENDIX-II

GENERAL HEALTH QUESTIONNAIRE (GHQ) -12

(Goldberg, D., 1992)

He questionnaire hi chu kar hnih khat kal ta chhunga i hriselna dinhmun chungchang a ni a. Chhanna awm thei pali atang hian i dinhmun sawifiah ber nia i hriat thai la. Thil kal tawh ni lovin tun hnaia i hriselna dinhmun chungchang a ni tih hre reng chungin zawhna zawng zawngte hi i chhang dawn nia.

TUN HNAIAH? (HAVE YOU RECENTLY BEEN?).

1	I thiltih lai i ngaituah ding tha thei thin em?. (Been able to concentrate on what you're doing?).		A pangngai aiin a tha e. (Better than usual).	A pangngai a ni. (Same as usual).	A pangngai aiin thei lo. (Less than usual).	A pangngai aiin thei lo fe zawk. (Much less than usual).
2	Rilru hah vangin i mu thei lo thin em?. (Lost much sleep over worry?).		Teuh lo mai. (Not at all).	A pangngai aiin thei lo chuang lo. (No more than usual).	A pangngai aiin thei lo mah e. (Rather more than usual).	A pangngai aiin thei lo daih zawk. (Much more than usual).
3	Thiltih-ah tangkai i in ti ti em?. (Felt you were playing a useful part in things).		A pangngai aiin tangkai in ti e. (More so than usual).	A pangngai a ni e. (Same as usual).	A pangngai aiin tangkai lo zawk ka in ti. (Less useful than usual).	Tangkai lo zawk daih. (Much less useful).
4	Engkima thutlukna siam thei thinin i in hria em?. (Felt capable of making decisions about things?).		A pangngai aiin in hria e. (More so than usual).	A pangngai a ni e. (Same as usual).	A pangngai aiin hre lo zawk e. (Less so than usual).	A pangngai aiin hre lo zawk daih. (Much less capable).
5	Englai pawhin nekchep a awmin i in hria em?. (Felt constantly under strain?).		Teuh lo mai. (Not at all).	A pangngai aiin hre chuang lo. (No more than usual).	A pangngai aiin hre mah e. (Rather more than usual).	A pangngai aiin hre daih zawk. (Much more than usual).
6	I harsatna sukiang thei lovin i in hria em?. (Felt you couldn't overcome your difficulties?).		Teuh lo mai. (Not at all).	A pangngai aiin hre chuang lo. (No more than usual).	A pangngai aiin hre mah e. (Rather more than usual).	A pangngai aiin hre zawk daih. (Much more than usual).
7	Nitin i nunphung pangngai a nuam i ti thei thin em?. (Been able to enjoy your normal day-to-day avtivities).		A pangngai aiin nuam ti e. (More so than usual).	A pangngai a ni e. (Same as usual).	A pangngai aiin nuam lo zawk. (Less so than usual).	A pangngai aiin nuam lo zawk daih. (Much less than usual).
8	I harsatna i hmachhawn theiin i in hre thin em?. (Been able to face up to your problems).		A pangngai aiin hria e. (More so than usual).	A pangngai a ni e. (Same as usual).	A pangngai aiin hre lo zawk. (Less so than usual).	A pangngai aiin hre thin lo zawk daih. (Much less able).
9	Rilru hnual leh hlim lovin i awm thin em?. (Been feeling unhappy and depressed).		Teuh lo mai. (Not at all).	A pangngai aiin awm lo chuang lo. (No more than usual).	A pangngai aiin awm lo mah e. (Rather more than usual).	A pangngai aiin awm lo zawk daih. (Much more than usual).

10	I inrintawkna i hlauhin i in hria em?. (Been losing your confidence?).		Teuh lo mai. (Not at all).	A pangngai aiin hlauh chuang lo. (No more than usual).	A pangngai aiin hlauh mah e. (Rather more than usual).	A pangngai aiin hlauh zawk daih. (Much more than usual).
11	Mi tlaktlai lovah nangmah leh nangmah i in ngai thin em?. (Been thinking of yourself as a worthless person?).		Teuh lo mai. (Not at all).	A pangngai aiin ngai chuang lo. (No more than usual).	A pangngai aiin ngai mah e. (Rather more than usual).	A pangngai aiin ngai zawk daih e. (Much more than usual).
12	Engkim ngaituah-in i hlim tawkin i hre thin em?. (Been feeling reasonably happy, all things considered?).		A pangngai aiin hria e. (More so than usual).	A pangngai ang vel ani. (About same as usual).	A pangngai aiin in hre lo zawk e. (Less so than usual).	A pangngai aiin in hre lo zawk daih. (Much less than usual).

APPENDIX - III

MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

(Zimet, G.D., Dahlem, N.W., Zimet, S.G. & Farley, G.K., 1988)

Khawngaihtakin a hnuaia thute hi ngun takin chhiar la, nambar pasarih atanga thlangin I dinhmun sawifiah ber nia I hriat I thai bial dawn nia.

1 PAWM LO LUTUK (Very Strongly Disagree)
2 PAWM LO (Strongly Disagree)
3 PAWM VAK LO (Mildly Disagree)
4 CHHAN NGAIHNA HRE LO (Neutral)
5 PAWM VE THO (Mildly Agree)
6 PAWM (Strongly Agree)
7 PAWM LUTUK (Very Strongly Agree)

Entirnan: A hnuaia thu hmasa ber hi I pawm lutuk anih chuan a zawn a nambar pasarih awm atangin No.7 I thai bial dawn nia. A dang ho pawh chutiang zelin.

1. Harsatna ka tawh in min puitu tur mi tha tak ka nei. There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2. Ka hlimna leh lungngaihna thlenna tur mi tha tak ka nei. There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3. Ka chhungte'n an theihtawpin min tanpui an tum thin. My family really tries to help me.	1	2	3	4	5	6	7
4. Ka chhungte hian ka rilru hah min chhawk zangkhai sak thin. I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5. Ka nun hahchawlhna leh hlimna min petu mi tha tak ka nei. I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6. Ka thiante'n an theihtawpin min puih an tum thin. My friends really try to help me.	1	2	3	4	5	6	7
7. Harsatna ka tawhin min pui turin ka thiante ka ring thei thin. I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8. Ka harsatna ka chhungte ka sawipui thei. I can talk about my problems with my family.	1	2	3	4	5	6	7
9. Ka hlimna leh lungngaihna ka thlen theihna tur thiante ka nei. I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10. Hrehawmna leh rilru natna ka tawh changte a min ngaihtuahtu mi tha tak ka nei. There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11. Thutlukna ka siam a ngaih changin ka chhungte'n min tanpui an hreh lo. My family is willing to help me make decisions.	1	2	3	4	5	6	7
12. Ka harsatna ka thiante ka sawipui thei. I can talk about my problems with my friends.	1	2	3	4	5	6	7

