"I was like a rose, now I look like a thorn"

An exploratory study of women injecting drug users (WIDU) in Tunisia

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Abstract

Aim: The aim of this master thesis was to explore contexts of initiation of substance use and to describe the social and healthcare needs of women injecting drug users (WIDU) in Tunisia.

Relevance: In North Africa, people who inject drugs are an important risk group in the HIV epidemic. There is evidence that WIDU are even more vulnerable. However, in Arabic Muslim societies, rehabilitation, treatment and research for this key population are scarce.

Method: A qualitative study was conducted. Six in-depth interviews with WIDU in Tunis were recorded, transcribed and inductively analyzed using thematic analysis.

Findings: Four themes were identified from the thematic analysis. The first theme was related to their situation before the drug use initiation. It seemed that they were brought up within patriarchal cultural norms. The second theme is related to the circumstances of initiation of drug use characterized by wish for escape and pleasures. The third theme describes the different aspects of dependence, how it starts and how it is lived by the WIDU. Final and four theme is related to the way out of addiction and how the limited rehabilitation options presented.

Conclusion and recommendation: The socio-ecological model and the gender relational theory helped to interpret the findings. WIDU in Tunisia suffer from marginalization and from social and health inequalities due to their gender and to their addiction. This puts them at a higher risk of violence, abuse, health hazards and HIV infections.
In memory of my grandfather Mosbah

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Abbreviations

AIDS - Acquired Immune Deficiency Syndrome
ATIOS - Association Tunisienne d’Information et Orientation SIDA
ATL MST/SIDA - Association Tunisienne de Lutte contre les Maladies sexuellement transmissibles et le SIDA
DALYs - Disability-Adjusted Life Years
HIC - High-Income Countries
HIV - Human Immunodeficiency Virus
HRS - Harm Reduction Service
IDU - Injecting Drug Use
MENA - Middle East and North Africa
NGOs - Non-Governmental Organizations
LMIC - Low- and Middle-Income Countries
SES - Socio-Economic Status
TA - Thematic Analysis
UNAIDS - Joint United Nations Programme on HIV/AIDS
UNODC - United Nations Office on Drugs and Crime
PWID - People Who Inject Drugs
WHO - World Health Organization
WIDU - Women Injecting Drug Users
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Introduction

Illicit substances: use, dependence and injecting drug use

Illicit or controlled substances are psychoactive agents of which production, distribution and use are prohibited or limited to medical and pharmaceutical channels by national laws or by international drug conventions. They include a wide-range of natural and synthetic products that carry high dependence potential (1).

Dependence on a substance is defined by the World Health Organization’s (WHO) lexicon of alcohol and drug terms as “a need for repeated doses of the drug to feel good or to avoid feeling bad” (1). The term dependence can refer to both psychological and physical dependence. Psychological dependence is the inability to control substance intake while physical dependence refers to tolerance and withdrawal symptoms (1,2). According to the International Classification of Diseases and Health Problems, the diagnostic criteria of a dependence syndrome are based on the presence of at least three concomitant symptoms that should have occurred for at least one month or for repeated periods of less than a month within a year. These symptoms include, but are not limited to, compulsive consumption of the substance, need for significantly increased amounts of the substance and physiological withdrawal when substance use is reduced or ceased (2).

Illicit drug dependence has direct and indirect adverse consequences on individuals and populations (3). In 2010, it was estimated to account for almost 1% of global all-cause Disability-Adjusted Life Years (DALYs) (4). A particular aspect of drug dependence is Injecting Drug Use (IDU), mainly opioids 1 that derive from opium e.g. heroine, morphine. Opioid dependence is the largest contributor to the global burden of disease causing 9.2 million DALYs globally (4). Countries with the highest burden are High-Income Countries (HIC). Nevertheless, recent reviews suggest that illicit substance use is expanding quickly in Low- and Middle-Income countries (LMIC), notably in Africa and the Middle-East (5,6).

Substance use in general and IDU in particular carry risks of Human Immunodeficiency Virus (HIV) transmission. In fact, IDU alone as a risk factor for HIV accounted for 2.1 million DALYs globally, in 2010 (4). IDU high risk of HIV infection is imputable to direct

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1 Opioid: A class of controlled substances deriving from Papaver somniferum, such as heroin and morphine, and their synthetic analogues. Opioids are usually prescribed to relieve pain. They also produce euphoria, and can cause coma and respiratory depression at high dosage (4).
transmission of the virus through the sharing of substance administration equipment such as syringes, between People Who Inject Drugs (PWID) (7). WHO estimates that almost 20% of PWID in the world are living with HIV (8). These estimates remain under-evaluated since in many LMIC data is on substance use is scarce (3).

**Regional implications for the Middle East-North Africa region**

International and Regional Organizations often use different definitions when referring to the Middle East-North Africa region (MENA). The World Bank definition of the MENA region is referred to in this paper and includes 21 countries situated in North-Africa and South West Asia, from Morocco to Iran (Figure 1). According to the World Bank, MENA only comprises of developing countries and presents particularities regarding its political situation, but also human rights, health and education, especially for women (9). Most countries in MENA present similar geo-political characteristics and have Arabic as official language and Islam as the major religion.

![Figure 1: The MENA region](image)

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2 Source: World Bank
Before the beginning of 2000s, the region has stood out with contained HIV transmission and low rates of HIV infections. Compared to other regions of the world, it is hypothesized that conservative cultural norms that prevail within MENA have played an important role in limiting the expansion of HIV (10). These are often religious norms that forbid -with possibility of juridical consequences- certain practices such as extramarital sexual relationships, homosexuality, alcohol and drug use. However, since 2001, HIV epidemic has rapidly increased, putting MENA among the top two regions in the world with the fastest growing HIV epidemic (11). While transmission in the general population is limited (12), the highest infection rates are registered among key populations namely female sex workers, men who have sex with men and PWID (Figure 2) (13). In fact, HIV prevalence among PWID in the Middle East is among the highest in the world. For example, more than 80% of PWID in Libya are HIV positive (14).

Figure 2: HIV prevalence among key populations in the MENA region as defined by UNAIDS (11).
Substance use in MENA is considered as a taboo and is a neglected social and public health issue (15). Related research is rather limited and focuses mainly on tobacco and alcohol use (6). Moreover, even though IDU is an important contributing factor to the HIV epidemics, national policies are not designed to limit new infections through Harm Reduction Service (HRS)\(^3\) and treatment options (15).

**Harm reduction services in MENA**

HRS designate policies and programs aiming to minimize the health, social and economic drawbacks associated with the illicit use of substances. It is a human rights-based approach that recognizes that substance dependence is a chronic condition and that people who misuse drugs may be unwilling or unable to stop (16). Needle or syringe exchange programs aiming to reduce blood-borne infections in PWID, opioid substitution therapy \(^4\) and antiretroviral therapy \(^5\) are examples of HRS. They are recognized by WHO as an evidence-based approach to HIV prevention (8). Nevertheless, HRS remain under-funded in many LMIC including countries of MENA where they are mainly provided by Non-Governmental Organizations (NGOs) (18).

