

Special Article - Community Medicine

Relationship between Premarital Mental Health Status (GHQ-12) and Marital Satisfaction after the First Year of Marriage: A Prospective Study

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Received: April 04, 2019; Accepted: May 10, 2019;

Published: May 17, 2019

Abstract

Background: Macrosocial changes and modernization have forced researchers to reexamine factors associated with marital satisfaction. Although correlation of mental health problems and marital health has been examined in several studies, almost all of them were retrospective or cross-sectional in nature.

Objectives: The aim of this research was to assess the relationship between premarital mental health and marital satisfaction one year after marriage, controlling for sexual satisfaction and demographic factors.

Methods: This prospective study was carried out on a consecutive sample of 386 women attending premarital education classes in Kerman (southeastern Iran). At first, they were asked to complete the General Health Questionnaire-12 (GHQ-12); one year later, their marital satisfaction (using ENRICH Marital Satisfaction scale) and sexual satisfaction (using sexual satisfaction index) were examined.

Results: The average ($\pm SD$) age of women was 23.6 ± 5.1 . Based on the GHQ-12 score, 51.0% of them were mentally healthy before marriage. Nearly 12% of them were dissatisfied with sex. In the multivariate linear regression, a significant relationship was observed between marital satisfaction and both sexual satisfaction ($P < 0.001$) and mental health ($P < 0.001$).

Conclusion: To identify those at risk of marital dissatisfaction, GHQ-12 test may be conducted on women before marriage. To generalize the results of the study it would be replicated in diverse settings.

Keywords: Marital satisfaction; Mental health; Women; Iran

Introduction

Marriage is still regarded as a life priority by collectivist societies [1]. Researchers have shown that people will be happier and healthier if they have a successful marriage [2]. People marry with different motives; no matter what their motives are, they wish to have a more satisfied life after marriage [3]. Marital satisfaction is a crucial source to achieve a healthier life from different physical, social and psychological aspects [4].

Global statistics and figures have represented the increasing trend of divorce in recent decades. Assessing its causes in different cultures and countries (whether developed or developing) has suggested that social changes, modernization and increased individualism have played undeniable roles in this regard [5]. Iran is no exception; in Iran as one of high divorce countries, one in three marriages ends in divorce in some large cities [6].

Both experts and lay people try to predict people's marital life before they marry so as to prevent divorce using premarital interventions. Marital satisfaction has been shown to be related to various factors including sexual satisfaction [7,8], personality traits [9] and some demographic factors [10]. Although the relationship

between marital satisfaction and mental health has been evaluated in several studies and has been significant in most of them [11,12], almost all of them have been retrospective [11] or cross-sectional [12] studies. Uncertainty of temporal relationship between these two issues has made it difficult to judge them. Although in few studies mental health has been measured after marriage [13,14], they are either devoted to a specific subsample [13] or the main objective of the study is not prediction of marital satisfaction [14].

According to World Health Organization (WHO), mental health is an integral part of health; indeed, there is no health without mental health [15]. According to the WHO, nearly half of the world's population suffers from mental illness which affects their work and relationships in their everyday life [15]. Concerning the significant impact of mental health on different aspects of life, this study tried to answer this question: "Does mental health of people who want to marry have any contribution to their marital satisfaction one year after marriage?" The reason why only women participated in this study was that men, in Iran's culture, are not willing to answer private questions especially sexual ones related to their marriage [8] and that women are more vulnerable to marital problems, seek help more and their dissatisfaction is more likely to trigger the cascade of divorce

[16].

Based on our knowledge, this is the first study which examined and evaluated the relationship between mental health before marriage and marital satisfaction one year after the marriage in the presence of some correlates including demographic factors and sexual satisfaction.

Methods

Settings and participants

This follow up study was conducted in Kerman a city located in southeastern Iran on women attending premarital education classes. Participating in premarital education classes became compulsory in 1993 in Iran [8]. These compact course is mainly about sexual education.

Three hundred eighty six subjects were studied by enrolling 20 consecutive classes over a one month period in 2015. One exclusion criteria were defined; unwilling to participate in the study and the only inclusion criteria was "entering marriage for the first time". About 20 people participated in each class, and questionnaires (except for marital satisfaction questionnaire) were distributed and collected before the classes started. Participants were told that they would be interviewed one year after their marriage to check their marital satisfaction. One year later, the participants were telephoned to remind them, and then two female interviewers interviewed them on their doorstep using the Enrich questionnaire. Each participant was given \$15 for their time and participation at follow-up survey completion.

Ethical considerations

After explaining the purpose and nature of the study and after obtaining the informed consent, they participated in this study. This plan was approved by the university ethics committee (approval code: K/226).

