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Sexual Satisfaction; Prevalence, Cofactors and its Relation to Mental Health of Egyptian Married Women

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ABSTRACT

Background: Sexual satisfaction not only leads to one's marital satisfaction but also plays a crucial role in psychological well-being and overall satisfaction with life of married individuals.

Objectives: The purpose of this study was to determine the prevalence and cofactors of sexual satisfaction, as well as its relationship to mental health in Egyptian married women.

Participants and methods: An analytical cross-sectional study was carried out on 256 married females selected from attendants of two healthcare centers in Menoufia governorate, Egypt. Sexual satisfaction among the participant women was assessed using Married Women Sexual Satisfaction Questionnaire (**MWSSQ**) while their mental health was evaluated using the 28-items General Health Questionnaire **(GHQ-28)**.

Results: Using **MWSSQ** revealed that 9.8%, 82% and 8.2% of participants were sexually dissatisfied, moderately satisfied and highly satisfied respectively. Regarding mental status of participants, **GHQ-28** scale showed that 48% of them were of good mental health, 38.3% were of poor mental health and 13.7% were of very poor mental health. There was a significant relationship between worsening mental status and decreased sexual satisfaction (P<0.0001). Multivariate regression analysis showed that husband age, women education and socioeconomic standard were independent risk factors for sexual dissatisfaction.

Conclusion: Women's sexual satisfaction and their mental wellbeing are intimately related, so it is recommended to implement effective and appropriate sexual education programs that will raise women's awareness and lessen the suffering of those who are impacted.

Keywords: Sexual satisfaction, Married females, Mental health.

INTRODUCTION

According to one definition, sexual satisfaction is "an effective response coming from one's subjective appraisal of all aspects of one's sexuality within a relationship". So, it is considered as a reliable measure of sexual health and sexual well-being **(1).**

Sexual satisfaction has a strong association with marital contentment, which is necessary for long-term stability and healthy family bonds **(2).**

Female sexual satisfaction is influenced by a variety of factors, including length of marriage, age at marriage, age at the time of marriage, number of marriages, number of children, employment status, and educational background **(3).** It is also impacted by a variety of intrapersonal and interpersonal elements, such as the strength of relationships, one's religious beliefs, gender power, stress, life quality, mental health issues, chronic disease, age gap between couples, and child-rearing methods **(4).**

The lack of sexual satisfaction is attributed to many factors, which may include marital issues, partner performance during the sexual activity, sexual dysfunctions, and lack of emotional satisfaction **(5).**

Sexual satisfaction and mental wellness are intimately linked. While mental health greatly affects women's sexual desires, and higher levels of sexual satisfaction have been related to improved mental health **(6),** it has also been established that women's sexual satisfaction influences their emotions and plays an important part in preventing dangerous sexual practices, major mental illness, and eventually divorce **(7).**

In many countries, sexual dissatisfaction is an increasingly frequent issue, and it affects females more than males. The main contributing factors include incorrect beliefs held by women about sexual activity and cultural taboos surrounding it, in addition to parenting approaches that do not recognize their role in the appreciation of sexual functions and sexual demands. As a result, they are impacted by a variety of psychological problems such as depression, emotional instability, and personality consequences including hostility and violence **(8)**.

In Egypt, there is limited research on sexual function and relationship satisfaction among females. So, this study focused on the prevalence of sexual satisfaction in women and how it is linked to their mental health.

PARTICIPANTS AND METHODS

An analytical cross-sectional study on 256 married females who were selected from the attendants of two healthcare centers (Shebin-Elkom and Batanon Health Centers) in Menoufia governorate, Egypt. At the

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time of data collection, women who had been married for at least a year, lived with their spouses, engaged in sexual activity, and were on their first marriage were included. However, women with physical or psychiatric illnesses, were not permitted to take part in this study.

