

# Sexual Risk Behaviors Constructed in Iranian Women's Life with Substance Use Disorders: A New Implication of Human Ecological Theory

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## Original Article

### Abstract

**Background:** Drug abuse is one of the important variables influencing protective sexual behavior. The objective of this study was to explore how risky sexual behaviors develop in drug abusing women using human ecological theory.

**Methods:** In this study, we used a descriptive exploratory approach. The participants were 32 drug abusing women from two of the selected drop-in centers (DICs) in south Tehran, Iran, where we could have access to a vast number of female drug users. Data was collected using semi-structured face-to-face interviews. Qualitative content analysis was used to analyze the data using Graneheim and Lundman procedure.

**Findings:** Risky sexual behavior in drug use disorders in women was found in four themes with thirteen emerged; sexual untaught at micro-system with two subthemes "unsafe home" and "drop out of school", Perception of differences at meso-system with three subthemes "lack of link between family and school", "doing manly behavior" and "low awareness of health puberty than peers", inappropriate marriages at exo-system with three subthemes "stigma", "fear of losing love relationship" and "self-devotion", marginalization at macro-system with four subthemes "barrier access to rights", "selling sex as a tool of security", "lack of belief as a sex worker" and "mistrust and doubt partner" using implication of human ecological theory.

**Conclusion:** Findings suggest that strategies supporting the discovery of risky sexual behaviors in drug use disorders in women are important in order to provide counseling and education to form their decisions toward safety sex.

**Keywords:** Human ecology theory; Qualitative research; Sexual behavior; Female; Substances use disorder

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## Introduction

Drug abuse is one of the important variables influencing protective sexual behavior.<sup>1</sup> With the introduction of industrial stimulants, the global and national drug use pattern has also been transformed from traditional drugs such as opium and hashish to industrial drugs such as heroin, crack cocaine and crystal meth. Similar pattern is observed in Iran like many other countries.<sup>2</sup>

The relationship between drug use and high-risk sexual behaviors and the sexually transmitted infections are important public health topics.<sup>3</sup> Women carry a greater risk of exposure if they use drugs.<sup>4</sup>

Although there is no accurate estimate of drug use disorders among women in Iran, some studies estimate that 9.6% of the addicts in this population are women. The majority of women with drug use disorders are in the age range of 20 to 36 years at the present moment which means that they initiated drug use at a younger age.<sup>5</sup>

Drug and alcohol dependence places women among the vulnerable population.<sup>6</sup> Drug use affects social and economic settings and thus increases high-risk sexual behaviors.<sup>7</sup> Women with drug use disorders tend to form clandestine networks that in turn, add to the risk of unwanted sexual activity and violence.<sup>8</sup> The prevalence of drug use and its pattern, initiation, underlying reasons and the social and health consequences arising from drug use and drug dependence differ with gender. The consequences of drug use are more severe in women than in men and are associated with problems such as economic hardship, greater drug dependence, health risks and involvement in human immunodeficiency virus (HIV-related) high-risk behaviors.<sup>9</sup> Drug use, especially crack cocaine, is associated with high-risk sexual behaviors and can increase the risk of HIV.<sup>10</sup> In 2015, the total number of patients with HIV and acquired immune deficiency syndrome (AIDS) in Iran was 30183, 15% of whom were women. Two-thirds had a history of injection and 18% were infected through sexual encounters. Unknown cases were 16.7% and if the transmission in this group is assumed to be through sexual contact, the reported rate of sexual transmission will be higher.<sup>11</sup> Women were more likely to become infected with sexual transmitted disease than men. Changing sexual behavior is

critical to control sexually transmitted diseases (STDs). However, women do not tend to reduce risky sex acts very much, specifically minorities such as drug users.<sup>12</sup>

Based on the theory proposed by Urie Bronfenbrenner, the individuals' behaviors form five different surrounding environments.<sup>11</sup> Problems in any one of the five human systems ecology can cause changes in the others<sup>11</sup>. According to Moon et al., as the family intimacy and school friendship decreased, and as adolescent's substance use increased, risk behaviors were also increased.<sup>12</sup> When family and school, as micro systems surrounding women with substance use disorders, become unsafe, they would further escalate high risk behaviors.