APPENDIX - IV

SOCIO-DEMOGRAPHIC PROFILE

1. Kum:
2. Awmna veng:
3. Mahni khua:
4. Zirna:
5. Pasal nei / nei lo.
6. Fa:
7. Nu leh pa in nei / nei lo.
8. Hnathawh lai i nei em?:

SEX WORK PROFILE

9. Mipat hmeichhiatna i hman hmasak ber a i kum zat:
10. Engnge i fawr chhan ber?
11. Mipat hmeichhiatna i hman in condom i hmang ziah em? Hmang ziah lo anih chuan engnge a chhan?
12. Fa i ti tla tawh em?
13. Mahni hmeichhiatpui i kawp tawh em?
14. Dawrtu pakhatah engzatnge i hlawh?
15. Karkhatah ni engzatnge hna i thawh?
16. Karkhat ah dawrtu engzatnge i neih?
17. Fawr hi nuam i ti em?
18. Hmelhriatin an hlamchhiah bik che in i hria em?
19. Khawtlangin an hlamchhiah bik che in i hria em?
20. Kutthlak?
21. Vau?
22. Pawngsual?
23. Chhawrluih?

DRUG USE PROFILE

24. Kum engzat i nih atangin nge ruihhlo i khawih tan?
25. Man i tawk tawh em?
26. Midang nan syringe in inhmantawm ngai em?

HEALTH STATUS

27. STI i vei tawh em?
28. HIV I vei tawh em?
29. Hepatitis I vei tawh em?
30. Abscess i nei tawh em?
31. Damdawiin awm ngai khawpin i dam lo tawh em?

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1. School Board	:	22nd April, 2013
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HEAD

ABSTRACT

PATTERN OF DRUG USE, PERCEIVED SOCIAL SUPPORT AND MENTAL HEALTH OF FEMALE SEX WORKERS - INTRAVENOUS DRUG USERS IN AIZAWL.

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CERTIFICATE

This is to certify that the present research tittled**"PATTERN OF DRUG USE, PERCEIVED SOCIAL SUPPORT AND MENTAL HEALTH OF FEMALE SEX WORKERS– INTRAVENOUS DRUG USERS IN AIZAWL"** is the bonafide research conducted by P.C.Lalbiakkimi under my supervision. P.C.Lalbiakkimi worked methodologically for her dissertation which is being submitted for the Degree of Master of Philosophy in Psychology of the Mizoram University.

This is to further certify that the research conducted by P.C.Lalbiakkimi has not been submitted in support of an application to this or any other University or an Institute of Learning.

(Dr. ZOENGPARI)
SUPERVISOR

INTRODUCTION

Sex work is a global and deeply rooted social phenomenon; substantial disparity exists in its perception, depending on different social and cultural factors (Kramer, 2003).One view is to consider prostitution as a crime that induces violence; such as human trafficking, sexual abuse, rape, physical or verbal abuse, and racial discrimination, including serious violations of human rights (Barry, 1996; Farley, 2006). The other extreme is to consider prostitution as a type of occupation in which the people involved are known as special workers, or "sex workers"(Romans, Potter, Martin, & Herbison, 2001). The term "sex worker" was coined in 1980 by sex worker activist Carol Leigh. A broad definition of sex worker would be: as “female, male and transgender adults, young people and children, who receive money or goods in exchange for sexual services, either regularly or occasionally, and who may or may not consciously define those activities as income generating (United Nations "Programme on HIV and AIDS [UNAIDS] Inter-Agency Task Team on Gender and HIV/AIDS, 2005). Like many other occupations, sex work is conducted primarily for economic gain (Deering, Shoveller, Tyndall, Montaner, & Shannon, 2011). Some may be full time sex workers i.e. total income comes from sex work and some may be doing it as part time sex work i.e. they may be engaged in some work and part of their income comes from sex work. It can also be defined as provision of sexual services for money or its equivalent (Vandepitte et al, 2006). Sex work is also sometimes called prostitution, although the term is sometimes viewed as a synonym or euphemism for prostitute, it is more general. Some people use the term to avoid invoking the stigma associated with the word prostitute (Lumby, 2012).

There are obvious differences that separate sex work from other occupations, including the increased risks to sexual health and safety, social and economic vulnerability

and a high degree of marginalization and criminalization in many settings (Blanchard et al., 2005; Dandona et al., 2006, Rekart, 2005, Shannon et al., 2008a; &Strathdee et al., 2008). The social stigmatization (Scambler, & Paoli, 2008) and lack of legal regulation (Hubbard, Matthews, & Scoular, 2008) are arguably among the main characteristics of sex work that separate it from other professions. The vulnerability of women in sex work to sex work-related harms including high rates of sexually transmitted infections (STIs) and HIV, violence and poverty, and marginalization and isolation from health and social services has been well-documented (Rekart, 2005).

The boundaries of sex work are vague, ranging from erotic displays without physical contact with the client, through to high risk unprotected sexual intercourse with numerous clients. Individuals may occasionally and opportunistically exact a fee or gift for a sexual favor without perceiving themselves to be sex workers, or they may engage more or less full time in the explicitly commercial provision of sex services (Harcourt& Donovan, 2005).

Sex work today occurs in various different settings. At least 25 types of sex work have been identified according to worksite, principal mode of soliciting clients, or sexual practices. These types of work are often grouped under the headings of 'direct' and 'indirect' sex work (Harcourt & Donovan, 2005). Direct (open /formal) female sex workers (FSW) are typically women who do define themselves as sex workers and earn their living by selling sex. Indirect (hidden/ clandestine/ informal) female sex workers (FSW) are women for whom sex work is not the first source of income. They may work as waitresses, hairdressers, tailors, massage girls, street vendors, or beer promotion girls and supplement their income by selling sex on a regular basis or occasionally. They do not consider themselves as sex workers and often work outside of known venues for sex work and therefore they are even more difficult to reach than women known as direct sex workers (Harcourt, & Donovan, 2005; UNAIDS, 2002; UNAIDS, 2003; Family Health International [FHI], 1999; Gysels, Pool, &Nnalisuba,

2002; Wojcicki, 2002; WHO, 2001; Hanenberg, & Rojanapithayakorn, 1998; Aral et al, 2003).There are also some indirect sexual services (bondage and discipline, lap dancing, massage) that involve little or no genital contact and therefore have little sexual health risk (Blain, 1994). Even less risky are services such as telephone sex and the various forms of internet (virtual) sex which only become a public health concern if they precede an actual sexual relationship however, these services are mostly confined to wealthier countries (Harcourt & Donovan, 2005).