Sample size calculation

According to **Younis *et al.***, among Egyptian women there was 19.9% of sexual dissatisfaction [(9)]. At alpha error 0.05 and power of the study 80%, the estimated sample size was 245 participants. We expanded the sample size by 25 females (10%) to compensate for the non-responder rate. Thus, the total sample size was 270, after exclusion of 14 invalid questionnaire, the studied sample was 256 participants.

Sexual satisfaction among the participant women was assessed using married women sexual satisfaction questionnaire (MWSSQ). It is a 27-item questionnaire with 4 subscales: antecedents (Qs 13–15–16–17–18–20–25–26), physical and mental barriers (3 – 4 – 5 – 9 – 10 – 14 – 21 – 23 – 27), dominant cultural values (1 – 2 – 7 - 11 - 12), husband-related variables (6 – 8 – 9 – 22 – 24). The MWSSQ items were graded using a Likert-type scale, where one represents "never" and five represents "always." Items 3, 6, 9, 10, 14, 19, 21, 23, 24, and 27 were scored in reverse, with "never" receiving a score of five and "always" receiving a score of one. The MWSSQ's overall score thus spans from 27 to 135; higher values indicate more sexual satisfaction (SS). The score was broken down into three categories: 50% (≤ 67), 50% - 75% (68 - 101), and > 101, which signified high levels of satisfaction [(10)].

The GHQ-28 scale, developed by **Goldberg and Hillier** in 1979, was also used to assess the participants. The GHQ-28 is a well-known self-administered questionnaire that is used as a screening tool to identify persons who are at risk for mental issues [(11)]. Numerous studies on the GHQ-28's reliability and validity in various populations showed that it is highly valid and reliable. GHQ-28's Arabic version was translated and validated by **Alhamad and Al-Faris** [(12)].

In a study conducted by **Farhood and Dimassi** on a Lebanon sample, GHQ-28 internal consistency was found to be 91% [(13)]**.**

This 28-item questionnaire assesses mental health during the last month and is broken down into 4 subscales: physical symptoms (items 1–7), anxiety/insomnia (items 8–14), social dysfunction (items 15–21), and severe depression (items 22–28).

The total score ranges from 0 to 84 and is based on the Likert scoring technique (0, 1, 2, 3). The lower the score, the better the mental health. The cutoff score for screening was considered as less than (50%). Score of 42 was considered as "good mental health". 50% - 75% (43 – 63) was considered "poor mental health" and more than 75% (> 63) was considered "very poor mental health". and subscales were divided into normal (<50%, < score 12) or probable disorder (>50%, ≥ 12) [(11)]**.**

Ethical consent:

An approval of the study was obtained from Menoufia University Academic and Ethical Committee. Every participant signed an informed written consent for acceptance of participation in the study after explaining the aim of the study and ensuring their confidentiality. This work has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for studies involving humans.

Statistical analysis

The data were collected, tabulated, and analyzed using SPSS (statistical package for the social sciences) version 23.0 (SPSS Inc., Chicago, IL, USA). While qualitative data were represented in frequency and percent, quantitative data were expressed in mean, standard deviation (SD), and range. To assess the relationship between the qualitative variables, the Chi-square test (χ^2) was applied. With quantitative data that were not normally distributed, the Kruskal Wallis test (K) was used to assess differences between the satisfaction groups. The Pearson's correlation co-efficient was used as a measure for correlation between two continuous variables. Multivariate regression was used to detect independent predictors for married women sexual dissatisfaction (Odds ratio). A P-value lower than 0.05 was regarded as significant.