The qualitative studies are effective to explore cases that lead to unsafe sexual behaviors since the researchers can get deeply involved in a particular phenomenon and can help detect the experiences, emotions, beliefs and awareness of people through their behaviors and through making comparisons and induction from the details of their interviews.<sup>13</sup> As clinical professionals, the researchers chose the present subject to study because they observed an increasing trend in the number of drug-using women presenting to the hospitals with unwanted pregnancies and for delivery and they had previous experience with studies on drug-using women. An attempt was therefore made to explain the sexual behavior pattern in drug-using women. Using qualitative study and employing ecological system theory will help answer the question "how do the risky sexual behaviors develop in women with drug use disorder". Appropriate preventive methods could be designed through implementing effective interventions by acquiring the concept of sexual health based on the experiences gained from their surroundings and the culture of their society.

## Methods

In this exploratory qualitative study, content analysis was done using Graneheim and Lundman procedure.<sup>13</sup>

At the first phase of our study, employing content analysis was rationalized to explore the complexity of risk behaviors among women with substances use disorders, to identify dyadic alteration of women's healthy sexual behaviors to risky ones and to identify the determinants of each layer from women's ecological system.

To obtain a rich source of data, details of the parameters involved in the study phenomenon was collected and used to explain and evaluate the activity.<sup>14</sup> By exploring the inner world and the experiences of individuals, which make up their distinct truth, the researcher could explore the meanings of phenomena from the individuals' own perspectives.<sup>15</sup> After evaluation and context mapping, five centers did not meet the study criteria and only two volunteered to take part in the study. We approached our participants through two of the selected drop-in centers (DICs) to collect the information. There are several DICs in Tehran, Iran. One of these centers is affiliated with the Family Health Association of Iran that is a non-governmental organization and the other one with the State Welfare Organization of Iran. These two centers offered the highest variation in terms of type of the drug used, presence of drug users with hepatitis B and C or HIV, and risk lifestyles such as living in shelters, homelessness and living at home with a sexual partner. Each of these centers had about 1000 to 1500 records registered for these women. Vulnerable women, especially drug-dependent women had immigrated from different parts of the country, and they were referring to visit these centers during work hours from 9 to 15 to receive services. The centers' midwives offer medical services such as quick HIV testing and Pap smear to women with high-risk behaviors and also provide both men and women with free condoms. Methadone therapists as well as midwifery and psychological counseling classes are provided twice a week by these centers. Other activities included teaching empowerment and life skills and holding introductory classes for professions, handicraft and artwork. These centers employ a midwife, a clinical psychologist and a social worker on a full-time basis. The facilities provided by the centers included a warm meal and bath. The study population consisted of self-reportedly sexually active women with drug use disorders aged 18 years and older. Finally, with saturation data, thirty-two eligible women participated in this study (Table 1).

The researcher visited the addiction-harm reduction centers and observed and interviewed participating women in order to discover and articulate the reasons for their tendency toward high-risk sexual behaviors. After visiting the

centers, the objectives of study were explained and verbal consent was obtained, then consent forms were filled. The researcher held four focus group discussion (FGD) sessions with six to eight women in each session and then conducted five individual deep interviews with the women who preferred to talk in private. In-depth, semi-structured, face-to-face interviews were conducted along with voice-record. Data of 32 participants was collected when saturation occurred and no further new data could be obtained.<sup>14</sup>

**Table 1.** Demographic characteristics of drug abusing women with risky sexual behavior

Characteristics	Mean ± SD
Age (year)	35.10 ± 5.59
Min-Max	9-47
Age of marriage (year)	14.40 ± 0.79
Min-Max	13-19
Age of initiate use	14.70 ± 3.40
Min-Max	9-30
Education (year)	7.60 ± 2.60
Number of children	1.50 ± 1.50
Min-Max	0-3
Number of siblings	6.00 ± 2.76
Min-Max	2-10
Number of marriages	2.00 ± 0.57
Min-Max	1-3

SD: Standard deviation

The interviews and group discussions began with a general question as the guide to the interview and were carried out flexibly with open-ended, descriptive questions. The main question was "how was your sexual relationship initiated in relation to your drug use?" leading to more probing questions such as "Can you give an example? Can you elaborate? Do you mean that?" as the interview went on. Each group or individual interview lasted between 60 and 90 minutes. Each interview was voice-recorded, then carefully listened to and promptly transcribed and typed up verbatim and then matched with the audio version to increase the rigor of the data and the researcher's command over the subject. Second interviews were conducted with some of the women who consented to verify their statement or to cooperate with the researcher if further data was required. It should be noted that the women were given aliases to maintain confidentiality. We selected the flower's name for them that have Persian