Religion plays an equally important role to government support in the implementation of HRS in MENA. Lack of support by religious and political leaders supplemented by extremely repressive laws against PWID, undermine the scaling up of these interventions in countries of the region (19). A study was conducted in 2012 by the Middle East and North Africa Harm Reduction Association to research uptake of HRS by WIDU (20). This study concluded that the stigma this population was subjected to impairs their access to HRS. Another conclusion was that WIDU are at a higher risk of HIV infection since they are more exposed to violence, to unsafe or coerced sex and are more prone to sharing needles than men injecting drugs (20). Yet, countries in the region seldom report on drug use among women (15).

Ultimately, it appears that both lack of political will to tackle this issue and scarcity of accurate information hinder efforts of HRS in reducing the rate of HIV infections among key populations in the region.

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\(^3\)Policies, programs and practices that aim to reduce the harms associated with the use of psychoactive drugs in people unable or unwilling to stop.

\(^4\)Medical treatment for opioid dependence using a substitute opiate such as methadone or buprenorphine (17).

\(^5\)Drug regimens, for patients with HIV infections, that aggressively suppress HIV replication. The regimens usually involve administration of three or more different drugs including a protease inhibitor.
**Tunisia in the MENA region**

Tunisia is a North-African middle-income country with approximately 11 million inhabitants (21). With a geographically strategic location on the Mediterranean Sea, it has been a meeting point of diverse cultures throughout history. Classified within the MENA region by the World Bank, Islam is the official and major religion and Arabic the official language of Tunisia.

**Status of women in Tunisia**

In the last five decades the situation of women in Tunisia drastically changed in parallel to historical events in the country. Tunisia obtained independence from French colony in 1956. Women took part in the struggle for independence. At that time the majority of women had very little education. Privileged women groups formed branches of nationalist movements (22). With the advent of Independence, Habib Bourguiba, the first president of Tunisia, implemented the Code of Personal Status that provided women with an equal status to men. This code was revolutionary in the region as it abolished polygamy, officialised civil marriage legalized divorce and made adoption possible. Moreover, voting rights for women were introduced, abortion was legalized and in 1958, free education for all became mandatory (23). The decades that followed, saw new generations of educated women push for their rights and for better and more equal opportunities for all women in the country, particularly in the most disadvantaged areas (24).

Today, literacy rates for women are higher than for men. However, the number of women on the job market remains inferior (25). In fact, the Tunisian society remains conservative with cultural traditional values clashing with the modern “institutionalised” values. Despite the emancipation of the Tunisian woman, traditional norms impose that a woman should be married, care for the children and bare household chores. Cultural gender norms remain strict when compared to western cultures but they also differ within the society between families with different socio-economic status (SES).

In 2011, a popular uprising ruled out the second president of the republic who has been in power since 1987. For the last five years, the country has undergone a democratic transition. Civil society organizations have multiplied and feminist and gender equality movements multiplied. Again, women movements are a driving force behind these social changes(26).
**Healthcare system in Tunisia**

With the enactment of the Tunisian constitution after the independence, healthcare in Tunisia was established free for all through a government-funded system. As for the situation for women, Tunisia made major steps in improving access to health care for all. In the 1990s a social security scheme was founded based on employee contributions and government-subsidized coverage for poor populations. Nowadays, healthcare service delivery is provided through a large public healthcare facilities network and a rapidly growing private sector. However, health inequity remains an important issue in Tunisia and was one of the main drivers behind the uprising in 2011. A substantial gap remains in the access to health services between rural interior regions and coastal urban cities and between different economic strata of the society. As an example of such disparities, figure 3 showcases the higher number of physicians available in eastern and coastal cities compared to western and southern governorates. In addition, Tunisia is facing an important rise of chronic and non-communicable diseases, which adds to the high level of out-of-pocket expenses (27).

![Number of physicians by governorate in Tunisia](http://www.santetunisie.rns.tn/msp/msp.html)

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6 Source: http://www.santetunisie.rns.tn/msp/msp.html
**Substance use disorders in Tunisia**

The main substances used in Tunisia for recreational purposes are cannabis and psychotropic medicine (15). After the 2011 revolution, the country witnessed tremendous political and social changes. However, insecurity and violence increased in parallel and with them did illicit substances trade.

In 2012, the Ministry of Health reported that around 9,000 people are PWID in the country (28). However, official government estimates usually do not report their methodology thus rendering the accuracy of the figures hard to assess (29). In 2011, a study conducted in Tunis, capital city of Tunisia, estimated that almost 25% of HIV infections are imputable to IDU and that a 2.4% of PWID are HIV positive (15).

These indicators showcase that IDU is a pressing sanitary concern with dramatic consequences on public health. Nevertheless, when compared to other countries in the MENA region, these numbers are relatively low. In fact, the ministry of health launched the Tunisian national Acquired Immune Deficiency Syndrome (AIDS) strategy that includes PWIDs as an important target group. Still, the most important stakeholders in providing HRS and rehabilitation services in the country remain civil society actors and NGOs (30).

In Tunisia opioid substitution therapy is not available and high dosage buprenorphine is not legally marketed. In Europe and other parts of the world, this substance is used for opioid substitution therapy in cases of heroin or other opioid addiction. In Tunisia, it has been reported to be used as a “street drug” since the early 2000. Today it is considered to be the most used substance in IDU in the country (28). Since this substance is marketed in the form of pills in Europe it arrives in Tunisia through the black market in blisters with the name of the French specialty (Subutex®) written on them. Subutex is today widely used by PWID in Tunisia. However, competent authorities do not provide any biological tests for its use. PWID usually get convicted on bases of injection material or other evidence of injection (28). Overall, PWIDs are an extremely criminalized and marginalized populations in MENA, and Tunisia is no exception (15). Both men and women who inject drugs are suffering from poor treatment options and limited prevention services. Efforts are limited and coverage is low, only six needle exchange facilities exist in the country (19). Moreover, because HRS and rehabilitation services are NGO-driven they are tolerated and not institutionalized. They

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7 A derivative of the opioid alkaloid thebaine, which is a more potent and longer lasting analgesic than morphine. It appears to act as a partial agonist at mu and kappa opioid receptors and as an antagonist at delta receptors. The lack of delta-agonist activity has been suggested to account for the observation that buprenorphine tolerance may not develop with chronic use (31).
depend on external funding and the political transition happening since 2011 has affected the development of their activities, and in some cases they were completely ceased.

**Rationale**

Exploration of specific aspects related to IDU among women is limited in the literature. In the MENA region, PWID are an important risk group in the HIV epidemic but women are particularly more vulnerable to HIV infections (20,32). HRS and rehabilitation programs need to be tailored to special needs, in specific settings (33). In MENA, these programs need to take into account the important role of religious and social norms. Contexts of substance use initiation and social circumstances surrounding WIDU are not enough documented in this region. Thus it is important to conduct research in order to explore their health needs and social wellbeing. However, it is equally important to keep in mind the pluralistic societies without falling in the assumption that all countries in MENA present the same features.

**Aims and Objectives**

**Research question**

What circumstances drive women towards substance abuse and injecting drugs in the Tunisian society, and how do they perceive that their addictive practices influence their mental, physical health and social well-being?

**Overall aim**

To explore the context of initiation of drug use among women injecting drugs in the Tunisian society and describe their social and health needs.

