Research Paper:

Comparing Quality of Life Among Female Sex Workers With and Without Addiction

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ABSTRACT

Background: Prostitution and substance abuse are among the crucial social problems in women, which affect the quality of life. However, no study has yet investigated that prostitution and substance abuse affect which dimension(s) of quality of life. The current study aimed to compare different dimensions of quality of life among female sex workers with and without drug abuse.

Methods: The research design was ex post facto study. The study sample comprised 120 women (60 female sex workers with substance abuse and 60 without substance abuse). They were selected through convenience sampling method in Tehran, in 2016. They completed WHO Quality of Life-BREF questionnaire. Data analysis was done using multivariate analysis of variance and covariance methods by SPSS V. 20.

Results: According to the results, there was a significant difference between female sex workers with and without drug use ($P < 0.05$) with regard to physical, social relationship and environment health. The sex workers without drug abuse had higher quality of life in aforementioned aspects. However, no significant difference was observed among two groups with regard to psychological health ($P > 0.05$).

Conclusion: The results indicated that quality of life in female sex workers with using drug is poorer than their counterparts who are not drug users. These findings emphasize that health care providers can consider quality of life as an essential factor in therapeutic intervention (primary and secondary) in prostitutes and addicted women. Female sex workers using drug have the psychological, social, and biological needs that require the immediate and considerable attention.

1. Background

Female Sex Workers (FSWs) and female drug users are the marginalized population stigmatized by society. Nevertheless, extensive research on this extremely vulnerable group is urgent and demand serious attention (Mirzazadeh et al. 2013). FSW provides sexual services in exchange for goods, money, or other benefits in different ways (Moore et al. 2014). It is difficult to estimate the prevalence rate of prostitution be-

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cause definition of sex worker is different. In other words, some reports did not count FSWs who offer provisional sexual service in hidden or occasional situation (Vandepitte et al. 2006). However, the estimate prevalence of prostitution among girls older than 15 years is 0.4 to 4.3 in African countries, 0.2 to 2.6 in Asian countries, and 0.1 to 1.4 in European countries (Love 2015). The prevalence of FSWs has not published in Iran (Malery Khah Langroudi et al. 2014). Several social (poverty, unemployment, lack of support service) (Vuylsteke et al. 2015), familial (family background, domestic violence/ physical and sexual abuse), and psychological factors conduct disorder (Collinsin & Ash 2015), personality trait (O'Conner & Brown 2016), and personality disorder, especially antisocial disorder (Alegria et al. 2013; Ramrakha et al. 2013) affect the prevalence of prostitution.

Moreover, several other recent studies have shown the comorbidity of prostitution with Substance Use Disorder (SUD) among FSWs (Matusiewicz et al. 2016; Argento et al. 2015). However, the serious risk of drug use is higher in female than men (Khajedaluee et al. 2013). Women are rapidly addicted to substance compared to men due to their psychological and physical vulnerability (Saberi Zafarghandi et al. 2013), a tendency towards increasing sexual desire under partner coercion (Khodabakhshi-koolaee et al. 2015), and decreasing weight (Rahmatizadeh & Khodabakhshi-koolaee 2012). Furthermore, several crucial factors influence the expanding rate of using illegal drugs among women, including financial, familial, and social factors; changing life style of women (Ohlin et al. 2015), as well as Quality of Life (QoL) (Baumeister et al. 2014).

QoL is a multidimensional concept that was defined according to the individual's perception of mental, physical, emotional and social functioning (Khodabakhshi-koolaee et al. 2015; Hengartner et al. 2015). In this rgard, the World Health Organization (WHO) defines QoL as "individuals' perception of their position in life in the context of the culture and value systems which they live and in relation to their goals, expectations, standards and concerns" (WHO 1997). Based on previous studies, QoL had a major role in commitment to abstinence (Tracy et al. 2012) and prevention of relapse (Motahhari et al. 2016).

However, previous studies have concentrated mainly on sexually transmitted diseases among FSWs and there were not sufficient published research on QoL and related factors (Vandepitte et al. 2006). Moreover, the results of the studies carried out on QoL are not consistent. For example, Brody et al. interviewed with 657 FSWs using a structured questionnaire. They reported that the majority of respondents rated their own health and quality of life as good (Brody et al. 2016). Whereas, Wang et al. carried out a study on 57 FSWs in China. They showed that only 7.5% of studied women were satisfied or very satisfied with their lives (Wang et al. 2007). Furthermore, FSWs are involved in addiction by peer pressure or addiction in their family (Seydi et al. 2014).

As mentioned, several studies have been carried out on AIDS/HIV and mental disorders and their effects on increasing the prevalence of prostitution. Nevertheless, no study has been conducted on the different aspects of health and QoL affected by prostitution. The current study aimed to compare QoL among FSWs with and without SUD.