context. By the end of the interviews, participants were presented with a small gift such as prepaid mobile top-up cards. The second interviews were conducted only after the first individual or group interviews were analyzed. During the content analysis stage, class analysis was extracted directly from the textual data. First, units of analysis were identified; then, relevant codes were extracted and categorized according to the similarities.<sup>15</sup> The researcher also benefited from the hands-on views of advisors and supervisors with experience in qualitative studies and ecological systems theory for modifying the interview process and better analyzing the obtained data. Validity and reliability of the study were confirmed based on the criteria for credibility, dependability, confirmability and transferability using Lincoln and Guba.<sup>16</sup> For this reason, the data was obtained using continuous engagement and contact with participants, and was checked by taking advantage of the comments of collaborating experts. Then, acceptance codes were extracted from the data and subclasses were identified and shared with some of the participants. Field notes were also used in the integration of data for trustworthiness. All the activities and obtained data were recorded to maintain the confirmability of the data. The data obtained was shared with 5 drug-using women to be match with their experience. The researcher ensured the definite transferability of the data. The ethics committee of the Shahroud University of Medical Sciences, Iran, approved the study and it was carried out June 2014 to May 2015.

## Results

We explored four themes and thirteen subthemes using implication of human ecological theory layers and setting them in environmental systems in which the drug-using women had developed their tendency toward high-risk sexual behaviors (Table 2). Themes and sub-themes included sexual untaught at micro-system with two subthemes "unsafe home" and "drop out of school", perception of differences at meso-system with three subthemes "lack of link between family and school", "doing manly behavior" and "low awareness of health puberty than peers", inappropriate marriages at exo-system with three subthemes "stigma", "fear of losing love

relationship" and "self-devotion", marginalization at macro-system with four subthemes "barrier access to rights", "selling sex as a tool of security", "lack of belief as a sex worker" and "mistrust and doubt partner".

Individual's immediate connection with environment, such as the family, peers, school and neighbors is established in a micro-system.<sup>17</sup> The present study identified one theme in individual's micro-system with two subthemes "unsafe home" and "drop out of school".

### *Individual's micro-system*

#### *Sexual untaught*

Unsafe home: The majority of women with drug use disorders had certain family peculiarities, and, according to their statements, had somehow suffered from impaired relationships with their family members during childhood. Their statements revealed experiences such as punishment, being discriminated against other children in the family or among relatives particularly boys, strict parents and having drug users in the family prevented addicted women from learning information on healthy sexual behavior in a safe environment like home.

Zanbagh 36 years old, drug-user for 22 years stated:

"It all goes back to childhood. Addiction is a chronic and life-threatening disease. The lack of family security, childhood fears that I had. I did not feel secure enough to express my shortcomings, especially to my mother. I was the only girl in the family, and she always reproached me and was very strict with me. Ever since childhood, I liked to play with boys. My brothers smoked and sold hashish, and so I played with them. When I had my first period, I did not know anything, and I did not dare tell my mother. I would turn my sanitary pad over and reuse it." (Individual interview).

Gelayol 38 years old, drug-user for 20 years stated:

"I was worth nothing. I was the only girl at home among 9 brothers. They forced me to wear the clothes like boys rather than what I wanted to wear. I had no freedom. When my male cousins visited us, I did not dare come out and talk to them. I had no mother to have a heart-to-heart with. My step-mother forced me to marry. I was only 14 and knew nothing about sex." (a participant in FGD1).

**Table 2.** Summary of the meaning units, condensed meaning units, sub-themes and themes of interviews about sexual risk behaviors constructed in women with substances use disorders

