

SOMATIC SYMPTOMS AND RELATED FACTORS OF EARLY-AGE MARRIAGE AMONG WOMEN: A POPULATION-BASED CROSS-SECTIONAL STUDY

Erken Yaşta Evlenen Kadınlarda Somatik Belirtiler Ve İlişkili Faktörler: Toplum Tabanlı Kesitsel Bir Çalışma

Mahmut Bulut¹, Mehmet Cemal Kaya¹, Yasin Bez¹, Mehmet Güneş¹, Abdullah Atlı¹, Süleyman Demir¹, Aslıhan Okan İbiloğlu¹, Cem Uysal¹, Aytekin Sır¹

¹Dicle Üniversitesi, Tıp Fakültesi, Psikiyatri Anabilim Dalı, DİYARBAKIR

ABSTRACT

Aim: Child marriage still persists for various reasons in numerous countries and cultures including primarily the underdeveloped or developing countries in South Asia and North Africa. In this study, our aim is to focus on the frequency of child marriage as well as the family characteristics and socio-cultural factors pertaining to marriage, frequency of domestic violence, and somatic symptoms such as pain of unknown origin among the women.

Methods: Our study was conducted using a questionnaire presented to 454 women aged 17-65 living in the provincial centre of Diyarbakir.

Results: The families of 17.3% of the participants had a history of migration before the marriage. Close-kin marriage was present between the parents of 31.1% of the women. Among the participants, 17.3% were subjected to physical abuse and 1.8% were subjected to sexual abuse before the marriage. Among the women, 33.3% replied that they had chronic pain of unknown origin which the physicians could not diagnose.

Conclusions: We have observed that chronic pains of unknown origin pointing to somatisation are more frequent among women who get married before the age of 18. The results of our study point out that underage marriage has an impact not only on sexual and reproductive health, but also on general health.

Key Words: Early age marriage, health consequences, pain of unknown origin

ÖZ

Amaç: Çocuk evlilikleri günümüzde daha çok Güney Asya ve Kuzey Afrika gibi az gelişmiş ya da gelişmekte olan ülke ve kültürlerde değişik sebeplerden dolayı görülmektedir. Bu çalışmada ki amacımız çocuk evliliklerin sıklığını, bu evliliğe iten faktörleri, aile karakteristiklerini ve bu kadınlarda nedeni bilinmeyen ağrıların araştırılmasıdır.

Yöntem: Çalışmamız bir anket çalışması olup Diyarbakır da yaşları 17-65 yaşları arasında değişen 454 kadına uygulanmıştır.

Bulgular: Katılımcıların %17.3' ünün evlenmeden önce göç durumu, %31.1'inde akraba evliliği, %17.3'ünde fiziksel istismar, %1.8'inde evlenmeden önce cinsel istismar ve %33.3'ünde nedeninin bulunamadığı kronik ağrıları mevcut idi.

Sonuçlar: Çalışmamız sonucunda 18 yaş altında evlilik yapan kadınların çoğunda orijini bulunamamış somatizasyon olduğu kanaatine varılan ağrılara rastlanılmıştır. Çalışmamız göstermiştir ki erken yaş evlilikler sadece cinsel sağlığa ve üreme sağlığına değil aynı zamanda genel anlamda sağlığa etki eden bir faktördür.

Anahtar Kelimeler: Erken yaş evlilik, tıbbi sorun, nedeni bilinmeyen ağrı

Gönderme tarihi / Received: 06.11.2015 **Kabul tarihi / Accepted:** 21.01.2016

İletişim: Prof. Dr. Mahmut Bulut, Dicle Üniversitesi, Tıp Fakültesi, Psikiyatri AD, Diyarbakır, TURKEY

Tel: 0 533620 6490 **E-posta:** drmahmutbulut@yahoo.com

INTRODUCTION

According to the Convention on the Elimination of all Forms of Discrimination against Women adopted also by Turkey, marriages entered into before the age of 18 are considered as underage marriage (1, 2). Child marriage still persists for various reasons in numerous countries and cultures including primarily the underdeveloped or developing countries in South Asia (45%) and North Africa (40%) (1, 2). Child marriage disproportionately affects girls. Due to the early marriage, individuals are separated from their families and friends, are robbed of their childhood and exposed to domestic violence. Also, their psychological and physical development are compromised, their education is broken up and their chance to get a profession is jeopardised. Since underage marriage is not legal, unofficial marriages are entered into and thus girls/women are deprived of their right of legal redress when they face with problems in the marriage. They also lose legal rights including the right of property (1, 2). Child marriages usually lead to early and frequent pregnancies and thus increase the risk maternal or child mortality (3-5). Also, according to a study, psychiatric disorders are more frequently observed and the risk of developing such disorders increases among women who have entered into underage marriages (6).

