

ORIGINAL ARTICLE

Psychiatric Assessment for a Sample of Wives of Opioid Addiction

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Background	Substance addiction affects the functioning of the family, the community, and the relatives of substance abusers, as they experience considerable burden of care. The presence of a substance-dependent family member increases conflicts and causes stress to every member of the family. The aim of the study was to assess psychiatric disorders among wives of opioid abusers and find out the relation between such disorders and the factors related to husband's addiction.
Procedure	A total of 97 wives of opioid addicts were included in a study at El-Maamoura Hospital for mental health. SCID I was performed for all wives. Full drug screening and the addiction severity index were performed for husbands. The socioeconomic test scale was answered by any of the spouses.
Results	This study was conducted on 97 wives of opioid addicts. Approximately 49.5% experienced recent psychiatric disorders, as 18.5% of the wives had a dysthymic disorder, 13.4% had major depressive disorders, 6.1% had anxiety disorders, and 10.2% had hypochondriasis. Among the wives of opioid addicts, a significant relation between having a psychiatric disorder and a family history and a highly significant relation between having a psychiatric disorder and the addiction severity of their husbands were recorded by the regression analysis.
Conclusions	Opioid dependence of a male patient was associated with wife's mental health; the majority of them experienced psychiatric disorders, ranging from a dysthymic disorder, major depressive disorders, anxiety disorders, to hypochondriasis. Among the wives of opioid addicts, there was a significant relation between having a psychiatric disorder and a family history and the addiction severity of their husbands.
Keywords	Addiction severity index, Opioid dependence, Psychiatric disorders, Wife's burden.

INTRODUCTION

Substance dependence is complex and often chronic in nature, which affects the brain and body function. It also causes serious damage to families, relationships, schools, workplaces, and community. The most common symptoms of addiction are severe loss of control, continued use despite serious consequences, preoccupation with using, failed attempts to quit, increased tolerance, and difficult withdrawal (Saunders *et al.*, 2016).

Opioid addiction is a chronic disorder that can result in health, social, and economic problems. Opioids are a class of drugs that act on the nervous system to produce

feelings of pleasure and pain relief. Some opioids are legally prescribed by health care providers to manage severe and chronic pain. Commonly prescribed opioids include oxycodone, fentanyl, buprenorphine, methadone, oxymorphone, hydrocodone, codeine, and morphine. Some other opioids, such as heroin, are illegal drugs of abuse (Crist and Berrettini, 2014).

Although a positive effect of marriage on better health and decreased risk taking (such as substance use) among couples has frequently been suggested in the literature, possibly owing to the involved sociocultural norms

(Duncan *et al.*, 2006), some existing theories have also pointed to its likely negative effects, suggesting that if one of the couples has a health behavior problem, it is possible that the other has the same problem as well (Stein *et al.*, 2007).

In line with this suggestion, addition of a new adult role (such as spouse and parent) might lead to more stress and consequently substance use among couples (Homish *et al.*, 2007).

Therefore, it seems that the positive and negative effect of marriage on mental, physical, and behavioral health outcomes of individuals is still a subject of debate. A possible relationship between drug dependence and psychological well-being seems to be clear (Hoxmark *et al.*, 2010).

Several sources of stress for wives who provide care for husbands with a substance and/or mental disorder have been identified. Those cited most often include isolation, coping with behavioral problems, relationship problems between family members, family violence, not having enough help from their relatives, and insufficient help from treatment professionals. Documented effects of these stresses include worry, anger, guilt, and shame; financial and emotional strain; marital dissatisfaction and discord; diminution in the quality of life and hopefulness of family members; physical victimization; negative effects on the normal growth and development of children in the family; and physical effects of the stress of living with a substance abuser (e.g. migraines, colitis, and ulcers) (Sarkar *et al.*, 2015).