Themes	Sub-themes	Condensed meaning unit	Meaning unit	
Sexual untaught	Unsafe home	Strict parents and fear of talking about menarche	I did not feel secure enough to express my shortcomings, especially to my mother.	
		Forced to wear the boys clothes	They forced me to wear the clothes like boys rather than what I wanted.	
		Unknown hymen in genital organ	When I had sex with my boyfriend, I knew nothing about virginity.	
	Drop out of school	Being discriminated against boys	I was worth nothing. I was the only girl at home among 9 brothers.	
		Not learning about genital health at period time	I did not know anything, and I did not dare tell my mother. I would turn my sanitary pad over and reuse it.	
		Forced marriage in early adolescence	My step-mother forced me to marry. I was only 14.	
		Not learning about menstrual cycle from teacher	My mother and my teacher had not told me about getting my period.	
	Perception of differences	Doing manly behavior	Not learning about puberty at school	When we were invited to family get-togethers, I did not like to mix with the girls.
			Unwillingness among girls group	The school was trying to force me to, but then I ran away and spent a month on the streets.
		Lack of link between family and school	Separation of parents and school	I was finally caught, and sent to a behavioral rehabilitation center.
Being in rehabilitation center			I nicked and swallowed my stepfather's opium.	
Inappropriate marriages	Lower awareness about health puberty than other girls	Imitating father behavior	I was 15 when I began thinking that no one would marry an addict girl, since no man would be able to sit and watch his wife smoking.	
		Stigma	I entered a temporary marriage with Ebi, who was also a drug user and 18 years my senior and had 3 kids.	
	Stigma	Stigma of drug use by a girl	I was madly in love with my second husband. We did not use condoms I wanted everything to be as he pleased.	
		Relationship for sex with a peer man	I did not want him to go with someone else.	
		Doing everything to pleased him	When they walk by, they shake their heads and keep walking.	
Marginalization	Fear of losing love relationship	Fear he would leave for somebody else	A few times they even robbed my house and took everything. I was a drug dealer, so I was forced to rent a house with the man who is now my sexual partner.	
		Society's attitude to drug users	It feels really unpleasant. My sexual partner is like my husband. I have been living in one home with my sexual partner.	
	Barrier access to rights	To avoid being raped by strange somebody	This really bugs me. Now imagine having HIV too. I have to hide in a corner alone.	
		To avoid financial violence		
	Lack of belief as a sex worker	Feels unpleasant with condom		
		I am not a sex worker		
		Stigma about HIV		

Zanbagh's perception of sex had not been formed by reviewing her sexual past, which should have been learnt at home-the smallest social unit. She had realized her biological differences with her brothers and father and her similarity to her mother, but she had not sensed the female gender role that her parents should have expected of her. Confirming Zanbagh's belief, Gelayol also said that she had not been able to talk and exchange views with the opposite sex to establish her gender role, and by giving in to a forced marriage in early adolescence, she had begun her married life, but she always felt alarmed about its stability.

In the society scrutinized in the present study, the amount of information and educational skills conveyed by parents to their children about sexual issues was found to be very limited. One study showed that parents were not well-equipped with the necessary competence in the various aspects of sex education.<sup>18</sup> Such education is not to be expected in damaged families.

#### ***Drop out of school***

The women's stories of school during childhood and adolescence were filled with feelings of insecurity, lack of sources of counseling and solving problems such as signs of puberty and menarche. Turning to drugs at a young age and early marriage had made them quit school. The school could have helped their talents to develop and flourish, but it had turned into mental concerns about family issues and evading rules and regulations intending to foster discipline and academic education.

Laleh 28 years old, drug-user for 15 years stated:

"My mother and my teacher had not told me about getting my period, and when I got my first period at school, I stayed in the toilet from the second to the last class of the day and only went out when everybody else had gone home. I never forget it. I had to miss classes that day. Well, this stuff is harsh on a young girl." (a participant in FGD1).

Feeling of insecurity in the family for these vulnerable girls, lack of good school follow-up systems and inadequacy of age-appropriate health education about puberty and sexual health had facilitated this damaging process. The link between family and school could be interacting, but this issue had not occurred to Laleh.

#### ***Drug-abusing women mesosystem***

Perception of differences: According to their own

statements, the dominant characteristics of these women included "boldness", "curiosity toward drug use" and "seeking excitement in activities". Over time, the tendency toward tomboy behaviors gradually came in conflict with their gender, a gender that had been learnt and formed through perceptions and the dominant culture of the society. Three sub-themes were revealed including:

**Doing manly behavior:** Behaviors in conflict with the female gender, such as drug use, which is considered a masculine behavior in the society, created a gap between them and their peers of the same gender. They had even failed to exchange information with their peers about their gender and sexuality and their genitalia and its function. For instance, Orkideh, 30 years old, and drug-user for 15 years stated:

"I always liked bad men ever since childhood because of the special way they behaved. I used to sneak around my father's cigarette butts and smoke those. When I got my first period, I had no idea what it was, but 2-years younger cousin of mine knew what to do about it. When we were invited to family get-togethers, I did not like to mix with the girls." (a participant in FGD4).

#### ***Low awareness of health puberty than peers***

Lack of understanding about her own sexual identity resulted from the separation of her parents during her childhood. Each of them had started a new life afterwards. Their lack of understanding about the consequences of such role modeling, which had not only led their daughter to drug use, but had also disrupted her perception of her sexuality.

Yas, 27 years old, drug-user for 14 years said:

"When I had sex with my boyfriend, I knew nothing about virginity, I thought my partner had somehow wounded me, I knew nothing about this stuff. I found later that what had happened between us was being intimate. When I told my aunt, she said what have you done girl?" (a participant in FGD3).