Measurement tools

The GHQ-12 questionnaire contained 12 questions to assess mental health based on a four-point Likert scale; lower scores represented better mental health [17]. Scores above the median score (score 4) were considered the cut-off of the mental health questionnaire [17]. Its validity and reliability were confirmed in Persian [17]. The GHQ-12 was completed collectively before the classes started. The reliability coefficient of the questionnaire was 0.74 in our study. The GHQ-12 is the most widely-used screening tool to assess the mental health status in non-clinical setting [17].

One year after the marriage, the ENRICH Marital Satisfaction (EMS) scale consisting of 10 questions was completed at the participants' houses using the 5-scale Likert method [18]. Validity and reliability of 10-question questionnaires have been confirmed in Iranian research [19]. To investigate the sexual satisfaction four questions of the sexual satisfaction index (SSI) questionnaire [8] which was about the experience of satisfaction with sex were also completed. In both questionnaires, higher scores represented higher satisfaction. The maximum acceptable score for both questionnaires was five. Cronbach's alpha for two questionnaires mentioned above was 0.84 and 0.79, respectively.

Concerning the possible relationship between demographic

Table 1: Demographic variables in the follow-up study of women (n=351).

| Variables | Frequency (%) |
|--|---------------|
| Age difference | |
| Woman's age<man's age | 271 (77.2) |
| Woman's age>man's age | 80 (22.8) |
| Woman's education | |
| Below high school diploma | 51 (14.5) |
| High school diploma or university education | 300(85.5) |
| Husband's education | |
| Below high school diploma | 88(25.1) |
| High school diploma or university education | 263(74.9) |
| Husband's income (from woman's viewpoint) | |
| Low | 22(6.3) |
| Acceptable or high | 329(93.7) |
| First-degree family relationship with the husband | |
| Yes | 63(17.9) |
| No | 288(82.1) |
| Duration of pre-marriage relationship | |
| < 12 months | 241(68.7) |
| ≥ 12 months | 110(31.3) |

Table 2: Respondents' satisfaction with 10 dimensions of marital satisfaction (n=351).

| Area of marital relationship | Frequency (%) |
|------------------------------|---------------|
| Personality issues | 283 (80.6) |
| Equalitarian roles | 313 (89.2) |
| Communication | 302 (86.0) |
| Conflict resolution | 261 (74.4) |
| Financial management | 292 (83.2) |
| Leisure activities | 278 (79.2) |
| Sexual relationship | 309 (88.0) |
| Children and marriage* | 216 (66.7) |
| Religious orientation | 258 (73.5) |

* Of 249 people who answered this item.

variables and marital satisfaction [10], participants were asked about their age and education, spouse's age, friendship period before marriage, income and the family relationship.

To examine the relationship between marital satisfaction (as dependent variable) and demographic variables, scores of mental health and sexual satisfaction, the multivariate linear regression was used.

Results

Of 386 women who completed the questionnaire before marriage, 351 ones completed marital satisfaction and sexual satisfaction questionnaires one year after the marriage (response rate = 90.9%). Demographic variables in drop outs showed no significant difference with others. The mean ($\pm SD$) age of participants and their spouses was 23.6 ± 5.1 and 27.0 ± 5.3 respectively, although in nearly 23% of cases women were older than men. In about a third of cases, they

Table 3: Multiple Linear Regression Results for associated factors of marital satisfaction^a.

| variables | Unstandardized regression coefficient | Standardized regression coefficient | P value |
|--------------------------------------|---------------------------------------|-------------------------------------|---------|
| Wife's age | -0.006 | -0.054 | 0.354 |
| Husband's age | 0.004 | 0.039 | 0.5 |
| Wife's education | 0.142 | 0.084 | 0.069 |
| Husband's education | 0.03 | 0.022 | 0.621 |
| Income | 0.046 | 0.025 | 0.55 |
| Consanguineous marriage | 0.003 | 0.002 | 0.961 |
| Duration of premarriage relationship | 0.06 | 0.049 | 0.251 |
| Sexual satisfaction | 0.506 | 0.504 | <0.001 |
| Premarital GHQ-12 score | -0.063 | -0.288 | <0.001 |

^aR² = .441, F(9, 343) = 31.07, p < .001.

were friends for more than one year, before getting married (Table 1). Furthermore 71% of participants were pregnant or had children.

The mean ($\pm SD$) score of women's mental health was 5.0 ± 2.7 before marriage; that is, 51.0% of them were normal. The mean ($\pm SD$) score of sexual satisfaction and marital satisfaction was 4.4 ± 0.6 and 3.9 ± 0.7 respectively. Considering 10 dimensions of the Enrich questionnaire, the highest satisfaction was found in equalitarian roles and sexual relationship aspects and the lowest satisfaction was observed in the religious orientation aspect (Table 2).