RESULTS

This study was done on 256 married women with mean age 31.77±8.30 and ranged from 20 – 58 years, their husbands age was 35.75±8.74 and ranged from 22 – 66 years with duration of marriage 9.32±7.03 that ranged from 1 – 35 years. Out of them 65.65 % were of urban residence and 42.6% were working. Regarding socioeconomic level, 15.3% was of high level, 64.5% were of middle and 20.3% were of low SEL**.**

Married women sexual satisfaction questionnaire on the participants revealed that 82% were moderately satisfied. Regarding mental status of participants, GHQ scale of these women showed that 48% of them were of good mental health. Mental health subscales revealed 42.2% with somatic symptoms, 48.2% with social dysfunction, 42.6% with anxiety-insomnia and 43.8% had severe depression **(Figure 1A and B).**

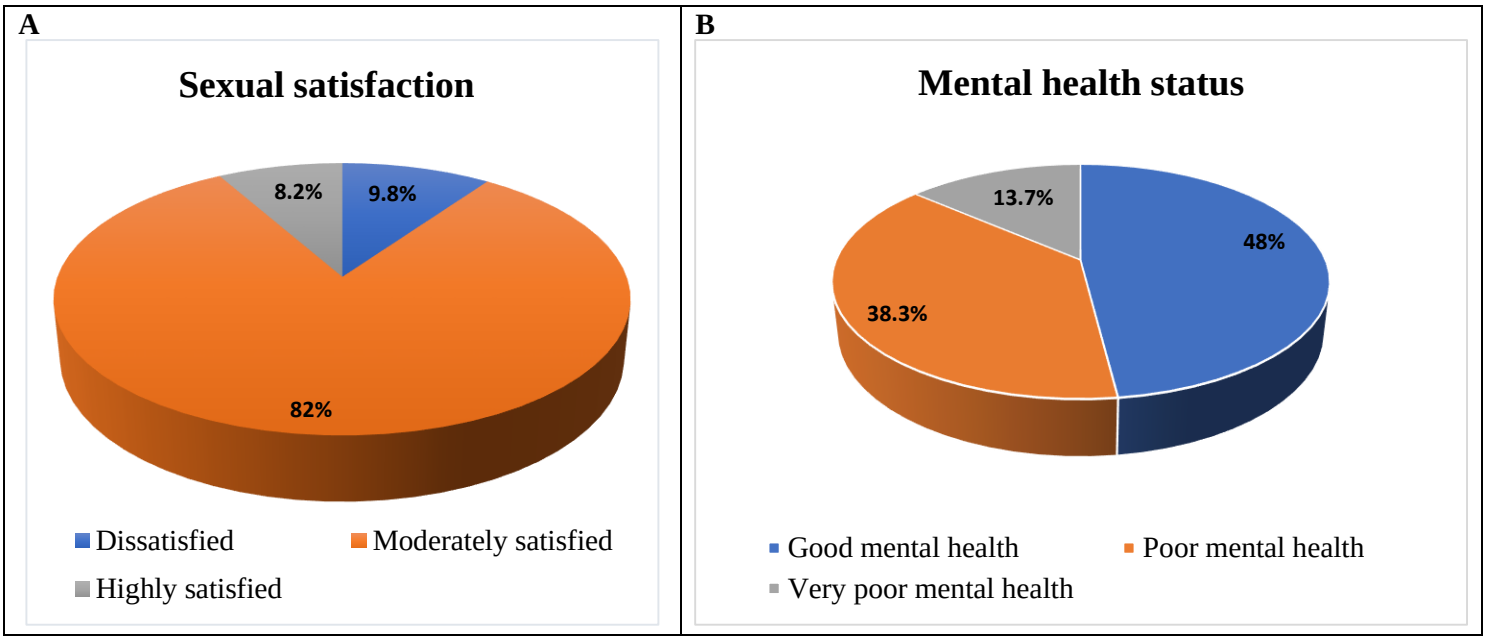

Figure 1:
A: Frequency of sexual satisfaction categories among the studied women using MWSSQ
B: Frequency of degrees of mental health affection among the studied women using GHQ-28

There was a significant relationship between worsening mental status and decreased sexual satisfaction **(Table 1)**.