#### ***Lack of link between family and school***

It appears that the parents and schoolteachers involved had little knowledge of the children's behaviors while any behavior in conflict with the school rules could have easily been identified. A closer parent-school relationship could have prevented a misdemeanor. The women's statements suggested an inconsistency in the relationship between the two main systems of

education (i.e. the family and the school).

Niloofar, age 44, drug-user for 32 years expressed:

"I was 9 years old when I nicked and swallowed my stepfather's opium. I was 12 when we got a letter from my school that said they wanted to see my parents. I did not show it to my father and stepmother. The school was trying to force me to, but then I ran away and spent a month on the streets until I was finally caught, and sent to a behavioral rehabilitation center. I was always a tomboy. My family had taught me not to change my underwear in front of strangers. They told me that I would be laughed at because I had smaller genitalia than the other boys. They made me marry when I was 13. The first night I ran away and came back home to my father, because of the fear my father and the others had instilled in me." (Individual interview).

Several factors had indirectly affected these women's decisions, including submission to forced flimsy marriages or high-risk sexual relationships, which had originated from their bad decision-making exo-system and two themes were extracted.

#### *Bad decision-making exo-system*

##### *Inappropriate marriages*

Thinking about the stigma of drug use, especially for girls, had condemned these women to marry someone incompatible with them in terms of age, occupation and status of previous marriages. This issue had weakened their sexual authority and they could not make wise decisions, as is evident from the statements made by the study's participants.

Banafsheh, age 30, drug-user for 15 years stated:

"I used to nick and smoke my diabetic mother's opium ever since I was 11. I was 15 when I began thinking that no one would marry an addict girl, since no man would be able to sit and watch his wife smoke, so I entered a temporary marriage with Ebi, who was also a drug user and 18 years older than me and had 3 kids from his first marriage. He was unhappy with his sexual relationship with his first wife, so I tried to do whatever he liked. After a while, I realized I could not get along with the kids and the first wife. Ebi had been jailed in the past, and had had several relationships before me." (a participant in FGD2).

##### *Stigma*

The social stigma of drug use had faltered these

women's belief in their own identity to an extent that actually deprived them of their rights and created a vicious circle of attempting to compensate for the past and achieve future goals. The pressure of her own perceptions had made her make the wrong decision before even experiencing a stable marriage with a boy similar to herself with fitting characteristics. Women are the main pillar of the family in the Iranian society and thus play a major role in the management of the household and raising the children; men are therefore expected to choose women who are physically and mentally able to handle such a responsibility for marriage. She had believed the society's teachings and, with her drug dependence, preferred an ill type of marriage that soon disintegrated. It is evident that she had never given a thought to safe sex in either her first marriage or in her later relationships with partners.

Some women had been introduced to the world of drugs after separation from their first husband and through their second marriage. It was clear from their statements that they wanted to keep their new partners' company through joining them in drug use just to make up for the gap left in them by their first marriage.

##### *Fear of love relationship*

Worrying about losing their new partner had affected their decision to ignore safe sex and their sexual health, and to leave this decision to their sexual partner.

Narges, 47 years old, a drug-user for 15 years stated:

"Because of the love I felt for my second husband and because he had no companions for his habits, I kept his company on smoking and doing drugs, fearing that he might go get somebody else to keep his company. I loved him, I enjoyed being with him in every way, even in every sexual way. He was very cool. That is why I loved him, because he had none of the bad traits of my first husband. Although he had been jailed several times and would still fool around, I never dared tell him to get tested for HIV or hepatitis, and I did not know about condoms." (a participant in FGD4).

Nastaran, 42 years old, drug-user for 18 years, said:

"I was madly in love with my second husband; I did not want him to be away from me even for

one minute. Unlike my first husband, he was really kind to me. Perhaps he wanted a partner in crime, so he could use drugs by my side with no problems. He introduced me to crystal meth. As for our sex life, at first, I did not even know we had to use condoms, I thought it was only a contraceptive; besides, I wanted everything to be in a way that pleased him." (a participant in FGD2).

Nastaran's narratives indicate her lack of knowledge about methods used for the prevention of STDs. She did not have skill to suggest using condoms and did not know about safe sex, either.