The reasons why people take money or gifts for sex are very varied. In some ancient traditions sex work was recognized as the hereditary calling of particular subgroups or castes. In these cases women were "born into prostitution" (Harcourt, & Donovan, 2005). There are echoes of this practice in India and Nepal where descendents of temple dancers (Devadasis) and female court musicians (Nautch girls) still follow their "hereditary" calling, although their ritual significance is greatly diminished (Bhatt, Gurubacharya, &Vadies, 1993; Khanna, Nadkarni, & Bhutani, 1998). Currently most sex work has a strong economic basis, primarily as a source of income for sex workers, but also for dependent kin and associates including pimps, managers, and ancillary workers (Aral et al, 2003).

Research on initiation into sex work has made a distinction between voluntary and involuntary sex work (UNESCO, 2002). The former includes women who enter sex work willingly because of poverty or family pressure. The later includes those who are forced into sex work through trafficking, violence or tradition (Saggurti, Sabarwal, Verma, Halli & Jain, 2011). At the other end of the spectrum of sex work are the street walkers. These are the people most likely to be addicted to drugs as well as to develop, or already have, serious health problems, not the least of which is HIV as well as other STDs (Schwartz, 2011).

Sex work is also often linked with socio-demographic disadvantages like minority ethnic status, low income, homelessness and low education level (Medrano, Hatch, Zule, &

Desmond, 2003; Gilchrist, Gruer, & Atkinson, 2005).Prostitution, or some aspect of it such as soliciting, is illegal in many countries, but the law is an ineffective means of eliminating its negative aspects, often resulting in the criminalization of sex workers (Vanwesenbeeck, 2001; Government of Quebec, 2004; UNAIDS, 2002; Ngugi, Branigan, & Jackson, 1999; Lewis, Bamber, & Waugh, 1997; Morton et al, 2002). Criminalization leads to violence; police harassment; increased HIV and STI risk; reduced access to services; psychological disease; drug use; poor self-esteem; loss of family and friends; work-related mortality; and restrictions on travel, employment, housing, and parenting (Government of Quebec, 2004; UNAIDS, 2002; Pauw, & Brener, 2003; WHO, 2001; Ngugi et al, 1999; Blankenship, & Koester, 2002; Lowndes, Alary, & Platt, 2003; Ahmad, 2001; Rio, 1991; Snell, 1994).

Sex work in India is clandestine (Dandona et al., 2006). Previous research about this topic in India documented that the decision to enter into sex work is largely involuntary. Some women choose it knowingly but find the conditions unacceptable. Others are coerced in the beginning and then decide to continue with it (Nag, 2006). Studies in India show that women either involve in sex work involuntarily, often due to economic reasons (Blanchard et al., 2005) or they are forced into sex work and that women who join sex work for economic reasons belong to particular social, caste and class groups (Dandona et al., 2006; Silverman et al., 2007). Studies that have profiled the socio-demographic characteristics of sex workers (Somaiya, Awate, &Bhore, 1990; Salunke, Shaukat, Hira, & Jagtap, 1998; Dandona et al., 2006; Ramesh et al., 2008; Reza-Paul et al., 2008) document that the majority of women in sex work are illiterates, belong to lower castes, are destitute and/or are from poor economic backgrounds. The sale of women and children into the sex trade or sex trafficking or immigration from Nepal and Bangladesh are other reasons for the increasing numbers of girls and women entering the sex trade in India (Chattopadhyay & McKaig, 2004; Silverman et al., 2007).

Sex Work and Substance/Drug Use

The last two decades have seen an increasing interest in the study of sex workers as a marginalized group at increased risk for poorer mental and physical health outcomes, inequitable access to housing and the problematic use of illicit drugs (Vanwesenbeeck, 2001). Substance/drug use is prevalent among Female Sex Workers (FSWs). Substance/drug dependency according to International Statistical Classification of Disease and Related Health Problems (ICD-10) is a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state. The dependence syndrome may be present for a specific psychoactive (e.g., tobacco, alcohol, or diazepam), for a class of substances (e.g., opioids, drugs), or for a wider range of pharmacologically different psychoactive substances). Sex work is also associated with a host of psychosocial vulnerabilities, including exposure to childhood physical abuse, childhood sexual abuse, and interpersonal violence in adulthood and substance uses.

Much of the research literature suggests either that sex workers use substances to cope with having to prostitute themselves, or that they were misusing substances prior to entering the sex industry and turned to sex work in order to support their addiction (Farley, 2004; Inciardi, Lockwood, & Pottinger, 1993). Although substance use may occur prior to entry into sex work, substance misuse is a significant factor in maintaining sex work involvement, given that "substance use is woven into the sex work life-style in multiple respects" (Nuttbrock, Rosenblum, Magura, Villano, & Wallace, 2004). Once addiction develops, continued involvement in sex work is required to support it (Nadon, Koverola & Schluderman, 1998). The link between substance abuse and sex work is hard to pinpoint

though there are a variety of factors that are common to both including homelessness, unstable family lives, socio-economic deprivation, disrupted schooling, local authority care and confidence and esteem issues (May & Hunter, 2006).

Injection drug use (IDU) is common in sex workers in many locations (Vanwesenbeeck, 2001; Rekart, 2002; Aral, & St Lawrence, 2002; Romero-Daza, Weeks, & Singer, 2003; Braitstein et al, 2003; UNAIDS, 2002; Persaud, Klaskala, Baum, & Duncan, 2000). Although injecting drug users constitute a risk group in themselves, there is also an overlap between drug addiction and those involved in sex work (May & Hunter, 2006). Although there are several studies examining the prevalence of drug use and risk behavior of FSWs-IDU, there has been less attention given on the pattern and types of their drug use. FSW-IDUs exhibit particular vulnerability because they can acquire communicable infections through both the sexual and the injection routes; this subgroup may also act as a bridge through which HIV and other sexually transmitted infections (STIs) are spread from higher-prevalence to lower-prevalence populations (Strathdee et al, 2011; Hamers, & Downs, 2003; Liu, Grusky, Li, & Ma, 2006). FSWs are even more likely to accept a demand for unprotected sex to acquire more money in order to sustain their drug use and may be more likely to acquiesce to requests for unsafe sex in order to earn more money to support their drug addiction (Strathdee et al, 2008). Individuals who fall into both categories are therefore particularly vulnerable to HIV and are perhaps doubly stigmatized (May & Hunter, 2006).

Furthermore, existing research on FSW's has demonstrated clear and consistent associations between the sale of sex, substance abuse and HIV risk. So, despite the reason of their commencement into sex work, it is necessary to study the pattern and types of drug use among FSW-IDUs to have a more in-depth understanding about their risk behavior.