The study by Van Tricht *et al.*, (2013) found that chronic drug intake, especially opiates, is associated with a broad range of psychiatric manifestations ranging from intensely dysphoric withdrawal symptoms, depression, impulse control symptoms, intense anxiety, psychotic symptoms, especially paranoid delusions and hallucinations, to suicidal and self-injurious behavior.

The present study aimed to assess psychiatric disorders among wives of opioid addiction and to find out the relation between different disorders and factors related to husband's addiction.

PATIENTS AND METHODS

Procedures

This was a descriptive cross-sectional study carried out on 97 wives of opioid addicts, aged between 18 and 60 years old, The study was conducted on the wives of male opioid addicts visiting the outpatient clinic or were inpatients at the Maamoura Mental Hospital.

All participating wives were interviewed regarding their sociodemographic data and medical history. A brief medical and neurological examination was performed. A minimal state examination and the Arabic version of SCID I (First and Rounsaville, 1995) were used (El Missiry *et al.*, 2004). The Arabic version of SCID-I-CV was translated by El Missiry *et al.*, (2004) and was validated through its use in numerous studies conducted in research centers in Egypt. We used the clinical version for a relatively easier administration in clinical setting.

The addiction severity index (ASI) (McLellan *et al.*, 2004) Arabic version (5th ed) (Qasem *et al.*, 2003) was performed for their husbands, as well as a drug screen. Any participant whether the wives or their husbands answered the socioeconomic test scale (Fahmy and El Sherbini, 1983).

A past history of psychiatric disorders, separated couples, history of drug abuse, and husbands using substances other than opioid were excluded from the research. Ethical approval was fulfilled according to the recommendations of Ethics committee, Faculty of Medicine, Benha University, Cairo, Egypt (the number of approval Ms 23-1-2020). The clinical steps and possible adverse events were plainly demonstrated for all candidates with the ability to withdraw at any time without any consequences that would affect the treatment of the husbands.

Statistical Analysis

Data analysis was performed using the software SPSS (Statistical Package for the Social Sciences), version 20. Quantitative variables were described using their means and SDs. Categorical variables were described using their absolute frequencies and were compared using χ^2 test and Fisher exact test when appropriate. Kolmogorov–Smirnov (distribution-type) and Levene (homogeneity of variances) tests were used to verify assumptions for use in parametric tests. Binary logistic regression was used to predict the odds of being a case based on the values of the independent variables (predictors). The level of statistical significance was set at 5% ($P < 0.05$). Highly significant difference was present if P value less than or equal to 0.001.

RESULTS

This study was conducted on 97 wives of opioid addiction. The age of wives ranged from 23 to 56 years, with a mean age of 39.7 years; ~60% of them were aged 40 years or less. Age of their husbands ranged from 30 to 59 years, with a mean of 44.77 years. Approximately 61% were married for more than 10 years and 52% came from urban areas. Concerning social class, 16.5, 30.9, 27.8, and 24.7% had very low, low, medium, and high social classes, respectively (Table 1).

Table 1: The sociodemographic data of the studied wives of opioid addicts:

Sociodemographic data	N= 97 [n(%)]
Age of wife (year)	39.7±6.895
Mean±SD	23–56
Range	
≤40	58(59.8)
>41–50	35(36.1)
>50	4(4.1)
Age of husband (year)	44.773±7.318
Mean±SD	30–59
Range	
≤40	40(41.2)
>41–50	38(39.2)
>50	19(19.6)
Duration of marriage (year)	
Mean±SD	14.804±7.237
Range	5–34
≤5	2(2.1)
>5–10	36(37.1)
>10	59(60.8)
Duration of abuse (year)	9.01±4.448
Mean±SD	3–25
Range	
≤10	81(83.5)
>10–20	13(13.4)
>20	3(3.1)
Residence	
Rural	47(48.5)
Urban	50(51.5)
Wife’s education	
Illiterate	49(50.5)
Read and write	24(24.7)
Basic education	10(10.3)
Middle education	11(11.3)
High education	3(3.0)
Family history of psychiatric disorder	
Negative	63(64.9)
Positive	34(35.1)
SES	
Very low	16(16.5)
Low	30(30.9)
Middle	27(27.8)
High	24(24.7)
Wife occupation	
Housewife	51(52.6)
Worker	34(35)
Skilled	4(4.1)
Clerk	7(7.2)
Semiprofessional/professional	2(2.0)

SES: Socioeconomic standard.