#### *Self-devotion*

Like many of the other drug-dependent women who participated in the present study, she did not even think about the risk of pregnancy just to preserve the relationship with her partner. The attempt to preserve the relationship, which appears to have been only for the sake of satisfying her emotional needs, pushed her into drug dependence and unprotected sex. Niloofer had sacrificed herself more than Nastaran for this purpose and had opened herself up to the possibility of getting STDs. She stated:

"I have been tested twice for HIV and hepatitis, but my partner has never been tested, and though he does not use condoms, I do not like to ask him to. I say to myself, if he gets the disease, then it will not be a problem if I get it too." (a participant in FGD4).

The environment in which the drug-using women lived, which rooted in the culture, subcultures and the structure of the society, made a values and beliefs macro-system that affected the women's sexual behaviors. The women's understanding of the consequences of unsafe sex in the context of their society's culture revealed one theme and four sub-themes.

#### *Values and beliefs macro-system*

##### *Marginalization*

In some cultures, including Iran, "women addicts" are regarded as promiscuous or even considered to be sex workers. The general attitude toward drug use is that it is deviant; it is less regarded as a disease.

##### *Barrier access to rights*

The social attitude toward addiction, especially in women, is a huge barrier to its treatment. These women find themselves totally deprived of health

and welfare facilities and civil rights, which only provokes further high-risk behaviors, and infection with HIV remains a secret due to the great social stigma attached to it.

Fargol, 38 years old and drug-user for 21 years said:

"People's attitudes and looks really upset me. When they walk by, they shake their heads and keep walking. This really bugs me. Now imagine having HIV too. Then you would have to hide in a corner alone with your own God" (individual interview).

Shokofeh, 40 years old, homeless and drug-user for 25 years said:

"They all give you dirty looks. This is a disease that people think you have gotten because you have slept with someone, though you can get infected with a syringe too. But people look at you in that terrible way. They all think, she must have been sleeping around to have gotten HIV." (a participant in FGD3).

##### *Selling Sex as a tool of security*

Participants argued that, in the drug users' culture, the majority of women are older than their sexual partners, since these men prefer non-pregnant, highly experienced women who would occasionally finance their habits. It seems that women also enter these relationships to gain social security, which often lead to high-risk sexual behaviors.

Sonbol who was homeless for 10 years, stated:

"Drug-using men are always younger than their partner. They smoke drugs with their wives. When the police arrive on the scene, the woman hides the stuff. Women want a man to look after them and to protect them to avoid being raped when they sleep on the streets at night; they want to be safe... He was a purse-snatcher. Sometimes I helped him in these petty thefts. I even supported him financially for a while. He was 18 years my junior. I only wanted him to protect me on the street. Since he was young, he did not want his woman to get pregnant. He did not use condoms though." (a participant in FGD2).

The drug-using women had gradually realized that they needed a more forceful power than themselves; to attain that source of power, they gave in to high-risk sexual relationships. Yasaman who was 36 years old and drug users for 18 years asserted;

"I used to be chased around and catcalled by



men on the street. A few times they even robbed my house and took everything. I was a drug dealer, so I was forced to rent a house with the man who is now my sexual partner, and we entered a temporary marriage. Despite having a history of drug injection and imprisonment, I cannot ask him to use condoms since we live under the same roof." (a participant in FGD3).

Confirming Yasaman's points, Rose, 30 years old, who was under methadone therapy, with a history of drug injection and HIV infection said:

"I sold drugs. A few times I came close to being raped by clients. I met my second husband (one of the clients) and we decided to live together for a while so that the other men would leave me alone. He had a history of drug injection and had been jailed a few times. He told me he may have HIV, but I did not believe him. We injected drugs together. When I got pregnant, the tests showed that I was HIV-positive." (Individual interview).

#### *No belief as a sex worker*

They believed that they were not sex workers, and did not feel that they had to suggest using condoms if they are committed and faithful to one sexual partner, since it would have been deemed by both partners as betrayal and suggestive of having relationships with others or that they doubt each other about HIV infection. Some of the women knew about their partner's history of imprisonment and drug injection and other sexual partners, while some others did not. Yet, none of them ever considered being tested for HIV, hepatitis or other STDs or ever used contraceptive methods.

Mina, 37 years old and drug-user for 13 years stated:

"I have been living in one home with my current sexual partner for 6 years. We do not use condoms so that he will not think I doubt his faithfulness to myself. I have been married twice before and he only once. He has been jailed before. He has never tested for HIV or hepatitis" (Individual interview).

#### *Mistrust and doubt partner*

However, some women resorted to this living arrangement for the sole purpose of having financial support and a shelter, and their perception of this relationship was to merely satisfy their partner sexually, and they themselves were not the decision-makers.