Mental Health

Global literature suggests that, compared with the general population, FSWs generally have relatively higher rates of psychopathology and other health-related risks, including higher rates of depressive symptoms, drug use, and psychological distress (Alegria et al., 1994; El-Bassel et al., 1997; El-Bassel, Witte, Wada, Gilbert, & Wallace, 2001; Jones et al., 1998; Surratt, Kurtz, Weaver, & Inciardi, 2005). The mental health of sex workers has been found to be influenced by violence of client and rapes in some settings which in turn develops risk of stress, anxiety, depression, and posttraumatic stress disorder, and even use of alcohol or drugs as a coping technique (Carter & Dala, 2006).The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2010). Prostitution is associated with a host of psychosocial vulnerabilities, including exposure to childhood physical abuse, childhood sexual abuse, and interpersonal violence in adulthood and substance uses (Burnette et al, 2008). The mental health of sex workers was influences by violence of client and rapes in some settings (Farley, Lynne, & Cotton 2005) which in turn developing risk of stress, anxiety, depression, and posttraumatic stress disorder, and even use of alcohol or drugs as a coping technique (Carter &Dala, 2006).FSWs are an especially vulnerable population for psychological disorders, as their life is enmeshed with substance use, violent victimization, social or economic vulnerability and other negative events (Surratt, Kurtz, Chen, & Mooss, 2011). Women, who have been subjected to trafficking and forced into service, including sex work, are more likely to suffer multiple physical and mental health problems than the general female population, according to a recent study (Maki,2007).

Only a few researchers have examined the mental health problems among this particularly vulnerable population (Vanwesenbeeck, 2001; Surratt et al, 2011; Lau, Tsui, Ho,

Wong, & Yang, 2010). Based upon existing studies, it is found that FSWs had a higher rate of mental health problems, including depressive symptoms, suicidal behaviors, anxiety, and post-traumatic syndrome disorders (PTSD) compared to the general woman population (Li, Li, & Stanton, 2010; El-Bassel et al., 1997; Alegria et al., 1994; Rossler et al., 2010).

Perceived Social Support

Social support is usually defined as the existence of people on whom we can rely, people who let us know that they care about, value, and love us. A broad definition of social support is the "resources provided by others" (Cohen and Syme, 1985). Studies have indicated that people with low support have more suicidal ideation (Casey et al, 2006) and more alcohol and drug problems (Stice, Barrera, Jr., & Chassin, 107). However, social support is a complex, as demonstrated by reports that the presence of a partner or close friends, rather than simply being around family members or others, is associated with perceived social support and reduced stress levels (Burgoyne & Saunders, 2000).

Social support can come from a variety of sources, including (but not limited to): family, friends, romantic partners, pets, community ties, and coworkers (Taylor, 2011). Sources of support can be natural (e.g., family and friends) or more formal (e.g., mental health specialists or community organizations) (Hogan, Linden, & Najarian, 2002). Support from a romantic partner is associated with health benefits, particularly for men (Kiecolt-Glaser, & Newton, 2001).

Measures of social support usually include support from both family and friends (DuPertuis, Aldwin, & Bossé, 2001). Studies have found that interaction with friends and with family can produce different and distinctive patterns in reliability of support (Seeman & Berkman, 1988), satisfaction with support (Rook, 1987), morale (Crohan & Antonucci, 1989), arousal and affect (Felton & Berry, 1992; Larson, Mannell, & Zuzanek, 1986),

depression (Potts, 1997), and psychological distress (Dean, Kolody, Wood, & Ensel, 1989; Matt & Dean, 1993). .

Sex work is widespread in India, although it is currently a contentious issue (Casciani & Dominic, 2009). In 2007, the Ministry of Women and Child Development reported the presence of over 3 million female sex workers in India, with 35.47 percent of them entering the trade before the age of 18 years (UNODC, 2007). Studies in India show that women either involve in sex work involuntarily, often due to economic reasons (Blanchard et al., 2005) or they are forced into sex work (Dandona et al., 2006; Silverman et al., 2007). Women who join sex work for economic reasons belong to particular social, caste and class groups. Studies that have profiled the socio-demographic characteristics of sex workers (Somaiya, Awate, & Bhore, 1990; Salunke, Shaukat, Hira, & Jagtap, 1998; Dandona et al., 2006; Ramesh et al., 2008; Reza-Paul et al., 2008) document that the majority of women in sex work are illiterates, belong to lower castes, are destitute and/or are from poor economic backgrounds. The sale of women and children into the sex trade or sex trafficking or immigration from Nepal and Bangladesh are other reasons for the increasing numbers of girls and women entering the sex trade in India (Chattopadhyay & McKaig, 2004; Silverman et al., 2007). Findings from a study conducted among female sex workers who were economically backward stated that an important element responsible for commencing sex work were lack of education, lack of family support and deficit of capability to accomplish their primary needs (Chattopadhyay, Bandyopadhyay, & Duttagupta, 1994).

Mizoram, the 23rd state of the Indian Union is located in the North Eastern corner bordered by Bangladesh in the West and Myanmar in the East, and also share Inter-State border with Assam, Tripura and Manipur. According to 2011 census, the total population of Mizoram is 891058. Commercial Sex Work, which was not known in the community, started to become evident in the early '70's in the state capital, Aizawl. The modus operandi of the

Female Sex Workers (FSWs) was very distinct from that of other places. There were no specific Red Light areas and brothels so the FSW population did not operate from a particular location and there was no system of madams and pimps and so they operated on theirown. The same is the scenario today, there are still no specific Red Light areas and the FSWs are still soliciting on streets and roadsides and the local hotels are mainly the venue for sex work. The sex trade is mainly transient in nature and street based.

Sex Workers enter into this profession voluntarily due to various reasons. They are mainly from dysfunctional and broken families, low socio economic strata and often with poor education. Poverty is reported to be a major factor for many girls and women. This is especially so for those from the remote poor rural areas of Mizoram and for many from Myanmar. Another distinct feature of commercial sex work in Mizoram is that it may be considered to be closely interlinked with substance abuse. The need to support a drug habit which is associated with the commencement of commercial sex work is well documented (Volunteer for Community Mental Health [VOLCOMH], 2003).

There are some authentic papers on sex work and related issues - Situational Analysis (Kanth, 1998), Legal aspect (Marli, 1998), Historical aspect of Immoral Traffic (Zorammawia 1998), and Immoral Trafficking (Lalparmawii, 1998). However, most of the writings and presentations related to sex work refers to the Social Welfare Department document of 1995, which is based on the case study of 122 inmates admitted to Protective Home, the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram. This study though indicative of the situation that prevails in Mizoram then has not been updated. At the same time one of the most important suggestions of this study was the need for a systematic and in-depth study (Lalparmawii, 1998).