Regarding wives’ education, 50.5% of them were illiterate, 24.7% could read and write, 10.3% had basic education (primary), 11.3% had middle education (preparatory), and 3.0% had higher education (university).

According to family history of psychiatric disorder, 65% of wives had a negative family history of psychiatric disorders.

Regarding psychiatric disorders in the participating wives of the opioid dependence (Table 2), ~50.5% had no psychiatric disorders. Dysthymic disorder, major depressive disorder, generalized anxiety disorder, agoraphobia, hypochondriasis, panic attack, OCD, and psychotic disorders prevailed in 18.5, 13.4, 6.1, 4.1, 10.2, 5.1, 4.1, and 2.1% of the studied wives, respectively.

Table 2: Psychiatric disorders in the participating wives of the opioid dependence:

	N= 97 [n(%)]
Psychiatric disorders	
No	49(50.5)
Dysthymic disorder	18(18.5)
MDD	13(13.4)
GAD	6(6.1)
Agoraphobia	4(4.1)
Hypochondriasis	10(10.2)
Panic attack	5(5.1)
OCD	4(4.1)
Psychotic disorders	2(2.1)

GAD: Generalized anxiety disorder; MDD: Major depressive disorder; OCD: Obsessive compulsive disorder.

The relation between presence of psychiatric disorders among wives of opioid addict and demographic data revealed nonsignificant statistically relation between presence of psychiatric disorder and age of wife, husband, and residence, duration of marriage, wife education, occupation, or socioeconomic standard. There was also a nonsignificant relation between presence of psychiatric disorders among wives and duration of substance abuse of husbands (Table 3).

However, there was a very highly statistically significant relation between presence of psychiatric disorder and family history of psychiatric disorders. Positive family history significantly increase that risk by 4.83 fold (Table 4).

Regression analysis was conducted for factors associated with presence of psychiatric disorders among wives of opioid addict (Table 5), using total ASI, positive family history, medical, legal, employment, drug, and

psychiatric index as covariates. Total ASI, legal index, and positive family history were the significant risk factors in univariate analysis. In multivariable analysis, only total ASI was a significant risk factor for presence of psychiatric disorders among wives of opioid addicts.

Table 3: Relation between presence of psychiatric disorders among wives of opioid addict and demographic data:

Parameter	Psychiatric disorders [n(%)]		Test	
	Present N= 48	Absent N= 49	χ^2	P
Age of wife (years)				
≤40	31(64.6)	27(55.1)	0.203	0.653
>41–50	14(29.2)	21(42.9)		
>50	3(6.2)	1(2)		
Age of husband (years)				
≤40	24(50)	16(32.7)	3.175	0.074
>41–50	17(35.4)	21(42.9)		
>50	7(14.6)	12(24.5)		
Duration of marriage (years)				
≤5	2(4.2)	0	0.718	0.397
>5–10	21(43.8)	15(30.6)		
>10	25(52.1)	34(69.4)		
Duration of substance abuse (years)				
≤10	38(79.2)	43(87.8)	2.409	0.121
>10–20	7(14.6)	6(12.2)		
>20	3(6.2)	0		
Residence				
Rural	20(41.7)	27(55.1)	1.752	0.186
Urban	28(58.3)	22(42.9)		
Education				
Illiterate	27(56.2)	22(44.9)	2.502	0.114
Read and write	11(22.9)	13(26.5)		
Basic education	6(12.5)	4(8.2)		
Middle education	4(8.3)	7(14.3)		
High education	0	3(6.1)		
Occupation				
Housewife	23(47.9)	28(57.1)	1.412	0.235
Skilled professions	22(45.8)	12(24.5)		
Workers	2(4.2)	2(4.1)		
Infrequent professions	1(2.1)	6(12.2)		
Clerk professions	0	2(4.1)		
SES				
High	12(25)	12(24.5)	0.185	0.667
Medium	12(25)	15(30.6)		
Low	15(31.2)	15(30.6)		
Very low	9(18.8)	7(14.3)		