Ladan 25 years old, drug-user for 7 years

expressed her disagreement with using condom:

"It feels really unpleasant. My sexual partner is like my husband. I am not a sex worker to use condoms." (a participant in FGD4).

During their lifetime, drug-dependent women had turned toward high-risk behaviors under different circumstances and at different times and places. One such behavior was unsafe sex that had turned into a routine behavior, which is women's ecological chronosystem. The women had entered adolescence while having received no sex education during childhood; therefore, in addition to puberty crises, which boys also experience, they had menarche to the experience and had not learnt about reproductive health and their genital system when leaving school either. Poor relationship with their mothers and having distanced themselves from female peers had worsened the situation. The insecure family atmosphere, leading to forced marriages or running away from home at a young age, had pushed them toward making a bad decision for marriage, which resulted in separation and a vicious circle of high-risk sexual behavior.

Arghavan, 32 years old and drug-user for 17 years stated;

"When I look back, I realize that I was only 14 when I ran away from home, fearing my brothers' rage, because I was very mischievous. They might have beaten me up, who knows, but that would have been all. They were not going to kill me; I ran away and fell into this trap". (a participant in FGD1).

## Discussion

The explored data showed drug use disorders in women with sexual activity; their risky sexual behavior had formed over time. Biological aspects like age and gender influence women with substances use disorders in their childhood,<sup>19</sup> Bronfenbrenner emphasized that the biological characteristics have a unique role in human's behaviors. The person's own biology is the primary microenvironment that is the fuel for the development.<sup>20</sup> It may influence initial relations, because of the expectations formed directly from the society. Small societies such as family, school, and peer are individual microsystems.<sup>20</sup> A micro-system is a pattern of activities, roles, and interpersonal relations experienced by developing person.<sup>21</sup> Our study participants had an

inappropriate environment like home where their families were divorced or using drug, had low education and similar problems from micro-system. Bronfenbrenner believed that one's past experiences, skills, intelligence, social resources, parental care, educational opportunities and social means are also grouped under this characteristic and it is a same micro-system.<sup>20</sup> In line with the present study, the results of another study showed that poor relationships between parents and their young or teenage children, alcohol and drug use and low social self-worth were predictors of high-risk sexual behaviors in girls.<sup>22</sup> Educating the parents through discussions about issues pertaining to sex can help reduce high-risk sexual behaviors, especially among young women.<sup>23</sup>

A study on the prevalence of addiction among girls and women showed a strong relationship between domestic violence and the tendency toward addiction, which explained their high-risk sexual behaviors.<sup>24</sup>

As decision-makers in providing reproductive health information and services, the perceptions, attitudes and tendencies of adults who are responsible for the development and growth of children and adolescents affect the nature and quality of services provided.<sup>25</sup> The interaction between two areas of the women's micro-system produced a mesosystem that affected their sexual behavior.<sup>19</sup>

Our participants in their mesosystem environment did not have a link between home and school. Whereas this layer provides the connection between the structures of the child's micro-system like the connection between the child's teacher and his parents.<sup>21</sup> In a study, it was revealed that 90% of teenagers believed talking with friends had helped them keep mental health and reduce their depression.<sup>26</sup> Teachers also play an important role in young and teenage children's lives. Despite the prominent role of parents, teachers can have a greater influence since they spend a larger proportion of the day with the children. They can provide their students with emotional support and thereby guide them in their developmental periods and crises.<sup>27</sup> The school provides an excellent opportunity for the promotion of health. Providing students with information and the presence of peer groups help instill a positive attitude into students and help

teach forces, potential points of strength and skills.<sup>28</sup> Life skills enable adolescents to control and manage their exposure to HIV.<sup>29</sup> In Saudi Arabia, the results of a study showed the factors associated with poor knowledge of sexual health in 225 girls less than 15 years were being the only girl in the family; being second born or having a higher birth order within the family, having parents with low levels of education and having no sexual health curricula at school. In older girls, over 15 years, however, having parents with low levels of education and having no sexual health curricula at school were associated with poor knowledge of sexual health.<sup>30</sup>