**Specific Objectives**

- To describe particularities of drug abuse initiation for women living in Tunis
- To describe health needs of WIDU in Tunis
- To describe HRS uptake by women in Tunis
- To identify the barriers for healthcare provision and social integration of WIDU in Tunis
Theoretical Framework

The context where a person grows and the society´s dynamics such as power balances between men and women are at stake in understanding risk-taking behavior among PWID (34). In this perspective, the results this study used the socio-ecological model with the relational theory perspective. The socio-ecological model helps in providing a thorough view on the interactions between the individual and the different levels constituting the environment where human development takes place (35). Additionally, since this study specifically focuses on women, the relational theory by Connell was also used to appreciate the gender dynamics surrounding the participants (36).

Socio-ecological model

This model derives from Bronfenbrenner Bioecological theory and allows to understand how multiple factors from different environmental systems influence the individual (35). The theory uses a Process-Person-Context-Time framework that emphasizes the interactions that occur between an individual and the immediate and most remote surroundings. The context is divided in five different levels that will be used as the socio-ecological model for this study. The nuclear level is the microsystem which is the immediate environment of the individual such as parents and siblings, school and neighborhood. The next level is the mesosystem where different parts of the microsystem through their mutual interactions, indirectly influence the individual. After this level, comes the exosystem which includes settings or people that the individual may not interact with but might have an influence on his development such as the legal system of a country or the welfare services. The largest level is the macrosystem that includes the most remote set of people, cultural norms and social attitudes. The final level is the chronological system that takes into account life events i.e. time (37).

The Relational theory

Connell explains that the relational theory provides a multi-dimensional approach to define gender, as opposed to the categorical thinking that does not take into account the complexity of human relations neither between men and women, nor among groups of men and among groups of women. This theory recognizes that physical bodies play an important role in forming social processes and determining specific norms, but it also explains that the disparities in health between men and women are not only due to biological differences. Societal and cultural views of gender affect the health of individuals and thus, their bodies. It
introduces the concept of “gender order” as the structure of gender relations in a given society at a given time. It defines different ranges of human relations such as economic, power, affective and symbolic relations. At the same time, it looks at human interactions on intra-personal, inter-personal, institutional and societal levels. Connell speaks about a micro-level, where gender is accomplished in personal interactions, and a macro-level, where economy, policy-makers and media influence understandings of gender (36). Figure 4 illustrates the adaptation of the socio-ecological model using the relational theory of Connell. The overall goal of this study is not merely to establish the place of WIDU in Tunisian society but also to explore how their environment affects their wellbeing. Therefore, it is important to understand the relationships between these women and the different components of their surroundings, as well as how the social constructions of gender affect them.

Figure 4: Conceptualization of the adapted socio-ecological Framework using Relational Theory
Methods

Study design
This is an explorative and descriptive qualitative study. Data collection took place in August 2015 in Tunis. Participants were interviewed in-depth by the master student.

Setting
Data was collected in two different districts of Tunis with the help of two collaborating NGOs:

1. ATL MST/SIDA: Association Tunisienne de Lutte contre les Maladies sexuellement transmissibles et le SIDA: Tunisian association for the fight against sexually transmitted diseases and AIDS
2. ATIOST: Association Tunisienne d’Information et Orientation SIDA: Tunisian association for information and orientation on AIDS.

Both provide HRS to substance users in two different districts of Tunis. In Tunisia, HRS is provided by external, privately-funded NGOs.

The ATL MST/SIDA center was situated in a low-income neighborhood in the west part of the capital. The center was created in this setting to come closer to the key populations in the prevention of HIV epidemic such as people with dependence, sex workers, marginalized populations (38). No external distinctive feature could differentiate it from the other houses of the neighborhood. Well-equipped with air-conditioning, clean bathrooms, a kitchen, two offices, one meeting room and a game-room, all spaces were open for the beneficiaries. The full-time staff included a psychologist and a social advisor, who were the main collaborators of this study as they were contacting prospective participants and inviting them to visit the center for interviews.

The ATIOST center was located downtown. The area was highly frequented and many street vendors have settled in the surrounding streets during the past few years. Two low-income neighborhoods were located at walking distance from the center. This center was rather small compared to the first one. It was located in the first floor of an old building. It had only one consultation room where both the doctor's and the psychologist's consultations took place and one office where beneficiaries could walk in, get their syringes or wait to see the doctor or psychologist. It seemed that this center was designed as a medical cabinet. Full-time staff included a psychologist and two social advisors. A medical doctor was working part-time.
Again, the main collaborators were the full-time staff as they helped with contacting prospective participants.

**Sampling and recruitment**

Six interviews with WIDU from Tunis were used for this study. Inclusion criteria were:

- Being a woman and above 18 years old
- Having injected illicit substances in the past (for at least 3 consecutive months)
- Being a beneficiary at one of the HRS centers of ATL MST/SIDA and ATIOST

Women referred to as “peer-educators”, also called “key informants” by the NGOs, were also eligible for this study. Peer-educators are women or men with current or past dependence to psychoactive substances that are considered to be influential in their neighborhoods. They are recruited by the NGOs to provide clean syringes and HRS counseling to their peers.

Convenient sampling was followed to recruit participants. Women going to the HRS centers to collect syringes for their personal use or for their peers were approached by a member of the staff working at the NGO-usually the psychologist- who introduced the study and the master student. If they showed interest, the master student provided them with more explanations about the aim of the study, its methodology and the justification for audio-recording (oral sheet information in annex 2).

Of the 10 WIDUs approached, six agreed to take part in the study. Of those who declined, one had severe health issues and could not reschedule a time for the interview, one was suffering withdrawal symptoms and could not be interviewed and another asked for financial compensation which could not be provided within this study. The fourth WIDU was a peer-educator but she declined participation for unknown grounds. Her mother offered to be interviewed in her place. The interview happened but it was not used as a primary data. It was used as an informative meeting to seek more general information about the studied population.

**In-depth interviews**

A total of seven in-depth interviews were conducted in Tunisian dialect (mother-tongue of the master student) and transcribed in Arabic scripts. The length of the interviews varied between 20 and 60 minutes. The interview guide (annex 1) was promoting participants’ disclosure of the circumstances of their initiation of substance injection and their perceptions on how it affected their relationships and lives in general. The interviews were all audio-recorded and transcribed verbatim.
Participants’ characteristics
Participants in this study were all female. All had children except for one. They came from different socio-economic backgrounds and had different educational levels: most of them have not finished primary schooling and only one has finished secondary school. All were unemployed and two of them explicitly disclosed activities related to sex trade during the interviews. Two other participants were involved as peer-educators in one of the collaborating NGOs. Table 1 provides information on age and substance use history of participants. Only one out of six defined herself as rehabilitated. One woman was homeless and a widow. She was still living from sex trade at the moment of the interview. All others had a shelter living with their families or companion.