Table 1: Sexual satisfaction among the studied women in relation to measured mental disorders (GHQ-28)

	MWSSQ				Chi-square Test	P value
	Total participants (N = 256)	Dissatisfied (N = 25)	Moderately satisfied (N = 210)	Highly satisfied (N = 21)		
GHQ-28						
Good mental health	123 (48.0%)	7 (28.0%)	101 (48.1%)	14 (66.7%)	34.27	<0.001
Poor mental health	98 (38.3%)	8 (32.0%)	89 (42.4%)	3 (14.3%)		
Very poor mental health	35 (13.7%)	10 (40.0%)	20 (9.5%)	4 (19.0%)		

Also, there was a significant negative correlation between MWSSQ score and mental health subscales (somatic disorders, social dysfunction, anxiety-insomnia and severe depression) **(Figures 2 and 3).**

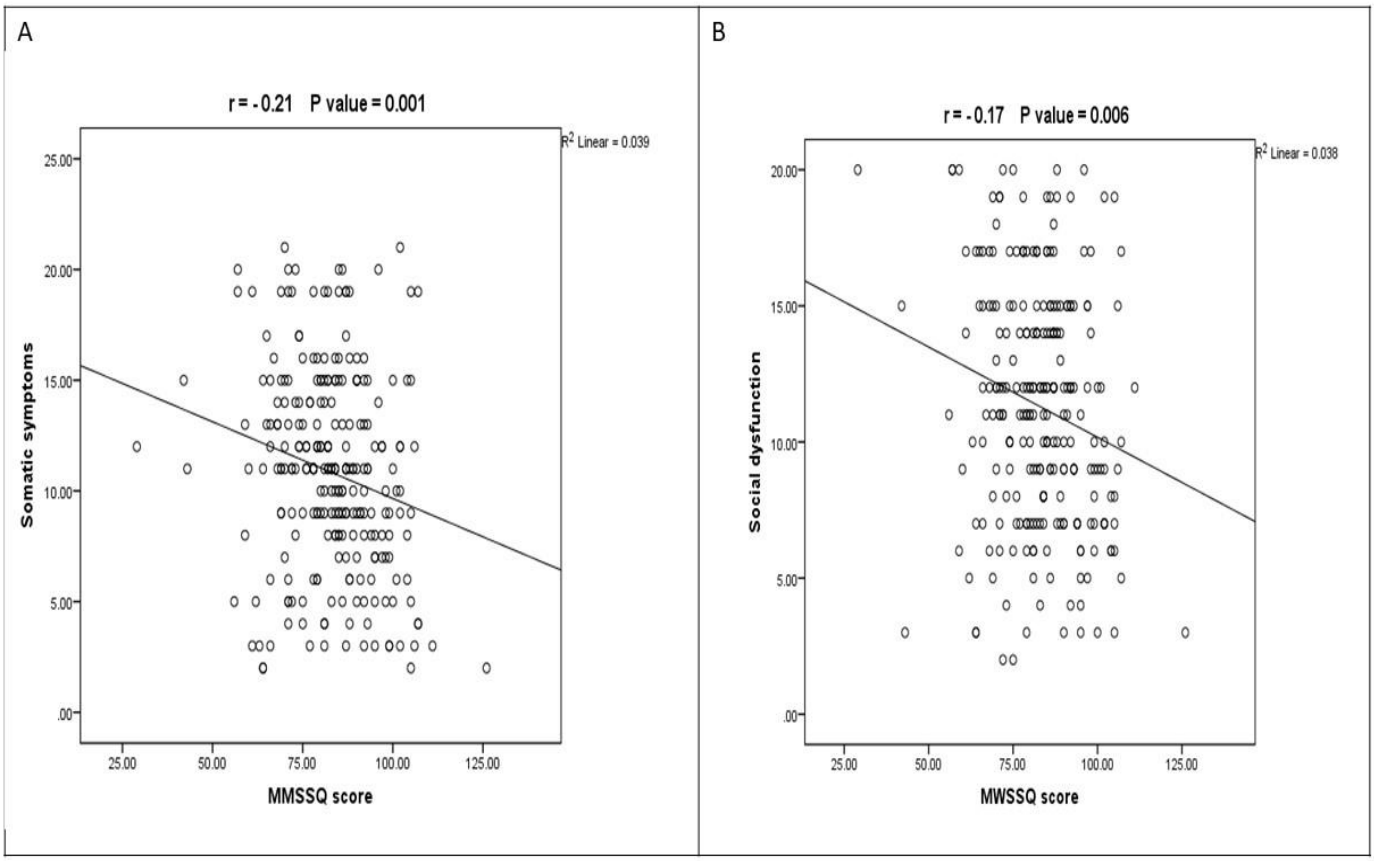

Figure 2:
A: Scatter blot for correlation between MWSSQ score and GHQ-28 subscale (somatic symptoms)
B: Scatter blot for correlation between MWSSQ score and GHQ-28 subscale (social dysfunction)

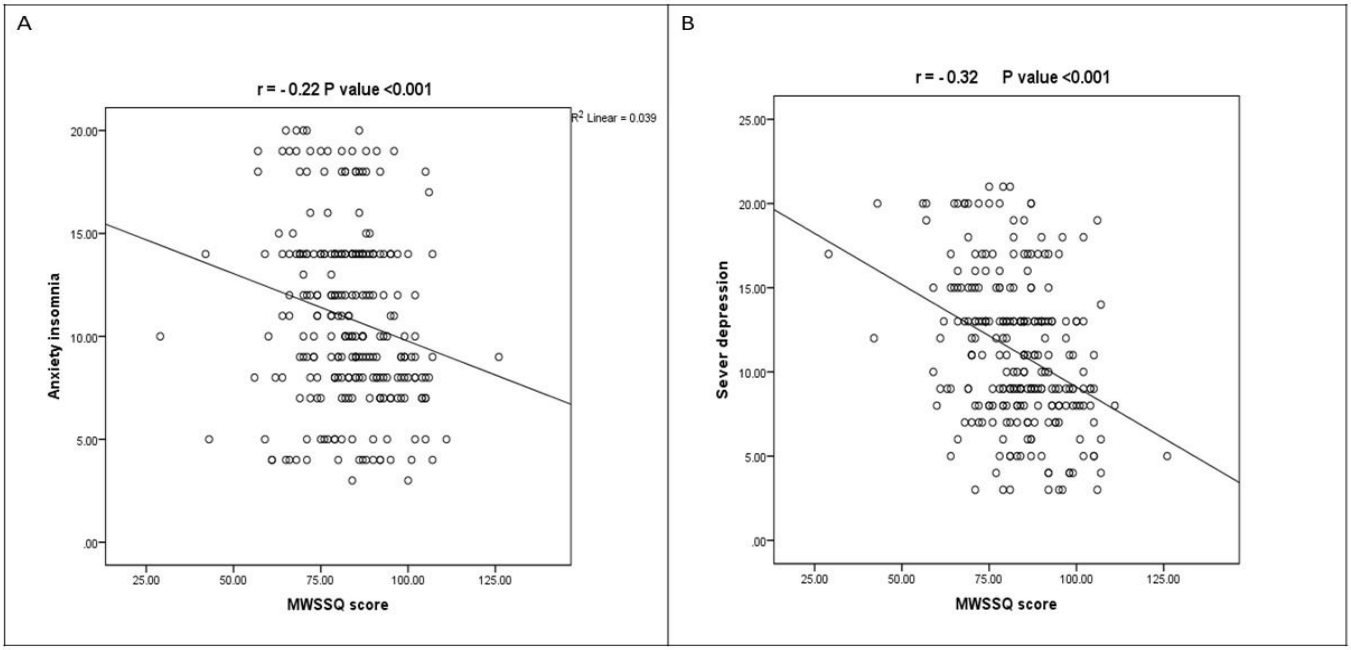

Figure 3:
A: Scatter blot for correlation between MWSSQ score and GHQ-28 subscale (anxiety - insomnia)
B: Scatter blot for correlation between MWSSQ score and GHQ-28 subscale (severe depression)

Sexual satisfaction was significantly associated with younger women and husband age, higher education of women and husbands, short duration of marriage, fewer number of children and higher socioeconomic level, meanwhile, it showed non-significant relation with women work or residence **(table 2)**.