In the present study, the knowledge about the consequences of safe relationships between the two genders was poor, and unsafe sexual relationships had various reasons, but unequal gender powers justified such behaviors. Women's limited power to discuss safe sex increases the risk of infection with HIV.<sup>7</sup> The lack of family support for various reasons, disintegration due to divorce, addiction, death of the spouse and the lack of financial independence lead to a bad marriage at times. With a lower social capital than men, women take on higher levels of stress. The lack of social support and the odds of addiction are correlated and seem to be stronger in women.<sup>31</sup> This finding was also evident in the present study. As participants stated, despite the high-risk behaviors of their sexual partner, emotional attachment had led these women to the perception of having safe sex. The results of a study showed that condoms were used less in more permanent and non-one-night-stand relationships in which partners were involved for a greater period of time.<sup>32</sup> The present study was faced with a number of limitations. In qualitative studies, due to the limited sample sizes employed, the final results cannot be generalized. The women who participated in the present study were from DICs in southern Tehran; it cannot be concluded that women from the upper classes of the society who visit private addiction rehabilitation centers equally tend toward high-risk sexual behaviors during the course of their life. The women investigated in the present study were not sex workers. As a result, the results obtained cannot be generalized to drug-using sex workers as we do not know how they would conceptualize their sexual behaviors.

These findings have implication for strategies based on training skills in an intervention to incorporate specific features of cultural relevance derived from targeted population.

### Conclusion

The themes extracted in the present study revealed that the trend of high-risk behaviors begins from childhood. To prevent this trend, teaching life skills and problem-solving skills to young men and women seeking to marry in the form of premarital counseling will be helpful. It is highly important for schools and teachers to identify and follow-up thoroughly those children who come from vulnerable families. Education on sexual identity, puberty and reproductive health for both boys and girls based on their gender and age at the elementary school level using experts will definitely help increase young and teenage

children's knowledge and instill a positive attitude into them. The data obtained showed that drug-using women are partially familiar with the transmission routes of STDs; however, they do not boast comprehensive knowledge on the subject. As a result, risky sexual behavior in drug use disorders is formed from environmental events and transitions over the life course.

### Conflict of Interests

The Authors have no conflict of interest.

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## رفتارهای پرخطر جنسی در زنان ایرانی با اختلال مصرف مواد: یک کاربرد جدید از تئوری اکولوژی انسانی

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### مقاله پژوهشی

### چکیده

**مقدمه:** یکی از متغیرهای مهم و تأثیرگذار بر رفتار جنسی ایمن، مصرف مواد غیر قانونی است. هدف از انجام مطالعه حاضر، کشف چگونگی ایجاد رفتارهای جنسی پرخطر در زنان مصرف کننده مواد با کاربرد جدید از تئوری اکولوژی انسانی بود.

**روش‌ها:** در این مطالعه، از یک رویکرد اکتشافی توصیفی استفاده گردید. مشارکت کنندگان پژوهش ۳۲ زن مصرف کننده مواد بودند که از دو مرکز گذری در جنوب شهر تهران انتخاب شدند و دسترسی با حداکثر تنوع وجود داشت. داده‌ها با استفاده از مصاحبه نیمه ساختار یافته و چهره به چهره جمع‌آوری شد و در نهایت با استفاده از تحلیل محتوا مورد تجزیه و تحلیل قرار گرفت.

**یافته‌ها:** رفتار جنسی پرخطر در زنان دارای اختلال مصرف مواد در ۴ مضمون و ۱۳ زیرمضمون ظهور یافت که با کاربرد جدید تئوری اکولوژی انسانی به محیط‌های آن طبقه‌بندی شد. ناآموخته‌های جنسی در محیط میکروسیستم با دو زیرمضمون «محیط ناامن خانواده و فرار از مدرسه»؛ درک تفاوت‌ها به عنوان مضمون در محیط مزوسیستم با سه زیرمضمون «فقدان ارتباط خانواده با مدرسه، انجام رفتار مردانه و آگاهی کم از بهداشت بلوغ نسبت به دختران»؛ ازدواج نامناسب در محیط اگزوسیستم با سه زیرمضمون «انگ، ترس از دست دادن رابطه دوستی و از خودگذشتگی» و در حاشیه ماندن در محیط ماکروسیستم با چهار زیرمضمون «موانع دسترسی به حقوق، فروش سکس ابزاری برای امنیت، باور نداشتن به عنوان تن‌فروش و بی‌اعتمادی و تردید شریک جنسی» برآورد گردید.

**نتیجه‌گیری:** نتایج نشان می‌دهد که کشف رفتارهای پرخطر جنسی در زنان با اختلال مصرف مواد، می‌تواند در راهکارهای حمایتی و فراهم نمودن مشاوره و آموزش جهت تصمیم‌گیری در انجام رابطه جنسی ایمن، کمک کننده باشد.

**واژگان کلیدی:** تئوری اکولوژی انسانی، مطالعه کیفی، رفتارهای جنسی، زنان، اختلالات مصرف مواد

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