Table 1: Participants’ age and years of substance use

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age (approx.)</th>
<th>Years of substance use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early 40s</td>
<td>Less than 5 years</td>
</tr>
<tr>
<td>2</td>
<td>Late 20s</td>
<td>Between 5 and 10 years</td>
</tr>
<tr>
<td>3</td>
<td>Mid 40s</td>
<td>More than 10 years</td>
</tr>
<tr>
<td>4</td>
<td>Mid 40s</td>
<td>More than 10 years</td>
</tr>
<tr>
<td>5</td>
<td>Early 20s</td>
<td>Less than 5 years</td>
</tr>
<tr>
<td>6</td>
<td>Early 40s</td>
<td>More than 10 years</td>
</tr>
</tbody>
</table>

The same substance which is high dosage buprenorphine was used by all participants, even though their experiences were different. All participants referred to it using the name “Subutex” or as called in the local jargon “Souba”.

Data Analysis
Thematic Analysis (TA) by Braun and Clarke is useful in identifying key elements from narratives and is, in qualitative health research, one of the most frequently reported method of use(39,40). TA was particularly suitable for the present study as the narratives were reported in Tunisian Arabic which is a dialect that contains French words and often uses old sayings to express different ideas. This type of analysis allowed identifying recurrent meanings and themes.
Since Arabic is the master students’ mother tongue the transcripts were not translated in order to avoid loss of important meanings in the process. The guidelines provided by Green and
Thorogood (39) for TA were followed: firstly, the transcripts were read as a whole and relevant themes were noted at the end. Secondly, each interview was read separately and important parts were highlighted and coded.

Coding was done inductively on the Arabic script. When analyzing an interview, codes from previous interviews were used for the same meaning and new codes were created if needed. For the same sentence different codes could be identified (table 2). A total of 79 codes of different ranges resulted from this process.

After coding, potential themes and subthemes were formed. The themes were rearranged and renamed in order to select the final themes.

**Table 2: Example of a Thematic Analysis**

<table>
<thead>
<tr>
<th>Quote</th>
<th>Codes</th>
<th>Potential themes or subthemes</th>
<th>Final theme</th>
</tr>
</thead>
</table>
| “I told you, she takes all of your life. What is the most important thing for a person? His or her life I think. It’s as if you were not living anymore. As if you were only living for that thing...” 15. | • Loss  
• Isolation  
• The drug above all | Lived prison with Souba  
Isolation and loneliness  
Drug master of their lives | The dependence |

**Ethics**

The research process followed the four basic ethical principles.

- Autonomy: Participation in the study and interview was voluntarily. Participants were aware that they could withdraw from the study at any time without consequences. A consent form was provided in Arabic (annex2) and all participants signed it after information about the study was orally explained.

Information about the study aim and protocol was presented orally to the participants. As many of them did not know how to read or write, which was not possible to know beforehand, it was preferred to present the information orally to all participants. Still, a printed information sheet was always available. The consent form was written (annex2) in Arabic and
all participants have signed it prior to the interview. The master student signed a copy of the consent form for the participant to keep.

- **Beneficence:** No financial incentive was provided for participating in this research. The centers where research took place provide HRS for free. Offering money would have been contrary to the principle of HRS strategies. In addition, it was thought that the participants would not genuinely disclose during the interview if they were participating in return of a financial benefit (by giving socially-desired or researcher-desired answers).

The participants indirectly benefit from this study as they provide the information needed for this study which ultimately aims to help improve their social and health status in Tunisia. Furthermore, being given the opportunity to safely and confidentially talk about their personal issues could relieve some participants. The fact of being given attention and the feeling of being able to contribute to a greater cause were also likely to be highly beneficial to the participants.

- **Non-malevolence:** There was no possibility of physical harm from participating in this study. However, in-depth interviews might bring up emotional harm since the participants might disclose painful experiences. If needed, it was possible for the participants to have psychological counseling after the interview. All interviews were discussed with the referring psychologist afterwards to assess whether it was needed for the participant to have a session with them or not. In addition, secrecy and confidentiality were very important to keep in this study since some of them did not disclose their addiction to their family members or friends and would suffer social and economic consequences if such information was not kept secret. Therefore, audio-records were held in the most careful way and all names or identity-disclosing information was immediately deleted in the transcribing process.

- **Justice:** The ultimate aim of this study is to shed light on a socially taboo issue that is affecting the lives of people with substance use and their surroundings. WIDUs are a marginalized group in the society which leads to poor access to health care and social services. This study helps to identify the barriers for healthcare provision and social integration of WDU. It is believed that this study will provide knowledge for future research to bring about effective interventions for this particular population.

Competent authorities such as the National Ethical Board of Tunisia and Department of Medical Research at the Ministry of Health were provided with the study protocol and samples of information sheet and consent forms. However, ethical approval could not be obtained. The National Ethical Board provides awareness on emerging ethical issues in the
country (41). They do not provide ethical waivers for social-oriented research. However, the medical research unit within the Ministry of Health and the Ministry of Women and Children supported this study.

**Data protection and confidentiality**

Audio-records and transcripts remained in the unique possession of the master student. Transcription of the audio-files was conducted with respects to confidentiality. Revealing information such as names of persons or places was omitted in the transcribing process in order to ensure anonymity. The transcripts remained secure with no access from any person not related to the research.

**Reflexivity**

I am a Tunisian national and I have lived in Sweden for a year before conducting this research. Even though I did not spend enough time far from my native country to become an outsider, I started identifying differences and notice how traditions are deeply rooted in our everyday life choices and actions.

In 2014, I finished my pharmacy degree with a thesis work in a rehabilitation center for SUD in the south of the country that was run by a local NGO. This center only accepted male patients and I conducted a quantitative research on their social background and drug use patterns with men only. Back then, I conducted a few interviews with men injecting drugs and one of my questions was to ask them how many WIDU they knew. It became obvious that there were many more WIDU than the official numbers stated and I started getting interested in their situation.

When I started this study I believed that WIDU were “unseen” in our society. I was interested to know how they cope in a society who denied their existence, and where they had neither access to healthcare nor family support, nor judicial protection. I must acknowledge here that I was interested in this population in particular because I believed beforehand that they were discriminated against because of their gender and their practices. I started the research with the mindset that the society in general was unfair towards this population.

Because I studied pharmacy before starting my master in International Health, I am more familiar with quantitative methodologies. Despite this fact, I decided that my thesis would follow a qualitative design because this is an area where research is lacking and information is needed in order to design efficient approaches.
When I contacted the NGOs working with key populations in Tunisia, I received positive feedback. I had the chance to meet different stakeholders working with HIV prevention and illicit drug use on the field or in higher positions. All supported that this work was needed and that the targeted population was hard to reach by social and health services. It was obvious then that it was important that this research is conducted.

During my previous study, I used to present myself as a pharmacist, and I quickly came to notice that many participants were disclosing information to me with hope that I would procure controlled medicine for them. Therefore, for this research I decided it would be better not to present myself as a pharmacist but rather as a researcher in public health to avoid influencing the data collection and the interview process.