2. Materials & Methods

Study design and participants

The present ex post facto study was carried out in crisis intervention center, social emergency centers, women-only residential Chitgar center, and overnight shelter Shosh center in Tehran, Iran, in 2016. According to previous studies and methodology of ex post research design, the sample size should be 60 participants in each group, so the researchers allocated 60 participants in each group (60 FSWs with SUD and 60 FSWs without SUD). The study sample were selected by convenience sampling method from aforementioned centers. The inclusion criteria were as follows: having at least high school degree of education, lacking any severe mental and physical illnesses, having at least 12 months record of being prostitute and having a dossier in Tehran Welfare organization. The exclusion criteria were as follows: filling out an incomplete questionnaire, having any severe mental and physical illnesses, having a history of prostitute for less than 12 months.

Study instruments

Demographic questionnaire

Researchers designed this questionnaire to collect information about FSWs' age, duration of sex-work, period of addiction and marital status. The results are presented in Table 1.

WHO Quality of Life-BREF

The WHO Quality of Life-BREF questionnaire (WHOQOL-BREF) was designed by WHO. This questionnaire is a short version of the original instrument that may be more convenient for use in large research studies or clinical trials (Skevington, Lotfy & O'Connell 2004). This inventory comprises 26 items, which measure broad domains, such as physical health, psychological health, social relationships, and environment. The items are rated on a 5-point

Likert-type scale from 1 (very poor) to 5 (very good). The original study reported its internal consistency reliabilities (Cronbach alpha) as follows: physical health = 0.80, psychological health = 0.76, social relationships = 0.66, and environment = 0.80 (Nejat et al. 2006).

The Persian version Cronbach alpha reliabilities have been reported as well; physical health = 0.70, psychological health = 0.73, social relationships = 0.55, and environment = 0.84 (Nejat et al. 2006). In the present study, the Cronbach α reliabilities were assessed, which were 0.72 for physical health, 0.70 for psychological health, 0.58 for social relationships, and 0.88 for environment.

Study procedure

Firstly, some information was provided about the aim and study procedure to the participants. Then the questionnaires were distributed among 156 FSWs with and without SUD in anonymous form. A total of 36 incomplete and inaccurate questionnaires were discarded from the returned questionnaires.

It is worth mentioning that the researcher ensured that the participants' confidentiality would be protected and also participants signed their written consent forms. It was announced to the participant that they had complete authority to participate in the research. This article was adopted by the research study which approved by ethics committee of Khatam University with approval number 94/h/117 on May 9, 2015.

Data analysis

The data were analyzed by descriptive and inferential tests. The collected data were analyzed by covariance and multivariate analysis of variance (ANOVA) using SPSS V. 20. P values less than 0.05 were considered as statistically significant.

3. Results

The mean (SD) age of FSWs with SDU and without SDU were 29.36(4.48) and 28.05(3.76) years, respectively. Also, the mean (SD) duration of prostitution was 30.16(5.75) months in FSWs without SDU group and 33.43(6.12) months in FSWs with SUD group. The duration of addiction in FSWs group was 25.20(8.14) months. In addition, 50% of FSWs group without SUD was single and 56.7% of FSWs group with SDU was divorced. Table 1 shows the sociodemographic characteristics of the participant in two groups. The assumption of equality of covariance was evaluated using Box's M test. The results of Box's M test demonstrated that the assumption of the homogeneity of the variance-covariance was established (Box's M = 148.022, $F_{[10, 66]} = 1.628$, P = 0.092).

The multivariate analysis of variance was used to assess the difference between two groups. The results showed significant difference between two groups in physical health (F = 22.339, P = 0.0001), social relationship (F = 28.672, P = 0.0001) and environment (F = 7.400, P = 0.008) (Table 2). In addition, no significant difference was observed between

Table 1. Sociodemographic characteristic of participants (n = 120)

Variables		FSWs Without SUD	FSWs With SUD
		No. (%)	No. (%)
Marital status	Married	4(6.7)	7(11.7)
	Single	30(50.0)	19(31.7)
	Divorced	26(43.3)	34(56.7)
Education	Elementary school	7(11.7)	10(16.7)
	Secondary school	16(26.7)	16(26.7)
	High school	26(43.3)	28(46.7)
	Diploma	10(16.7)	6(10.0)
	Higher than diploma	1(1.7)	0(0.0)
Income level	Poor	23(38.3)	10(16.7)
	Lower middle class	31(51.7)	22(36.7)
	Middle class	6(10.0)	28(46.7)

FSWs = 60; SUD = 60

Table 2. Comparing quality of life between FSWs without SUD (n = 60) and FSWs with SUD (n = 60)