χ^2 , χ^2 : test; SES: Socioeconomic standard. **P value less than or equal to 0.001 is statistically very highly significant.

DISCUSSION

The prevalence of substance dependence has been rising all over the world, and substance use disorders constitute one of the most serious public health problems. It is well recognized as a complex biopsychosocial phenomenon and considered as a ‘family disease’ (Shekhawat *et al.*, 2017).

In Egypt, it was found that 20% of Egyptian male students have used drugs: 5% hashish dependence, 1% opiate dependence, 2.5% tranquilizer dependence, 1.5% stimulant dependence, and 2.15% hypnotics dependence. The last Egyptian National Survey report shows that 8.6% of Egyptians had used drugs at least once during their lives (Mahgoub *et al.*, 2016).

This study showed that the age of wives ranged from 23 to 56 years, with a mean of 39.7 years. Age of husbands ranged from 30 to 59 years, with a mean of 44.77 years. Approximately 52% came from urban areas.

The mean duration of abuse was 9.01±4.448 years. Mattoo *et al.*, (2013) found that the mean duration of abuse was 5.82±4.39 years, which is almost similar to the study done by (Mohamed, 2017), where the mean duration of abuse was 7.47 years.

Concerning social class, 16.5, 30.9, 27.8, and 24.7% had very low, low, medium, and high social classes, respectively. The current research showed that most of the wives of opioid addicts were from lower social class (30.9%), which is in line with the study done by Shyangwa *et al.*, (2008), who deduced that most of the participants were from lower socioeconomic strata. This could be owing to the location of the facility and that it is a public one and thus accessible to lower income population. Moreover, 50.5% of the studied cases were illiterate. This slightly agrees with Shyangwa *et al.*, (2008), who illustrated that 64% of the studied cases did not have a high school diploma. Moreover, as most were from lower social strata, thus, it was common that females were not educated.

In the current research, 50.5% of the studied wives did not have any psychiatric disorder and the remaining 49.5% complained of psychiatric symptoms. This disagrees with Mattoo *et al.*, (2013), who concluded that only 12.5% of the studied females had a psychiatric disorder. However, Mohamed, (2017) reported similar results, which may be as both research studies were done in Egyptian communities. Kishor *et al.*, (2013) also discovered that more than 65% of the women with drug use spouses had mental disorders, and ~43% of them had severe mood disorders. Cheeseman *et al.*, (2011) also stated in Australia that the addict’s spouse faces multiple experiences and fears

such as depression and even hopelessness in life. The most prevalent disorder was dysthymia (18.5%) followed

by depression (13.4%), hypochondriasis (10.2%) and generalized anxiety disorder (6.1%).

Table 4: Relation between presence of psychiatric disorders among wives of opioid addicts and family history of psychiatric disorder:

Parameter	Psychiatric disorders [n(%)]		Test	P	COR (95% CI)
	Present N= 48	Absent N= 49			
Family history	23(47.9)	40(81.6)	χ^2	<0.001**	4.83(1.93–12.1)
Negative positive	25(52.1)	9(18.4)			

χ^2 , χ^2 : test; CI: Confidence interval; COR: Crude odds ratio. **P value less than or equal to 0.001 is statistically very highly significant.