Since I have been in contact with people who use illicit substances before, I considered myself to be familiar with the environment where I met the participants. However, I have never met any women with history of substance use. From my discussions with members of the staff working at the organizations, I was expecting that the participants would not share their stories as comfortably or freely as men did in my previous study. However, starting with the first interview I realized I was wrong. I expected that the participants would not feel comfortable talking to a stranger and that it would be hard to reach the in-depth. In reality, many of the participants answered the questions in directly. Most of them were not reluctant to share their experiences at all. I quickly realized that they saw the study as a channel to make their voice heard. Not only were they willing to “finally” disclose their story, they were also eager to know where the study would be published and if competent authorities were interested in it. In addition, some of my participants were asking me for counseling and medical advice during the interview. This showed me that they trusted me but at the same time, I thought it might hinder the research process so I tried to always leave answers after we finish the interview. One of the participants explained that she could not disclose her addiction to her doctor because she felt shy. However, she freely talked about it to me. Perhaps it was due to the setting where the research took place (syringe exchange center), or maybe she saw me as an outsider to the health system. Being Tunisian but studying at a European university may in fact have put me in a different position than the healthcare staff in Tunis. In fact, some of them asked for help, or for me to take their cases to competent authorities.
**Findings**

Four themes were identified from TA. Each theme describes a stage in the women’s lives and their situation in relation to their substance use. The 79 codes were grouped to form these themes and subthemes but some codes are recurrent under different themes. Table 3 provides an overview of the themes, subthemes and examples of related codes.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subtheme</th>
<th>Examples of codes</th>
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<tbody>
<tr>
<td>Life before substance use</td>
<td>Within the Tunisian kinship system</td>
<td>Family Honor</td>
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<td>Male dominance</td>
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<td>Forced marriage</td>
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<td>Victimization and internalization of the victim role</td>
<td>Domestic violence</td>
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<td>Passivity and obedience</td>
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<td>Acceptance and belief in faith</td>
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<td>The onset of substance use</td>
<td>Looking for another state of mind</td>
<td>Curiosity/ looking for enjoyment</td>
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<td>Wish to forget</td>
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<td>Boyfriend drug provider</td>
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<td></td>
<td>Honeymoon with <em>Souba</em></td>
<td>Pleasure, High and intoxication</td>
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<td>Male companions and female friends</td>
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<td>Parties and social popularity</td>
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<td>The Dependence</td>
<td>Feeling trapped</td>
<td>The Withdrawal</td>
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<td>Revenge, Betrayal and regret</td>
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<td>Lack of awareness</td>
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<td>Loss of valued meanings and things</td>
<td>Loss of honor, money, friends</td>
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<td>Bad physical features</td>
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<td>Drug above all</td>
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<td>Lived prison with <em>Souba</em></td>
<td>Confinement and isolation</td>
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<td>Social exclusion and family abandon</td>
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<td>Depression and self-hatred</td>
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<td>Looking for a way out</td>
<td>Limited options</td>
<td>Wish for cure, Fear of disease</td>
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<td>Mental Health and Depression</td>
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<td>Inability to make voice heard</td>
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<td>Healthcare VS. <em>Souba</em></td>
<td>Substance available + affordable</td>
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<td>Unavailable treatment</td>
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<td>The police in the healthcare</td>
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**Theme 1: Life before substance use**

Narratives of life before starting to use recreational substances in general and *Subutex* in particular were different. Descriptions of life before addiction were diverse. Some had better chances in life than others. Most participants were from low-income neighborhoods, although some had families with better economic situations than others. In fact, some participants reported poor economic circumstances during their childhood or as adults, and financial hardship was a recurrent code. Poverty and low SES were striking sometimes, but it was not always the case. Other participants referred to physical possessions such as goods and money or beauty and healthy bodies as assets in their lives before starting substance use.

On another level, the place they hold within the family seemed to play a major role. This place was at the bottom of the family’s hierarchy. In fact, fathers’ and brothers’ control over the lives of girls in the family was paramount. The neighborhoods where most participants grew up were low-income neighborhoods where patriarchal ideas and norms were also the norm. Extended family members were often neighbors and the women’s behavior outside the family circle affected their family’s reputation directly. By going against the will of their fathers they would bring shame to them. Consequently, it was important that they show respect to their male relatives and act in accordance to their directive.

On many accounts, women explained that as daughters or sisters, they could not make personal choices. Men in the family took these decisions for them. A girl cannot choose to whether to finish her education or whom she marries. For example, a participant reported being married off by their brothers before the age of 18 years:

“He is not from our family. He came to ask for my hand, my brother said yes. That’s it! They say a woman needs a man. So then my brother directly gave me to him. I mean my brothers... their work is bad and our family lives in hard circumstances. I just wanted to get married... I was 14 when I got married” I3.

The women were resilient and never questioned the powerful position of their brothers and fathers, over their lives. Mother’s behavior and positions strengthened the male dominance and gave right to it. The women were resilient and submissive to the norms in general. Some reported that they were never able to go against their fathers, brothers or husbands will or in other words risk the family’s reputation to become bad.
In some cases, male dominance took the form of domestic violence. Neglect and abuse were recurrent codes in many accounts. Some participants reported being raised by grandparents because the parents were not present. Abuse ranged from sexual assault to moral abuse such as family pressure to conduct in a certain way. Others disclosed being abused during their childhood. Intimate partner violence was also reported:

“Yes I used to be hit a lot on my head when I was young. And when I got married my husband stabbed me with a knife in my head. I stayed in intensive care and I started using pills since then” I1.

Most participants did not have an education or any qualifications. Belief in destiny and faith reassured their attitude of general obedience. They were resilient and submissive. In fact, passivity and obedience were two frequent codes. The expressions “that is god’s will” and “god is mighty” were repeated in all narratives.

**Theme 2: The onset of substance use**

Substance use initiation was presented by the participants as a form of salvation. A few participants reported taking drugs to forget about painful experiences or to help them go through bad experiences. As one participant tried to explain the overall situation, poverty and inequalities that people in her neighborhood are facing are at the origin of substance use. She described cases of parents and family members who beg or who are jailed. She explained that young people in these cases want to forget about their situation, somehow escape from their reality. She justified that substance use is the only way out of this “misery”. The situation for young women, as she described, is different from young men. In this setting, she said, financial hardship compels some women to prostitute themselves. Then, they would need to forget about the fact that they have “to go with men” so they would resort to injecting Souba. The neighborhoods where most participants came from were presented as places where illicit drug trade and street violence prevailed.

Traffic of psychotropic medicine in these neighborhoods was also common and it was easy to access different psychoactive illegal substances through the black market. Many participants reported that their first substance to be ever used for recreational purposes was psychotropic medicine. Some quickly changed to injecting Souba because it was available and cheaper or because they were looking for new sensations.

Having easy access to Subutex was usual and at the first intake it was offered to them or shared by a friend or by their partner. The direct role of male companions or female friends in
the onset of substance use was apparent in the accounts. Whether they encourage or discourage its use because of their own experience, they are usually the first substance providers. They show how to administrate it and in some cases they would even prepare the injection and administrate it to them.

Narratives of initiating substance use in festivities were the most frequent. Some participants reported trying recreational substances out of curiosity with the purpose of reaching intoxication and pleasure:

“Yes it’s normal. You are at a party you know? You think it’s for euphoria so you try” 15

The first injection of *Souba* was described as a unique experience with a great level of intoxication. Some described vanishing; for others it was a one-of-a-kind sensation, even when compared to other psychoactive substances.