Since then a study of "Commercial Sex Workers in Mizoram" was conducted based on 30 Female sex workers as a sample (Vansangpuii, 2004). The Human Right and Law

Networks have also conducted a survey on Sex workers identifying 218 Sex Workers. The identified Sex workers were classified into different categories and also identified several causal factors for sex work in Mizoram (Ruatfela nu, 2004). According to C.A.R.E, World Vision, (2003), most of them get married at one point or the other in their life after they became FSW. They are from differentplaces of the state and also from outside the state and so most of them do not have any permanent or regular address. They move from one place to another and doing their work according to convenience and the Sex workers in Mizoram use their money for buying drugs, clothes, ornaments and make up and they rarely save. Research and surveys done on CSW's has revealed that the health seeking behavior and knowledge of HIV is very low in the CSW population. Also that the attitude of the communities towards CSW's is negative. These studies have thrown light on an issue that is generally not discussed in Mizoram. This paucity of relevant literature reveals that there is need to systematically document the problems and needs of Female Sex workers in Mizoram.

STATEMENT OF THE PROBLEM

Like many other occupations, sex work is conducted primarily for economic gain (Deering et al, 2011). Drug use has been found to be an important antecedent to entry into street-based sex work for women (Malta et al., 2008) and qualitative and ethnographic studies have also documented that many women depend on income from sex work to sustain drug use or to gain access to other commodities such as food and shelter (Aral & St. Lawrence, 2002; Shannon et al., 2008a; Strathdee et al., 2008). Although substance use may occur prior to entry into sex work, substance misuse is a significant factor in maintaining sex work involvement (Nuttbrock et al, 2004).

Drug-injecting street-based FSWs are the highest risk sex worker group for HIV infection, and potentially serve as a major bridge through their clients to the general population (Tran, Detels, Hien, Long, & Nga, 2004). FSW-IDUs had higher STI levels, engaged in riskier behaviors and were more vulnerable to having unsafe sex with clients compared to other FSWs (Strathdee et al, 2008).The use of psychoactive substances is popularly believed to loosen sexual inhibitions and contribute to increased sexual activity. However, the actual direct and indirect effects of alcohol and drugs on sexual function are still not fully understood. Despite some limitations, the review of one article suggests that chronic alcohol and drug abuse have clear deleterious effects on sexual functioning for many individuals (Peugh & Belenko, 2001).

Studies which have been conducted among FSWs have only centered on their unprotected sexual behavior (e.g., inconsistent condom use) and its effects e.g., sexually transmitted diseases and HIV infection). Also, although there are several studies examining the prevalence of drug use and risk behavior of FSWs-IDU, there has been less attention given on the pattern and types of their drug use.Despite the overlapping nature of sex work and injecting drug use (IDU), little research has been conducted on the subgroup of women

who engage in both behaviors. FSW-IDUs exhibit particular vulnerability because they can acquire communicable infections through both the sexual and the injection routes; this subgroup may also act as a bridge through which HIV and other STI are spread from higher-prevalence to lower-prevalence populations (Strathdee et al, 2011; Hamers, & Downs, 2003; Liu et al, 2006). Furthermore, Sex workers who inject drugs might use condoms less consistently and, for more money, theymight agree to unprotected sex or anal sex (Rekart, 2002; Aral, & St Lawrence, 2002; UNAIDS, 2002; Pauw, &Brener, 2003; de Graaf, Vanwesenbeeck, van Zessen, Straver, &Visser, 1995). It is also necessary to have a more in-depth understanding of the association between mental health and injecting drug use among this specific population in addition to simply revealing their mental health status.

In Mizoram most of the writings and presentations related to sex work refers to the Social Welfare Department document of 1995, which is based on the case study of 122 inmates admitted to Protective Home, the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram. This study though indicative of the situation that prevails in Mizoram then has not been updated. Since then a study of "Commercial Sex Workers in Mizoram" was conducted based on 30 Female sex workers as a sample. (Vansangpuii, 2004). The Human Right and Law Network have also conducted a survey on Sex workers identifying 218 Sex Workers. The identified Sex workers were classified into different categories and also identified several causal factors for sex work in Mizoram (Ruatfela nu, 2004). According to C.A.R.E, World Vision, (2003), most of them get married at one point or the other in their life after they became FSW. They are from different places of the state and also from outside the state and so most of them do not have any permanent or regular address. They move from one place to another and doing their work according to convenience and the Sex workers in Mizoram use their money for buying drugs, clothes, ornaments and make up and they rarely save. Research and surveys done on CSW's

has revealed that the health seeking behavior and knowledge of HIV is very low in the CSW population. Also that the attitude of the communities towards CSW's is negative. These studies have thrown light on an issue that is generally not discussed in Mizoram. This paucity of relevant literature reveals that there is need to systematically document the issues and needs of Female Sex workers in Mizoram.

The following objectives have been put forward for the present study.

1. To present a profile of the FSW-IDU.
2. To highlight the pattern and types of drug use.
3. To examine the mental health status.
4. To identify the sources of social support.

In view of the theoretical foundation and empirical findings pertaining to drug use, mental health and social support of female sex workers, this study is aimed to provide baseline information on the current status of the Mizo Female Sex workers (FSW), who are Injecting Drug Users (IDU) who are very mobile and are a floating population in nature, by employing scientific research methods to form basis for further research and extended studies.

METHODS AND PROCEDURE

Sample

All the Female Sex Workers – Injecting Drug Users who were registered by several centers in Aizawl were randomly selected for the study sample without distinguishing the context in which sex work is provided. The sample consisted of eighty five (85) Female Sex Workers, within the age range of thirteen to forty years (13 - 40 years), who are in sex work for more than one (1) year and Injecting Drug Users, and living in Aizawl area, the capital of Mizoram.

Objectives of the study

The present study is aimed to provide baseline information on the current status of the Mizo Female Sex workers (FSW), who are Injecting Drug Users (IDU) who are very mobile and are a floating population in nature, by employing scientific research methods to form basis for further research and extended studies.

1. To present a profile of the FSW-IDU.
2. To highlight the pattern and types of drug use.
3. To examine the mental health status.
4. To identify the sources of social support.

Design of the study

The study will incorporate within group research design to highlight (a) the profile of the Female Sex Workers (FSW) – Injecting Drug Users (IDU), (b) their pattern and types of drug use, (c) their mental health status, and (d) their sources of social support.

Procedures

The primary data for the study was collected in a face to face interaction between the each participant.After obtaining the necessary consents and establishing a good rapport, the self-administered questionnaires containing demographic sheets (demographic profile, sex

work profile, drugs use profile, and health status) were administered to the participants which was conducted in an optimum environmental setting, and anonymously required to fill out the questionnaires with assured confidentiality. The measures / self-administered questionnaires employed for this study were - General Health Questionnaire (GHQ) – 12 (Goldberg, 1992) and Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988). A structured Interview schedule which was developed in the line of NCPCR (National Commission for Protection of Child Rights), 2012, for the purpose of the present study was used to measure the kinds and pattern of drug use of the participants. Each testing sessions lasted for approximately 90 minutes and the duration of data collection lasted for three (3) months.