Table 2: Socio-demographic criteria in relation to sexual satisfaction among the studied women

Socio-demographic criteria	MWSSQ				Test of significance	P value
	Total participants (N = 256)	Dissatisfied (N = 25)	Moderately satisfied (N = 210)	Highly satisfied (N = 21)		
Woman Age (years) Mean ±SD Range	31.77±8.30 20 – 58	38.60±11.42 21 – 58	31.19±7.61 20 – 58	29.43±7.06 20 – 45	K = 12.64	<0.001
Husband age (years) Mean ±SD Range	35.75±8.74 22 – 66	46.88±12.58 28 – 66	34.66±7.20 22 – 58	33.48±8.32 25 – 59	K = 31.89	<0.001
Marriage duration (years) Mean ±SD Range	9.32±7.03 1 – 35	15.08±10.66 1 – 35	8.78±6.28 1 – 33	7.81±5.90 1 – 22	K = 7.73	0.02
Residence Urban Rural	168 (65.6%) 88 (34.4%)	15 (60.0%) 10 (40.0%)	136 (64.8%) 74 (35.2%)	17 (81.0%) 4 (19.0%)	χ^2 =2.607	0.27
Education Illiterate Basic Secondary High and post graduate	7 (2.7%) 19 (7.4%) 136 (53.1%) 94 (36.7%)	4 (16.0%) 4 (16.0%) 9 (36.0%) 8 (32.0%)	3 (1.4%) 14 (6.7%) 118 (56.2%) 75 (35.7%)	0 (0.0%) 1 (4.8%) 9 (42.9%) 11 (52.4%)	χ^2 =24.59	<0.001
Working status Working House wife	109 (42.6%) 147 (57.4%)	13 (52.0%) 12 (48.0%)	86 (41.0%) 124 (59.0%)	10 (47.6%) 11 (52.4%)	χ^2 =1.35	0.51
Husband work Unskilled worker Skilled worker Employee Professional	18 (7.0%) 94 (36.7%) 94 (36.7%) 50 (19.5%)	3 (12.0%) 4 (16.0%) 9 (36.0%) 9 (36.0%)	2 (1.0%) 19 (9.0%) 110 (52.4%) 79 (37.6%)	0 (0.0%) 1 (4.8%) 9 (42.9%) 11 (52.4%)	χ^2 =18.64	0.005
Number of children 0 – 2 3 or more	163 (63.7%) 93 (36.3%)	12 (48.0%) 13 (52.0%)	133 (63.3%) 77 (36.7%)	18 (85.7%) 3 (14.3%)	χ^2 =7.07	0.03
Socioeconomic level `Low Middle High	52 (20.3%) 165 (64.5%) 39 (15.2%)	6 (24.0%) 17 (68.0%) 2 (8.0%)	43 (20.5%) 138 (65.7%) 29 (13.8%)	3 (14.3%) 10 (47.6%) 8 (38.1%)	χ^2 =9.91	0.04

K: Kruskal Wallis test, χ2: Chi square test

Multivariate regression analysis revealed that husband age, women education and socioeconomic level were independent risk factors for sexual dissatisfaction **(Table 3).**

Table 3: multivariate regression analysis for independent risk factors for married women sexual dissatisfaction

Risk factors	SE	Wald X^2	P value	Odds ratio	95% CI
Age	0.78	0.55	0.58	0.99	0.14 – 3.12
Husband age	1.25	4.48	<0.001	5.2	1.66 – 10.22
Duration of marriage	0.74	0.91	0.36	1.01	0.55 – 4.87
Education	1.24	2.14	0.03	1.89	1.45 – 6.85
Husband education	1.17	0.23	0.82	1.13	0.77 – 7.25
Number of children	2.01	0.08	0.94	1.06	0.65 – 8.21
Socioeconomic level	1.94	2.19	0.03	2.13	1.88 – 9.14

SE = standard error, CI = confidence interval.