The period following the first use, most participants started snorting or injecting *Souba* on a regular basis. This period of time was described in terms of euphoria, parties and general enjoyment. It was recalled as a state of general carelessness, when women used to trust their peers and felt socially dynamic. They were usually surrounded by friends and acquaintances, but also by caring powerful clients in cases of sex trade.

This period was also described as a period of good finances with flow of money or flow of *Souba* as one participant pointed it out:

“I had the money. I got high every night. What was it for? Very cheap...” 13.

In general, at the initiation of substance use, positive feelings were described, even though in some cases, the substance was used to clear away negative aspects in life.

**Theme 3: The dependence**

The discovery of the drug as damnation followed the period of pleasure and was frequently described as a pitfall. The feeling of falling into a trap was present when they realized they were unable to stop injecting, or after their first withdrawal symptoms. Notions of betrayal and disillusion were common in the narratives. Deception from trusted relationships such as male companions and female friends and not being previously aware of the negative effects of the substance were highlighted by many interviewees. As explained by one participant:
“... it was a person of trust who gave it to me, which makes me even more shocked[...] if I knew what she (Souba) really does to a person, it would have been impossible for me to go and try it” I5.

In order to avoid sharing needles or to be safe some avoided to meet other people who inject even if they knew them or were in their circle of friends before. Some simply stipulated that they did not feel the need to see anyone or meet anyone new. Isolation and distance from everyone else was recurrent in the narratives. Some preferred to be alone by choice because of fear of family or social rejection. Loss was extensively discussed by many participants and a recurrent code in the accounts: Loss of financial security, loss of family shelter, loss of social group, loss of husband, loss of honor and reputation. These negative consequences of dependence were extensively discussed as one participant presented it:

“I stopped working, I lost all my friends, they heard about me. I lost my friends, I lost my work, I lost myself, I lost my house, I lost my life, I lost my money, all my gold I gave it for Subutex [...] I lost my life I lost my world, I lost everything” I4.

The substance was “blamed” “she destroyed my life” as one participant presented it. Yet, it appeared as an essential part of their lives. Its value exceeded everything else that was once important for them. It seemed to be key for the continuation of life:

“One wakes up, try to do something, he cannot do anything without her! It’s like a battery” I1.

At this stage the health drawbacks of injecting drugs appeared and women were aware of them. Still, they perceived the substance intake as an indispensable condition for their mental and physical wellbeing. Being on withdrawal appeared to be as the extreme opposite of one’s state when having taken the substance. Dual and versatile personalities were systematically described in the interviews. The women described themselves as stressed, asocial, uncomfortable and unpleasant when they started to feel the need to inject. For some, the act of injection was like an antidote that brought them back to their natural estate.

Social exclusion was faced by women who were publically known to be injecting drugs. Some experienced family rejection and social marginalization quickly followed. As one participant presented it:
“When she discovered (mother) that I was shooting she threw me in the street [...] now people in the neighborhood (Houma) hate me. They look at me I don’t know how to explain it... it is a bad look” I1.

Fear of similar reactions led WIDU to hide their dependence from family and friends, isolating them from their entourage. The general hostile attitude towards PWID in the society was the main factor that prevented them to disclose their dependence. In addition to that, it appeared that there was a particular preconceived idea towards people who use Subutex in particular. As one participant presented it the term Subutex was associated with inappreciable individuals in the society who are stigmatized for certain crimes or very low-level jobs. She expressed her feeling of self-disgust when she thinks that she might be associated to these persons. At the same time, she acknowledged that this general idea was far from the reality and that this label or stigma was doing a lot of harm to the PWID.

**Theme 4: Looking for a way out**

The wish for getting out of addiction was shared with feelings of powerlessness before the substance. Their inability to stop injecting, the withdrawal symptoms, the regrets and the fear of death and disease were mixed with the wish for getting out of addiction:

“I started seeing her disease and her death everywhere. People getting cancer, I know a woman who got blind because of her, people getting liver disease. I am afraid I want to stop it.” I1.

Mental health issues such as depression and suicidal ideation were reported by some participants. For example one participant was showing her scars and talking about failed attempts of suicide. The repeated attempts to kill herself were not directly related to her substance use but rather to her situation in which she feels helpless and doesn’t see any other issue except death. In the opposite of other participants who feared dying, some were in fact wishing for death.

Many participants expressed the limited or even nonexistent options of treatment. For some being in jail was seen as the only exit from dependence. It was the only possibility they could afford. Jail was also the only place where some successfully stopped injecting before relapsing after their release: As one interviewee presented it:
"In prison I could stop it. There the doors are closed; you have nowhere to go. Here you feel sick you go out to shoot"16.

In fact, there was not a single rehabilitation center that offers treatment for women in the country. The only left option for these women was to keep using Souba in order not to face the withdrawal syndrome. Souba was presented as affordable and available whereas treatment was unavailable. Some women knew about existing alternatives such as psychiatric follow-up at the psychiatric hospital or in private practices. However, treatment options were perceived as expensive and out of reach. Because of their low SES or because they were marginalized, some participants could not afford this option. As one participant explained it, for PWID with low SES, the only option is to keep injecting.

Moreover, the relationship with the healthcare system seemed to be stained with lack of trust. When it comes to disclosing substance use to the medical staff, both fear of moral judgment and fear of juridical consequences were definite. Feeling overlooked by authorities and invisible to the rest of the society, added to the feeling of distress. Many participants recognized the lack of awareness and how their rights for care and health are unrecognized. The healthcare professionals seemed to be unhelpful and to some extent hurtful in providing the needed care:

"-I know I am sick. I have AIDS. But I cannot take any medication.
-Why? Isn’t it free in the hospitals?
-My doctor said she could not prescribe it to me until I stop shooting. She said the treatment does not go with shooting. So I am waiting until I stop." 12

Another participant expressed desire to make awareness and disclose her situation to the general public. This is however a particular case. Having suffered from social exclusion and oppression in her entourage, it seemed like she could not fear anymore the societies or the juridical consequences. Others still had hope in getting out of addiction and retrieving social acceptance. They perceived the harm reduction centers as the only concrete help they could afford and that was easy to access. They recognized the role of the NGOs in helping them to better protect themselves, but the moral and social support they provided was perceived as far more valuable.


Discussion

Summary of Findings

This study looked at women injecting substances in a North-African society. The aim was to explore the environmental factors surrounding initiation of substance use by women and to describe how their injecting habits are influencing their social, physical and mental wellbeing in the Tunisian setting. Six in-depth interviews were conducted. The text was then thematically analyzed. The four identified themes were:

- Life before substance use
- The onset of substance use
- The Dependence
- Looking for a way out

The results showcased the diverse backgrounds of WIDU in Tunis but also highlighted the common way girls are brought up within the Tunisian family. Patriarchal values commanded their lives. Submissiveness defined their relationships to male relatives or companions. The power imbalance was due to the male dominance. The use of recreational substances seemed to be a form of escape from reality. The immediate entourage had direct influence on the substance use initiation. WIDU faced marginalization when their addiction was recognized. Economic hardship and poor access to healthcare was experienced by many of them. Mental health issues such as depression and suicidal ideation were not rare. To avoid marginalization, some WIDU hid their addiction and distanced them from the society. Moreover, the inability to disclose their practices out of fear prevented them from getting the needed care. It appears that their healthcare needs, whether related to their substance use or not, were usually unmet. This was due to reasons inherent to their SES but also to lack of treatment options and to the attitude of healthcare professionals towards them. On the opposite the harm reduction centers and NGOs seemed to be easy to access for them and were perceived on a more positive note than the official public authorities.
Discussion of Findings

The results are hereby presented using the socio-ecological model. As described previously (Figure 3) the relational theory of Connell is used in order to interpret the dynamics in the relationships of WIDU with their surroundings at each level of the socio-ecological model.