Test materials:

The assessment tool consists of a structured interview schedule and self-administered questionnaires. The anonymous demographic sheets (demographic profile, sex work profile, drug use profile, and health status) were also included in the present study to obtain additional information of the participants.

A structured Interview schedule developed in the line of National Commission for Protection of Child Rights (NCPCR), which was based on study on children with substance abuse, 2012, for the purpose of the present study was used to measure the kinds and pattern of drug use of the subjects.

The General Health Questionnaire (GHQ) – 12 (Goldberg, 1992) which a 12-item self-report measure of current mental health was used to assess the mental health of the participants. The GHQ-12 measures both positive and negative aspects of mental health. The scale asks whether the respondent has experienced a particular symptom or behavior recently. This self-administered questionnaire focuses on two major areas- The inability to carry out normal functions, and the appearance of new and distressing phenomena. The

scores are 0-1-2-3 which can get a range of 0-36 wherein higher scores are an indication of more problems and lower scores indicates mental well-being.

Multidimensional Scale of Perceived Social Support (MDPSS) (Zimet, Dahlem, Zimet & Farley, 1988) was used to measures the participants' perceived social support. It is an uni-dimensional tool to measure perceived social support from one particular source and measures the adequacy of support from three sources: family (items 3,4,8,11), friends (items 6,7,9,12) and significant other (item 1,2,5,10). Total scores can range from 12 to 84, with total scores of 69-84 indicative of high acuity, 49-68 indicative of moderate acuity and 12 to 48 indicative of low acuity.

The outcomes of the overall analyses are presented in the chapter to follow.

RESULTS AND SUMMARY

In view of the theoretical foundation and empirical findings pertaining to drug use, mental health and social support of female sex workers, the main aim of the present study is to explore pattern of drug use, perceived social support, and mental health of female sex workers who are Intravenous Drug Users (IDU) in Aizawl, capital of Mizoram.

This chapter attempts a brief summary of the whole study and some conclusions drawn based on the results and the findings.

Within group research design was used in the study. The present study has been designed with four – fold objectives: (i) to present a profile of the Female Sex Workers (FSW) – Intravenous Drug Users (IDU). (ii) to highlight the pattern and types of drug use. (iii) to examine the mental health status. (iv) to identify the sources of social support.

The study incorporated purposive sampling procedure. Keeping in view the objectives of the study, 85 Female Sex Workers who are Intravenous Drug Users with age ranging between 13 to 40 years were randomly selected for the conduct of the study without distinguishing the context in which sex work is provided, who have been registered in different centers in Aizawl, the capital of Mizoram, namely - Volunteers for Community Mental Health (VOLCOMH), Agape Drop In Centers, Chawnpui Bethel Camping Centers, Grace Home, and Protective Home which is the custodial rehabilitation centre run by the Social Welfare Department, Government of Mizoram.

To meet the objectives of the present study on "Pattern of Drug Use, Perceived Social Support, and Mental Health of Female Sex Workers – Intravenous Drug Users in Aizawl", the following measures were incorporated: 1. General Health Questionnaire (GHQ) – 12, Goldberg (1992), 2. Multidimensional Scale of Perceived Social Support (MDPSS), Zimet, Dahlem, Zimet & Farley (1988), 3. Interview Schedule for Pattern of Drug Use (NCPCR,

2012), and Socio-demographic sheets including - demographic profile, sex work profile, drug use profile, and health status profile. Since this is the first endeavor to study the pattern of drug use, perceived social support and mental health of Female Sex Workers who are Intravenous Drug Users in Aizawl, capital of Mizoram, the researcher felt it necessary to include the Socio-demographic profiles in a detailed manner to give the reader a perspective of the Female Sex Workers who are Intravenous Drug Users and their background, and to provide a backdrop/reference for further studies in this population.

Demographic Characteristics of the female sex workers

Age

Approximately half of the samples (41.2%) of the samples were at the age of between 21 years to 25 years, followed by 26 years to 30 years (34.1%), followed by 31 years to 35 years (9.4%), followed by 36 years to 40 years (8.2%), and then 15 years to 20 years (7.1%).

Marital status

Approximately half of the samples had been divorced (49.4%). Roughly equal percentages of the samples were single (25.9%) and married (22.4%). A few of them were widowed (2.4%).

Number of children

54.1% of the sample had children and 45.9% did not have children.

Education

All the samples were literate and more than half of the samples (50.6%) had completed high school, 30.6% middle school, 14.1% higher secondary school, 3.5% were graduates, and only 1.2%studied only up till Primary School.

Occupation

The majority of the samples were unemployed (83.5%), 7.1% were government employed, and 9.4% were doing a small business.

Marital status of parents

Parents of the majority of the samples were divorced (41.2%). Parents of the 31.8% had been married. This is followed by father deceased (17.6%), both parents deceased (7.1%), and mother deceased (2.4%).

Sex Work Profile and Behavior

Age at first sexual activity

Overall, the majority (87.1%) of the samples had their first sexual activity at the age of 14 years to 19 years, which is followed by the age group of between 20 years to 25 years (10.6%), and 2.4% for between 8 years to 13 years.

Abortion status

The majority of the participants (89.4%) have never had abortion, but 10.6% of the participants had abortion due to several reasons (10.6%).

Enjoyment of sex work

Majority of the samples (88.2%) reported that they never enjoyed sex work. Only a 7.1% of the samples reported that they enjoyed sex work and 4.7% of the samples sometimes enjoyed sex work.

Sexual Orientation

Approximately one third of the samples (32.9%) had same sex partner (homosexual), while more than two third of the samples (67.1%) never had same sex partner (heterosexual).

Average income per customer

Majority of the samples (89.4%) reported getting between Rs100 to Rs 1000, followed by Rs 2100 to Rs 3000 (4.7%), followed by Rs1100 to Rs 2000 (3.5%), and then Rs3100 to Rs 4000 (2.4%). Although their rates per customer were different depending on several conditions including the conditions of their customers, the samples have reported their average income per customer.

Number of days per week engaged in sex work

Out of 85, thirty eight participants (44.7%) generally engaged in sex work for 6 days to 7 days, twenty nine participants (34.1%) reported 4 days to 5 days, fifteen participants (17.6%) reported 2 days to 3 days, and only three participants (3.5%) reported only one day in a week.

Number of clients / customers in a week

The number of the participants' clients / customers is different. These might depend on their attractiveness, class, number of days they are engaged in sex work in a week, and even luck as well. Almost thirty samples (35.3%) reported having 11 to 15 customers per week, twenty one samples (24.7%) reported 6 to 10 customers per week, seventeen samples (20.0%) reported 21 to 25 customers per week, each of the seven samples (8.2% each) of the samples reported 1 to 5 customers per week and 16 to 20 customers, one of the samples (1.2%) reported 26 to 30 customers, one of the samples (1.2%) reported 31 to 35 customers, one of the samples (1.2%) reported 41 to 45 customers.