Table 5: Multivariate and univariate regression analyses of factors associated with presence of psychiatric disorders among wives of opioid addicts:

	Univariate		Multivariate [#]	
	P	OR(95% CI)	P	OR(95% CI)
ASI total (≥ 26)	<0.001**	57.671(13.357–249.006)	0.003*	3.000(1.445–6.228)
Positive family history	0.012*	6.451(1.503–27.688)	0.427	0.667(0.245–1.813)
Medical	0.894	0.938(0.362–2.426)	0.404	0.667(0.257–1.728)
Legal	0.042*	1.889(1.023–3.489)	0.181	0.871(0.711–1.067)
Employment	0.448	1.285(0.673–2.453)	0.262	1.500(0.739–3.045)
Drug	0.098	0.819(0.646–1.038)	0.252	0.787(0.522–1.186)
Psychiatric	0.055	0.880(0.771–1.003)	0.620	1.198(0.587–2.443)

ASI: Addiction severity index; CI: Confidence interval. *P value less than 0.05 is statistically significant. **P value less than or equal to 0.001 is statistically highly significant.

Maghsoudi *et al.*, (2019) added that most women with addicted spouses experienced some degree of ‘anxiety,’ ‘depression,’ and ‘stress.’ Along with this result, Mancheri *et al.*, (2013) also in a descriptive study of 400 addicted people showed that 36.4% of the spouses had moderate anxiety, 36.8% had moderate depression, 36% had low aggression, and 35.8% had a moderate interpersonal sensitivity.

In the present study, there was no significant relation between the age of wife and presence of psychiatric disorders, which is in line with Shyangwa *et al.*, (2008), who reported no significant relation between age of spouse and appearance of psychiatric disorders.

There was a statistically nonsignificant relation between the presence of psychiatric disorder and age of the husband, residence, duration of marriage, wife’s education, occupation, or socioeconomic standard. There was also a nonsignificant relation between the presence of psychiatric disorders among wives and the duration of substance abuse of husband. There was a highly statistically significant relation between presence of psychiatric disorder and family history of psychiatric disorders. Positive family history significantly increases that risk by 4.83 fold.

In the present study, positive family history was a significant risk factor in univariate regression analysis for the presence of psychiatric disorders among wives of opioid addicts. It is well recognized that the maximum effect of a psychiatric disorder is borne by the family and often leads to a complete disruption in its functioning (Lamichhane *et al.*, 2008). There was no significant correlation in between presence of psychiatric disorders among wives of opioid addict and employment in univariate or multivariate analysis. However, a high significance was present between the wife’s psychiatric illness and the ASI scale of the spouse, that is, the higher the scores of spouse addiction, the more prone the wife to develop a psychiatric illness. This could be owing to these wives are anxious and depressed because of the pressure of their housework, and the economic problems caused by the addicted spouse’s unemployment and the lack of an intimate relationship with each other.

So far, to our knowledge, there has been no research on the psychological and social problems of women with substance abuser spouses. Although there has been a lot of work on the addiction, all of these studies have been about violence and addiction itself and addicts.

CONCLUSION

Opioid dependence of male patients was associated with wife's mental health; the majority of them suffered from psychiatric disorders, ranging from a dysthymic disorder, major depressive disorders, anxiety disorders, to hypochondriasis. Among the wives of opioid addicts, a significant relation between having a psychiatric disorder and a family history and a highly significant relation between having a psychiatric disorder and the addiction severity of their husbands were recorded by the regression analysis.

LIMITATIONS

The study had the following limitations: the recruitment of participants in this study was from one psychiatric facility, which may not be representative of the general population; there was no control group; some cases faced difficulties in dealing with the scales owing to some wives being illiterate or having low educational level; and some husbands refused to bring their wives to mental hospital, especially the addiction clinic, as they were conservatives.

RECOMMENDATION

1. Further research is needed to better understand the nature of the difficulties faced by the wives of opioid addicts.
2. Marital counseling for the husbands and wives should be done.
3. Support groups for wives of opioid addicts should be initiated.

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