DISCUSSION

Many studies documented the connection between sexual satisfaction and psychological general wellbeing and overall quality of life [14,15].

In the current work, the prevalence of sexual satisfaction reported as 25 (9.8%) were dissatisfied, 210 (82%) were moderately satisfied and 21 (8.2%) were highly satisfied. There were multiple studies with different levels of sexual satisfaction. An Egyptian study conducted by **Younis *et al.*** [9] reported elevated level of high sexual satisfaction (57.9%) while, 22.2% were moderately satisfied and 19.9% dissatisfied**.** This different value may be attributed to different participants characteristics and also using different evaluation tool. More similar findings were found by **Ziaee *et al.*** [16] who explored that 8.1% were very unsatisfied, 16.9% unsatisfied, 62.9% relatively satisfied, and 12.1% were very satisfied in Iranian working women.

An Iranian study conducted by **Abdollahi *et al.*** [6] showed that 21. 08%, 27. 7% and 51. 2 % of participants had high, moderate and low sexual satisfaction in older women. This very low level of satisfaction in this study is due to different age group as its participants were older women who had considered a group of lower sexual satisfaction [17].

In this study, a high level of sexual satisfaction was highly correlated with good mental health, whereas a low level of sexual satisfaction was strongly linked with a low level of mental health. **McCall-Hosenfeld *et al.*** [18] discovered that sexual satisfaction was linked to mental health with all its subscales (vitality, social, role limitation and mental health).

The same results were observed by **Abdollahi *et al.*** [6] who found a significant relation between sexual satisfaction and mental health, also several studies proved the relation between sexual satisfaction and general psychological wellbeing [14,19].

The current work reported that older woman age, older spouse age, longer period of the marriage, poor educational level of woman and husband, increased number of children and lower socio-economic level were significantly related to sexual dissatisfaction in univariate analysis, while multivariable analysis revealed that husband age, educational level of woman and socioeconomic level were independent predictors for sexual dissatisfaction. Very similar findings were reported by **Abdollahi *et al.*** [6] who found that sexual happiness was negatively associated to age, number of children, and length of marriage while it was strongly connected to income, women's and their husbands' education. Also, **Younis *et al.*** [9] documented that age, marital duration, and level of educational were all related to sexual satisfaction, but it differed in being related to residence.

Mustafa *et al.* [20] revealed that older age, lengthier marriage, poorer educational level, and older husband age were correlated with sexual dysfunction in univariable and multivariable analyses. On the other hand, **Ziaee *et al.*** [16] disagreed with our finding as they reported that age was not associated with sexual pleasure, while the remaining findings were in line with the current study findings regarding number of children as it was inversely related to sexual satisfaction while education was directly related to sexual satisfaction.

In addition to socio-demographic factors that affect sexual desire and satisfaction, multiple Arabic studies have demonstrated that other socio-cultural and religious elements can have a detrimental impact on women's sexual and reproductive health [21,22]**.** This is an area for future complementary work to determine the overall factors that affect such important issue that had direct impact on psychological health and overall wellbeing.

CONCLUSION

It is obvious that sexual satisfaction is a significant problem that may be masked and present itself as psychological, somatic and social problems, so it is important to increase awareness among married women about sexual dissatisfaction and its preventable cofactors under title of marital and sexual education. Also, increase the attention of psychologists to the role of such issue in psychological wellbeing.

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