Risk Behaviors

Condom use

More than half of the samples (54.1%) consistently used condom while having sex, while almost half of the samples (45.9%) inconsistently used condom.

Syringe sharing

More than one third (42.4%) of the samples had shared syringe with other drug users.

Sexually Transmitted Infection/ HIV status/ Hepatitis/ Abscess

Out of 85 respondents, nine (10.6%) respondents had Sexually Transmitted Infections (STI), thirty (35.3%) respondents were Human Immune deficiency Virus (HIV) positive , nine (10.6%) respondents were hepatitis infected, and twenty four (28.2%) had abscess.

Neglect by others they know/ Neglect by society

More than half of the samples (55.3%) reported that they are not supported and are neglected by family and others they know and even more than half of the samples (50.6%) reported that they are also not supported and neglected by society.

Incidence of Violence, Threats, Rape, Forced Labour, and Caught

Approximately two third of the samples had been subjected to violence (65.9%), approximately one fourth of the samples had faced threats (25.9%), 3.5% of the samples had been raped, and one of the samples had been subjected to forced labor (1.2%). Majority of the participants (91.8%) had experienced being arrested.

Drug use Profile

Age of initiation into drug use

Approximately two third (65.9%) of the samples had used drugs for the first time at the age of 15 years to 19 years, more than one seventh (17.6%) of the samples were at the age of 20 years to 24 years, seven samples (8.2%) were at the age of 12 years to 14 years, and seven samples (8.2%) were at the age of 25 years to 29 years.

Drugs use:

a) Cannabis

Nine (10.6%) samples had never used cannabis. Thirty (35.3%) samples had used cannabis for the first time at the age of 16 years to 19 years, twenty-three (27.1%) samples had used at the age of 20 years to 23 years, 15.2% samples had used at the age of 12 years to 15 years, five (5.9%) samples had used at the age of 24 years to 27 years, and other five (5.9%) samples had used at the age of 28 years to 32 years.

Majority (89.4%) of the samples had ever used cannabis, forty (47.1%) samples had used in last year, and twenty four (28.2%) samples had used within last 30 days. Overall, majority (71.8 %) of the samples did not use cannabis within last 30 days, 11.7 % samples had used for 1 day to 5 days within last 30 days, followed by seven (8.2%) samples used for 26 days to 30 days, followed by two (2.4%) samples used for 11 days to 15 days, followed by three (3.5 %) samples used for 6 days to 10 days, only one (1.2%) used for 16 days to 20 days, and the other only one (1.2%) samples used for 21 days 25 days.

b) Heroin / Number 4

Out of 85 samples, 8.2% of the sample had never used heroin / number-4. Overall, almost half (48.3%) of the sample had used heroin / number-4 for the first time at the age of 18 years to 22 years, sixteen (18.8%) samples had used at the age of 13 years to 17 years, other sixteen (18.8%) samples had used at the age of 23 years to 27 years, four (4.7%) samples had used at the age of 28 years to 32 years, and one (1.2%) samples had used at the age of 33 years to 37 years.

The majority (91.8%) of the samples had ever used heroin / number -4, more than half (62.4%) of the samples had used within last year, and almost half (48.2 %) of the samples had used within last 30 days.

Overall more than half (51.8%) of the samples did not use heroin/number-4 within last 30days, followed by fourteen samples (16.5%) had used for 26 days to 30 days, followed by eleven (12.9%) samples had used for 16 days to 20 days, followed by seven samples (8.2%) had used for 11 days to 15 days, five (5.9%) samples had used for 21 days 25 day, 2.3% samples had used for 1 days to 5 days, and only two (2.4%) samples had used for 6 days to 10 days.

b) Pharmaceutical Drugs

i) **Parvon/ proxyvon**

Thirty-sixth (42.4%) samples had used parvon / proxyvon for the first time at the age of 17 years to 20 years, twenty (23.5%) samples used at the age of 21 years to 24 years, seventeen (20.0%) samples used at the age of 13 years to 16 years, seven (8.2%) had used at the age of 25 years to 29 years, and five (5.9%) had never used it.

The majority (94.1%) of the samples had ever used parvon / proxyvon, and even the majority (60.0%) of the samples had used within last year. Overall, approximately half (49.4%) of the samples had used within last 30 days. Overall, 50.6% samples did not used parvon /proxyvon within last 30 days, eighteen (21.2%) of the samples had used for 26 days to 30 days, seven (8.2%) of the samples had used for 21 days to 25 days, six (7.1%) had used for 11 days to 15 days, other six (7.1%) samples had used for 16 days to 20 days and 4.2% samples had used for 6 days to 10 days.

ii) **Sedatives**

Twenty-seven (31.8%) of the samples had never used pharmaceutical sedatives. Thirty six (42.4%) samples had used pharmaceutical sedatives for the first time at the age of 17 years to 20 years, nine (10.6%) samples had used at the age of 13 years to 16 years, eight (9.4%) samples used at the age of 25 years to 29 years, and five (5.9%) samples used at the age of 21 years to 24 years.

The majority (68.2%) of the samples had ever used pharmaceutical sedatives. Thirty two (37.6%) of the samples had used within last year and 19 samples had used (22.4%) within last 30 days.

Overall, the majority (77.6%) of the samples did not used pharmaceutical sedatives within last 30 days, five (5.9%) samples had used it for 1 day to 5 days, four (4.7%) samples had used it for 16 days to 20 days, other four (4.7%) samples had used it for 21 days to 25 days, three (3.5%) samples had used it for 26 days to 30 days, two (2.4%) samples had used it for 6 days to 10 days, and one samples (1.2%) had used it for 11 days to 15 days.

Nineteen (22.4%) samples had used cannabis for one month at any point of time, while the majority (77.6%) of the samples had not. The majority (68.2%) of the samples had

used heroin / number-4 for one month at any point of time, and even pharmaceutical sedatives had been used for one month at any point of time by the majority (84.7%) of the samples.

Primary drug used / the drug which is the most preferred

Since either or both heroin / number-4 and parvon / proxyvon have been used by all samples, they were compared to be classified it as primary drug of use. Overall, the majority (57.6%) of the samples had preferred most parvon / proxyvon, and the rest of the samples (42.4%) had preferred most heroin / number -4.

Procurement

As reported by the samples, the majority (70.6%) of the samples had procured their primary drug of abuse from a drug peddler, fourteen (16.5%) samples had procured from friends, seven (8.2%) samples were a drug peddler, three (3.5%) samples had procured from pharmacy or chemist shop, and one (1.2%) samples had procured from tobacco/wine shop. A study among FSWs in Tijuana and Cd. Juarez, situated on the Mexico-U.S. border, observed that FSWs who injected drugs tended to have social networks that may perpetuate their drug use. FSW-IDUs were more than twice as likely to report that most of the sex workers they knew injected drugs, which could suggest a group dynamic through which women buy and use drugs together (Strathdee et al, 2008).