In the multivariate linear regression model, sexual satisfaction and mental health were related to the marital satisfaction after controlling for demographic variables. The model with demographic variables, sexual satisfaction and GHQ-12 scores produced R² = .441, F(9,343) = 31.07, p < .001 (Table 3). To explore the relationship of premarital mental health with marital satisfaction score one year after marriage, the following working formula may be introduced:

EMS score = (-.006*Wife age) + (.004*Husband age) + (.142* Wife's education) + (.030* Husband's education) + (.046* Husband's income) + (.003* Consanguinity) + (.060* Duration of premarriage relationship) + (.506* Sexual satisfaction) + (-.063* GHQ-12) + 1.621.

Discussion

Researchers tended to identify the factors predicting a successful marriage. This study showed that the baseline level of psychological wellbeing of women before marriage had a significant relationship with their satisfaction with marital life, one year later. GHQ-12 score was negatively and significantly correlated with the marital satisfaction score, indicating that those with lower scores on GHQ-12 (i.e., higher mental health) tend to have higher marital satisfaction.

In the Surgeon General report in 1999 prepared based on 3000 research articles, the role of mental health was clarified as a foundation for successful performance of Americans in various aspects of life including school, workplace, parental role and other relationships [20].

Marriage (marriage which causes marital satisfaction) has been proved to protect the mental health [21]. Despite studies conducted on the effects of marriage and marital satisfaction on mental health, the impacts of premarital mental health on marital satisfaction have not been examined appropriately.

According to World Health Organization, mental disorders are prevalent in all countries of the world, and if they are not diagnosed or if left untreated, they will lead to a dysfunction in the family and community [22].

Although none of the studies examining the relationship between psychiatric disorders and marital satisfaction have regarded premarital mental health as the zero time, most of them have observed a strong relationship. In a prospective study in England, the impact of changes in partnership status over lifetime was examined [23]. The authors of this study acknowledged that marital dissatisfaction had a deteriorating effect on mental health. In a multinational study, mental disorder was identified as a predictor of divorce [9]. Although it was tried to comply with reverse causality in this study, mental disorders were measured based on retrospective reports [9]. Our finding regarding the importance of mental health screening in marriage applicants has an important pragmatic application. Since mental disorders have negative effects on interpersonal relationships; even affecting work performance and the relationship between the couple's families [11], early diagnosis of such cases may prevent later marital dissolution by prompt interventions to manage mental disorders. Introduction of the formula was not intended for any specific prediction because sexual satisfaction mentioned in the formula is not plausible before marriage in our culture. We introduce it to illuminate the role of premarital mental health in marital stability considering other potential associated factors.

In addition to mental disorders which had a negative impact on marital satisfaction, the only variable which showed a significant relationship with marital satisfaction in the regression model was sexual satisfaction which showed even stronger relationship than mental disorders. Based on the Enrich questionnaires [18], among the ten components of marital satisfaction examined in this study, sexual satisfaction had the second highest rank, and more than one tenth of women stated that their sexual relationship was not satisfactory. Although assessing the association between marital satisfaction and sexual satisfaction may be influenced by the temporal relationship, prospective studies have shown that sexual satisfaction is one of the most important predictors of marital satisfaction [24,25]. Like other countries of the world, Iranian studies have appropriately clarified the relationship between sexual satisfaction and marital stability [25]. Since the effect of premarital sexual education on sexual satisfaction has been determined in both Western culture [26] and nonwestern

countries [8], it is recommended that high quality premarital sex education must be held for couples who want to marry [8].

This study revealed that that religious orientation and conflict resolution were the two most dissatisfied dimensions of marital quality. In Latino couples it was explored that conflict resolution style and religiosity were the two most determinants of marital satisfaction, which both of them are interrelated with mental health status [27].

Two limitations of the study would be necessary to be explained. First, in measuring marital satisfaction by EMS it should be notified that one of the ten dimensions of marital satisfaction was assessed by an item related to sexual satisfaction. Meanwhile SSI which measured the quality of sexual relationships was entered in the model as a predictor variable of marital satisfaction. Second, couples after the first year of marriage, are still in honey moon period and it was better to measure the marital satisfaction after a longer period.

Concerning the high prevalence of mental health problems in the society and the role of mental health in relation to marital satisfaction, it is suggested that people who want to marry would be screened for mental health using GHQ-12 questionnaire so as to, if necessary, take some measures to restore their mental health before marriage. Although mental health may change over time, examining the mental health of marriage volunteers may shed light on psychological aspects of marital quality. Measures such as increasing community mental health literacy, destigmatizing mental illness, and providing mental health care and psychiatric consultation services [28,29]. Moreover, high quality premarital sexual education must be considered by the policymakers. To generalize the results of this study to other settings, similar studies must be conducted on both sexes in other societies.

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