**Microsystem:** The findings highlight a common pattern within the nuclear family. Even though the participants were from different backgrounds, fathers and brothers usually commanded the lives of the women since their youngest age; whether it was for their best interest or not. There was an obvious unbalanced power in these relationships and from their early life, WIDU were obedient to the paternal authority as well as to their brothers’. Internalization of these norms was apparent through their relationships to their companions, later in life. In fact, the participants who were not single were always under the economic and powerful authority of their companion. Women perpetuated this norm and lived by it; as inferiors to men. It seemed that they were not taught to take decisions for themselves but rather to accept what is decided for them. This sense of passivity since young age may be at the origin of the passivity and acceptance of faith expressed by the participants.

Factors related to SES also seemed to be at stake but further research needs to elucidate if low education and low economic status are related to substance use. Studies from HIC have reported that contexts of poverty, homelessness, incarceration and low years of education are risk factors for women to misuse substances (42). However, in this study, some participants suffered from poverty and lack of family support while others had better opportunities with parental presence and access to education when growing up.

It seems that internalization of patriarchal norms plays an important role in the choice-making process in the path towards substance use. In fact, it appeared in the results that forms of dominance vary from the symbolic hierarchic family order (where women in the family respect the men of the family) to domestic violence perpetuated against the WIDU since their childhood. Physical and sexual abuses from family members or from male companions were frequent in the accounts. In the literature, domestic violence is described as “intersected epidemics” with substance use within groups of women (43). Some studies have concluded that being a victim of abuse as a child is a risk factor for injecting substances (42,44). Vice-versa, IDU is considered as increasing the risk of being a victim of domestic abuse (43,45). In Tunisia, domestic violence is a pressing public health issue. About 30% of women are abused by partners or family members (46). Substance use disorder adds more complexity to
this issue in terms of service provision but also in terms of prevention and awareness (47). In HIC, it has been recommended to implement routine screening for domestic violence in rehabilitation centers (48). However, in Tunis such centers do not exist and WIDU are confined within a microsystem where they seem to be in a constant state of victimization and passivity.

**Mesosystem:** In the results, it seemed that the neighborhood played an important role in the social lives of WIDU but also influenced the initiation of substance use and habits of substance intake. The neighborhood can be viewed as a small representation of the general society. Referred to as “Houma” in the local dialect, it is not merely the place of residency in Tunisia but also a social entity that people refer to as where they belong to (49). In addition, **Houma is** the first social experience encountered when leaving the family shelter. The inferior role of women in regards to men followed outside the nuclear family circle to the neighborhood.

Beyond the direct influence of the availability of drugs and prominent violence within the neighborhoods, the relationship dynamics within this entity influence the lives of WIDU and the choices related to IDU. If the family rejects the WIDU, it is most likely that rejection in the **Houma** will take place. The results showed that marginalization after the addiction becomes publically known was mostly perceived within the “**Houma**”. At the same time, in case of family abandon, this level becomes paramount to the WIDU wellbeing as it becomes a substitute for the Microsystem.

The important role of the neighborhoods is reflected in the HRS programs in Tunis. In fact, the collaborating NGOs in this study have launched programs where they meet the PWID in their place of residency aka “**Houma**”. The aim is to provide a better access by getting closer to the target population. However, there is the risk of labeling people who stop and talk to the staff from these NGOs. This might present a barrier to WIDU to access this kind of service. A good way to overcome this is by including key populations in the programs designed for them. Both of the NGOs have similar programs where they resource to “peer-educators”; however the drawbacks are that the evaluation of the programs is dependent on subjective reports from PWID.

Moreover, the presence of epidemics such as HIV and other blood-borne pathogens within this circle come into play as important risk factors. In fact, “**Houma**” is usually where the substance is obtained and sometimes injected. Decisions related to means of earning the
substance through sex trade or preference of the place of injection, are influenced by how the WIDU is perceived within this social entity and how she fits within. The relation between sex work and drug abuse seems to be present across cultures and societies. A comparative study between men and women within a population of PWID in LMIC concluded that women more often engage in sex work to support their substance use (50). Often considered as a bridge population in the HIV epidemics, research has strongly focused on women sex workers who also inject drugs (51) driving attention away from other groups of women and leading to an underestimation of their risks (32). In addition, a study on utilization of HRS by WIDU in MENA revealed that in some parts of the region WIDU are always confused with sex workers (20). In this study, this association was not retrieved in the study. However, social rejection might put them at risks of trafficking, coerced sex and violence.

**Exosystem:** Many factors on this level seem to affect the WIDU: poverty and unemployment rates, social welfare, the legal system and how the political authorities deal with drug-related issues. In fact, the living conditions of WIDU, their access to healthcare, and their ability to seek help depend on these factors as it was shown in the previous levels of the socio-ecological model. In a study on WIDU in Tanzania the authors explained how political pressure aiming to limit drug-related activities put the studied population under more risks (52). In Tunisia as well there is a political pressure on substance use as consumption is highly criminalized (53). There is evidence today that extremely repressive laws against drugs tend to bring negative effects on health, social and economic development instead of providing stability and security (54). In society that condemn both morally and with legal texts these practices leave little options for treatment and rehabilitation but also for prevention of substance injection and its harmful consequences. As a result to their marginalization, they tend to refrain from seeking help or treatment as they are afraid to suffer from both social and legal consequences (48,55).

Our findings confirm the limited options for PWID in Tunisia in general, and for WIDU in particular. The relationship with the healthcare system appeared to be perplexing. There was an obvious lack of trust in the healthcare professionals, especially the ones belonging to the public and WIDU feared disclosing their addictive habits to their doctors. In fact, the Tunisian law against narcotic drugs (*Loi n° 92-52 du 18 mai 1992*) entails medical doctors to report cases of substance use to the authorities even though their professional code prevents them from doing so (56). This paradoxical situation restricts medical doctors as care-providers and
compels them to play the “police” role. Repeatedly, the policy on drug substance and care for PWID seem to be inadequate as it leads to complex situation where the healthcare needs and sometimes, the human rights of PWID are disregarded.

**Macrosystem:** In a given society, when women take on different gender roles from what cultural constructions are expecting from them, a trouble in the gender order is witnessed (36). In the Tunisian society, the female gender role is constructed around traditional values of female chastity and submissiveness (49). After women were allowed in the public space, work and get education equally, the weight of traditional role was not alleviated. This created a double identity between modern and traditional values (49). This double cultural and historical construction of the female gender role appeared to influence the social situation of WIDU. In fact, these women are considered as extremely deviant from the society’s both traditional and more modern norms. In this case, an extreme form of social rejection is witnessed. The findings showed that WIDU are denied as daughters or wives because they bring shame to the family by not acting as the society is expecting them to. Then, the society is rejecting them as they no longer belong to a familial circle. They are also marginalized because they are perceived as shameful with bad reputation. Perceived stigmatization and social exclusion of WIDU are recurrent in different parts of the world. Studies suggest that social exclusion and reprehension present barriers for WIDU in the MENA region for seeking treatment (20,32).