Adverse Health and Legal Consequences

The majority (91.8%) of the samples have considered drug use as harmful. Overall, the majority of the samples (82.4%) have experienced intoxication that impaired performance, twenty-eight (32.9%) of the samples had driven a vehicle after intoxicating drugs, the majority (72.9%) of the samples had fought under the effect of drugs, majority (78.8%) of samples had indulged in sexual behavior under the effect of drugs, majority

(95.3%) samples had sexual activity to get drugs or money for drugs, majority (84.7%) of the samples have experienced physical problems due to drug use, majority (92.9%) of samples have experienced sadness or anxiety due to drug use or problems related to drug use, majority (90.6%) of samples have experienced legal problems due to drug use (caught by the police even if case not registered or caught by the community).

Tolerance and Withdrawal

Twenty (23.5%) samples have experienced tolerance, while the majority (84.7%) of the samples has experienced withdrawal.

Self -Treatment and Treatment Seeking Behavior

The majority (85.9%) of the participants had considered stopping / reducing use of drugs in the last month, even the majority (89.4%) of the samples have ever been able to stop use of drugs. Thirty eight (44.7%) reported that they had stopped using drugs for more than 3 months in their most recent attempt, followed byeighteen (21.2%) who reported that that they had stopped use of drugs for between 1 to 3 months followed by nineteen (22.4%) reporting that they had stopped use of drugs for less than one month, and ten (11.8%) did not remembered the exact duration.

Almost half (48.2%) of the samples reported that they wanted to stop using drugs but would need some help for quitting, twenty-six (30.6%) reported that they accepted that they have a problem but that they could quit on their own, and eighteen (21.2%) did not think that they have a problem in stopping / reducing use of drugs.

The majority (55.3%) of the sample reported that they have never received any help for stopping /reducing use of drugs and have never seek for help, seventeen (20.0%) samples of the samples reported that they have consulted a doctor for treatment of drug use and were given treatment, eleven (12.9%) of the samples reported that they had received advice and

information to stop drug use but had not done anything, ten (11.8%) of the samples reported that they have seen a doctor for treatment of drug use, but had not been given treatment.

The sample reported that they had experienced several difficulties when trying to stop drug use. The majority 81.2% reported that they had experienced craving in quitting, nineteen (22.4%) samples reported peer influence as their difficulty in quitting, thirty six (42.4%) reported easy availability of drugs, majority (56.5%) of the samples reported that they had difficulty in tolerating withdrawal, more than half (54.1%) of the samples had difficulty in surviving on street without drugs, (62.4%) of the samples had difficulty in coping with stress, one (1.2%) samples reported feeling of hurt, one (1.2%) samples reported enjoying drugs in her difficulty in quitting, and difficulty in quitting of two (2.4%) samples were inapplicable.

Perceived Social Support and General Health Questionnaire-12

The majority (47.1%) of the samples had a moderate acuity, thirty-fourth (40%) had low acuity and eleventh (12.9%) had high acuity. The majority (85.9%) had moderate mental health, followed by (12.9%) low mental health, and (1.2%) had a good mental health.

Correlation coefficient of Perceived Social Support and Mental Health

The Spearman's Correlation coefficient between Perceived Social Support and Mental health shows that there is no significant relationship between these two variables which shows that each does not have any effect on each other. Spearman's Correlation coefficient between Perceived Social Support and Injecting Drug use shows that there is no significant relationship between these two variables which indicated that they have no any effect on each other. Spearman's Correlation coefficient shows that there is a significant relationship between mental health and injecting drug use. This indicated that injecting drug use can lead to mental health problems or mental health problems can leads to injecting drug use.

Psychometric properties of the Multidimensional scale of perceived social support and General health questionnaire (GHQ) - 12 are Cronbach's Alpha .742 and .754 respectively which are considered to be robust and reliable and valid for use in the population under study.

CONCLUSION

The last two decades have seen an increasing interest in the study of sex workers as a marginalized group at increased risk for poorer mental and physical health outcomes, inequitable access to housing and the problematic use of illicit drugs (Vanwesenbeeck, 2001). Most women do not choose sex work; rather, they are forced into this type of work because of lack of education, financial freedom, domestic violence, family responsibility, lack of support by family members and harassment and abuse in society and in the workplace and drug dependency, these factors, in addition to their lives on the streets, expose sex workers to a number of health problems other than, or in addition to, HIV/AIDS and sexually transmitted diseases (STDs) (Baker, Case, & Policicchio, 2003). FSWs are also especially vulnerable population for psychological disorders, as their life is enmeshed with substance use, violent victimization, social or economic vulnerability and other negative events (Surratt et al., 2011).

The findings of the present study indicate that the modus operandi of the Female Sex Workers (FSWs) of today, are still the same as reported in earlier studies, there are still no specific Red Light areas and the FSWs are still soliciting on streets and roadsides and the local hotels are mainly the venue for sex work. That the sex trade is mainly transient in nature and street based.The factors reported, such as broken family, lack of parental skills and neglect of children, delinquency, bad influences by peer, illegitimate pregnancy, illicit sexual urge, desire for easy life, loose character, poverty, unemployment, alcohol and drug addiction, domestic violence are also found to be related to sex work in the present study.

Another distinct feature of commercial sex work in Mizoram is that it may be considered to be closely interlinked with substance abuse and the need to support a drug habit is associated with the sex work, This study though indicative of the situation that prevailed in Mizoram then has provides an update, on this conjecture. Injection drug use (IDU) is common in sex workers in many locations and also in Mizoram, and although there are several studies examining the prevalence of drug use and risk behavior of FSWs-IDU, there has been less attention given on the pattern and types of their drug use. FSW-IDUs exhibit particular vulnerability because they can acquire communicable infections through both the sexual and the injection routes; this subgroup may also act as a bridge through which HIV and other sexually transmitted infections (STIs) are spread from higher-prevalence to lower-prevalence populations (Strathdee et al, 2011; Hamers, & Downs, 2003; Liu, Grusky, Li, & Ma, 2006). FSWs are even more likely to accept a demand for unprotected sex to acquire more money in order to sustain their drug use and may be more likely to acquiesce to requests for unsafe sex in order to earn more money to support their drug addiction (Strathdee et al, 2008).

The findings of the present study are in line with the research literature but one distinct factor that may be highlighted is that the attitude and perception of the communities towards FSW's is negative as in other locations but in a close knit community like the Mizo's this may be a factor which needs to be addressed and intervention strategies built around this issue. It is expected that the present study has thrown light on the above issues and may provide a systematically documented foundation to the problems and needs of Female Sex workers in Mizoram. That these findings could be used as baseline information for further in-depth research studies and to plan more effectively targeted intervention strategies.

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