Variable	Groups	Quality of Life						
		Mean ± SD	SS	df	MS	F	P	R^2
Physical health	FSWs without SUD	23.00 ± 1.96	99.008	1	99.008	22.339	0.0001	0.159
	FSWs with SUD	21.18 ± 2.23						
Psychological health	FSWs without SUD	20.61 ± 2.56	3.675	1	3.675	0.562	0.455	0.005
	FSWs with SUD	20.96 ± 2.55						
Social relationships	FSWs without SUD	8.48 ± 1.08	32.033	1	32.033	28.672	0.0001	0.195
	FSWs with SUD	7.45 ± 1.03						
Environment	FSWs without SUD	25.08 ± 3.12	52.008	1	52.008	7.400	0.008	0.059
	FSWs with SUD	23.76 ± 2 .070						

Client-Centered Nursing Care

FSWs: Female Sex Workers; SUD: Substance Use Disorder; SD: Standard Deviation; df: Degree of Freedom; SS: Sum of Squares; MS: Mean Square; R^2: Partial Eta Squared

two groups in subscale of psychological health (F = 0.562, P = 0.455) (Table 2).

4. Discussion

The current study was carried out to compare QoL among FSWs with and without SUD. The results indicated that physical health, social relationship and environment in FSWs without SUD is higher than those in FSWs with SUD. The similar studies were not found to compare the present study with them. Therefore, each subscale was independently investigated. The result of social relationship is consistent with the finding of previous research (Shannon et al. 2008; Murphy 2010; Dalla 2002). In a study on 12 FSWs in the USA found that one of the main causes of FSWs to maintain a poor QoL is social relationship within the gang subculture. The sex workers have a special subculture. Because their behavior are not respected by people and they are rejected from society, they prefer to deal with each other (Murphy 2010).

However, Dalla (2002) reported that "There might be a sense of camaraderie and kinship among FSWs." Therefore, it could potentially provide adequate protection in some way from a range of issues and act as a buffer against painful and traumatic experiences. Additionally, FSWs interact with various people and this possibly could improve some social skills in FSWs (Seydi et al. 2014).

The result of the present study in physical health dimension is consistent with finding of Chowdhury et al. (2013). The finding of a study in Bangladesh on 100 substance users and FSWs indicated that 62% of substance users suffered from malnutrition, whereas this percentage in FSWs group is 52% (Chowdhury et al. 2013). Also, Choudhury (2010) through a semi-structural interview with 20 FSWs found that FSWs concern about their bodies, because it is an essential part of the prostitution and FSWs do not want to damage their bodies. Although FSWs are aware of their risky behavior and the effect of illegal drug consumption on their health but it considered as an inseparable part of being sex worker.

Additionally, the results showed that the environment aspect of QoL in FSWs without SUD is better than FSWs with SUD. This result is consistent with previous study results (Shannon et al. 2008; Murphy 2010; Dalla 2002; Chowdhury et al. 2013; Choudhury 2010). The environment factor impacts on the physical, social, and economic items (Rhodes et al. 2012). Thus, this result is explained through the explanation of the aforementioned dimensions (physical and social relationship).

Moreover, the finding of the present research demonstrated no significant difference between two groups in psychological dimension of QoL. This finding is consistent with results of recent research carried out in this field (Deering et al. 2014; Ulibarri et al. 2015; Vorpan 2015). Several studies demonstrated that psychological problems in FSWs and female substance users comprise various disorders, including anxiety disorder, post-traumatic disorder, and stress (Ulibarri et al. 2015; Vorpan 2015). Furthermore, these mental health problems result in a barrier to treatment access for in-

dividual with SUD (Behzad et al. 2015; Priester et al. 2016; Khodabakhshi-koolaee & Damirchi 2016).

Since the QoL in patients referred to situation which reflects the mental and social condition. Then, based on the results of current and previous studies, substance use and sex work provoke a worsening conditional crisis that affect QoL. Furthermore, the QoL in FSWs with SUD is poorer than FSWs without SUD group. Hence, FSWs with SUD have the psychological, social, and biological needs that require the immediate and considerable attention. This attention should be concentrated on social relationship and physical aspect in women with SUD and psychological aspect in two groups. Women deal with high risks behavior, like multi-sex partner are facing the sexual transmitted diseases like HIV/ADIS, hepatitis, or other STD diseases. When the addition behavior is added to other risk behaviors like sex-work, QoL dramatically drops. Thus, these women belong to the vulnerable groups and need more attention from health professionals. Mental and psychical health interventions are necessary for them.

Results should be considered with caution due to limited study sample in Tehran. In addition, some incomplete demographic information and using a self-report measure which increased the possibility of biased reports were other study limitations. Thus, it is recommended that semi-structural interviews be used for future research.

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Conflict of Interest

The authors declared no conflict of interests.

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