**Time:** From the start of substance use until the establishment of the dependence there are different stages in relation to the drug. First, there is enjoyment (subtheme: Honeymoon with Souba), then the realization of being trapped filled with regrets and feelings of loss. Soon after, the dependence, its mental and physical suffering and the withdrawal syndrome follow (subtheme: Lived prison with Souba). In the results, reasons given for starting to use recreational substances, to enjoy or to forget, counter-acted with the reality of everyday addiction: pain, depression, isolation, financial hardship but also negative physical features such as sallow skin, skinny and weak body.

The interactions happening over time between WIDU and their direct and more remote environment are diverse. It is clear that the local cultural ideologies of the female role are indirectly affecting the WIDU on different relational levels. Considered in margin of the society, of what a “normal girl” is, they face isolation and loneliness. Depression, suicidal ideation and other mental health diseases are in fact common within PWID. This influences their relationships to others as well as the power balance in these relationships.
At become unable to provide for them. Exercise of illegal activities becomes an option. The loss of honor and reputation may facilitate the start of such activities.

—Power level: They are at “the bottom of the social scale”. Risk of being trafficked and risk of coerced sex work are very important.

**Discussion of Methodology**

A number of limitations related to the methodology of this study need to be acknowledged. Firstly, the interviews took place in the capital of the country. Whereas health inequalities are mostly seen in the interior regions, the HRS centers were mainly present in important coastal cities where it is believed that most of the IDU reside. Furthermore, the sampling method may have limited findings in terms of variability within the sample. However, since this population is hard to reach this methodology was privileged (57). Also, the participants had diverse backgrounds and different experiences.

Recall biases and accounts collected might have been influenced by socially-desired behaviors. It is often the case to encounter this type of limitation especially when researching stigmatized behavior. In order to reduce the chances of collecting biased information, one-to-one interviews are a preferable method instead of group interviews (58).

Previous research involving WIDU in the United States reported that the participants were under the influence of alcohol or a psychoactive substance during the meeting with the researcher (59). This might have been the case in this study where most participants were not abstinent. In addition some were probably facing minor withdrawal symptoms during the meetings as they were at the center with the purpose of collecting sterile injecting material.

In addition, this study was conducted in Tunisian Arabic whereas parts of the analysis and reporting are done in English. Although the original language was kept until coding was completed to avoid loss of important meanings, problems of understanding in data collection cannot be totally avoided even when working with one’s native language (39). In fact, the participants have used street codes or “slang” words the master student was not familiar with.

To minimize this limitation, before and after each interview, observations were made and reflective thoughts were noted in the researcher personal journal. The master student also had meetings with different stakeholders before the start of the study. This allowed familiarization with the setting. When needed clarifications and probing were asked to the participants.

Finally, the analysis of the transcripts was done inductively. However, as explained by Thorogood et al. (39), the researcher is never completely “blind” to the data before analysis as
there is always a certain degree of background knowledge and pre-understanding on the topic to be studied.

**Conclusion and Recommendations**

In the Tunisian context there is a cultural and social pressure rejecting PWID from which results inadequate policies and poor prevention programs. Non-existent rehabilitation options and poor access to care are striking for PWID in Tunisia. The situation is exacerbated in the case of WIDU. Generally speaking, the situation of WIDU as an extremely oppressed and marginalized sub-population portrays the inferiority of the female gender in the general cultural norm.

Moreover, the legal system does not take into consideration the mental and physical health implications of using drugs.

Special needs need special interventions. Healthcare and social, economic inequalities doubled by gender discrimination are at stake when developing policies and prevention programs for WIDU. Access to free antiretroviral therapy and to an open, responsive and strictly confidential psychiatric follow-up and medical care are two main actions to be taken. There is also an important need for awareness. Educational programs should be implemented on a large scale, and directed towards youth and teenagers, before the first encounter with the psychoactive substances might happen. Awareness should not only focus on the health drawbacks but also on relieving the stigma put on PWID and marginalized populations. Situation of WIDU should be taken from a human right perspective and social reintegration schemes should be coupled to medical rehabilitation programs.
References


54. Perspective on the development dimensions of drug control policy UNODC for UNDP [Internet]. [cited 2016 Apr 21]. Available from:


Annex
Annex 1: Interview guide

Presentation of the study will be given to prospective participants orally. A written and or verbal consent will be obtained ahead of the interview. The necessity of audio recording the interview will be explained and clarifications on who will listen to the records will be given. The voluntary aspect of the participation and the right to withdraw from the research at any time will be explained as well. If asked, the researcher will sign a copy of the consent form that entitles her to respect the confidentiality terms.

Interview questions
The study will be conducted in the HARM REDUCTION centers. Interviews will take place in the centers’ premises, for example in the psychologist office. The researcher will start by thanking the participant for taking the time to take part in the research as no incentive will be offered. The aim of the questions is to explore participants’ experiences with recreational drugs use. The interview will start with a general question:

- When did you start to use drugs for the first time? How old were you and how was it?

Probing questions:

- How old were you when (particular experience they may mention) happened?
- Were you living with your family at that time?
- Where do you live now?
- Do you have friends who also inject? Do you inject when you are with friends?
Annex 2: Oral information sheet (in English) and consent form (in Arabic)

Oral Information Sheet

- My name is Hager and I am conducting this study. My aim is to learn about women who inject drugs in Tunisia.

- Your participation in this study is strictly voluntary and you may withdraw from the study at any time during or after its completion.

- Your participation in this study will not have any consequences on your life and surroundings as it will remain secret and confidential.

- Your participation will not entitle you for a special care at the center and you will not receive any form of material or moral compensation.

- To complete this study you will have to sit for an interview with me and this interview will be audio-recorded.

- Before you sit for the interview, the psychologist from Syringe-providing center will give their agreement for you to complete it.

- During this interview you will be asked to reveal personal information about yourself and your history with drug abuse but you are free to say what you feel comfortable to say.

- In case you change your mind during the interview or after, you have the right to stop the procedure and withdraw from the study. After the interview, if it happens that you change your mind, you can contact the psychologist from the center and let them know you want to withdraw. They will contact me and I will delete your recording.

- All data collected will remain in my possession only and kept confidential at all time. I will write down what we discuss but any names of persons or places will not be written down.

- Your identity will never be divulgated and will remain anonymous when the data is published. You can ask to see the results of this study.
هبئلاجراهماستنيرةالمواقعتنموذج

لقد قرأت هذا النموذج وأقر بالموافقة على مشاركتي في هذه الدراسة الموصوفة, حيث تم إيضاح جميع الإجراءات التابعة للبحث التي تقرر إجراؤها بسبب فقط والإزعاجات المحتملة إن وجدت.

وأعرف أنه يمكنني الانسحاب من الدراسة وقتما أشاء.

وأقر بأنني قد استلمت نسخة من هذه الموافقة.

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