In Turkey, the age at first marriage is rising among women due to the increasing rate of urbanisation and the extended duration of education. While the mean age at first marriage in Turkey was 19.5 years twenty years ago, it was observed to have risen to approximately 22 years in 2008 (7). Also, the frequency of underage marriage in western Turkey is lower in comparison to the east, where this ratio may reach up to 56.1% (2, 8). Factors influencing underage marriage are lower educational attainment, lower socioeconomic status, residence in rural areas, larger families and the language spoken within the family (4, 8, 9). Also, socio-

cultural factors play an important role in underage marriage and a study conducted in the south-eastern region of Turkey has pointed out culture-specific traditions such as bride exchange, betrothal in the cradle, marriage between cousins and family honour as the causes of underage marriage (8, 10).

There are very few studies conducted on underage marriage in our country and there is no study at hand scanning the frequency of health problems, pain of unknown origin, domestic violence, bride price or sexual abuse in underage marriages.

In this study, our aim was to focus on the frequency of underage marriage (below the age of 18) as well as the family characteristics and socio-cultural factors pertaining to marriage, frequency of domestic violence, and somatic symptoms such as pain of unknown origin among the married women living in the provincial centre of Diyarbakir in the south-eastern region of Turkey. We also aimed to compare women married below the age of 18 with those who were married at an adult age and to specify the factors related to underage marriage.

MATERIAL AND METHOD

Our study was conducted using a questionnaire presented to 500 women aged from 17 to 65 living in the provincial centre of Diyarbakir between 14-18 November 2011. According to the 2011 data of the Turkish Statistical Institute (TUIK), Diyarbakir is the largest province in the region with 1.132.351 inhabitants, among which 577.441 are male and 554.410 are female (11). The sample size was determined according to the World Health Organization Manual on Sample Size Determination in Health Studies. The acceptable error rate of the study sample was taken as 5%; the Confidence Interval was 95% and the

expected participation rate was calculated as 45%. Accordingly, the calculated minimum sample size of 384 was rounded up to 500 questionnaires.

The study sample was selected through a process including the following steps: Firstly, the population characteristics (age, sex, educational and financial status) of Diyarbakir were specified based on the values of TUIK, then quotas reflecting the age and sex features of this population were set according to these characteristics. Also, the provincial centre of Diyarbakir has been divided according to the borders of the four main counties and these counties have been further sub-divided within themselves in order to assign the pollsters.

The pollsters were selected from amongst the female students of Dicle University who are fluent in Kurdish and Turkish spoken in the region. Before the start of the study, the pollsters were trained at the Dicle University Social Studies Research Centre (DUSAMER) regarding the survey to be conducted.

Women who participated in the study were contacted face to face and given information about the study and the questionnaire were used in the survey. After their oral consent to volunteer in this survey, they were asked to reply to the questionnaire and consequently the study was obtained. The topics included in the study for which answers were sought can be summarised as follows:

The questionnaire was composed of 52 questions and was to be filled by the pollsters.

- Family characteristics of the women before marriage (financial status, number of siblings, close-kinship between the parents, history of migration),
 - Social and cultural aspects of the marriage process (bride price, bride exchange, betrothal in the cradle, close-kin marriage),
 - Age of marriage, age of first pregnancy, number of children, number of miscarriages, marital harmony,

- Any abuse before or during the marriage,
- Any health problems or chronic pain of unknown origin.

Statistical analysis: In order to create a database, the purposes of the study were formed by entering the survey-data into the computer. All the analyses related to the study were performed using the SPSS 18.0 for Windows software package.

The results of the study were analysed in 2 steps: In the first step, the data obtained from all the women who participated in the study were analysed using descriptive statistics. In the second step, women who got married before the age of 18 were compared with those who got married at the age of 18 or later. For the comparisons, the student *t*-test was used for the parametric variables while the Chi-square test was used for the non-parametric variables.

RESULTS

For the purposes of the study, 456 women between the ages of 17 and 65 (mean age: 38.1 ± 11.6 years) were enrolled. Among the questionnaires, 44 were excluded from the study due to insufficient data and/or the failure or reluctance of the participants to complete the survey. The mean number of the siblings in the whole group was 7.2 ± 2.5 . Among the women, 21.7% (n=99) described the financial status of their families before marriage as poor, while 69.5% (n=312) described it as middle class and 8.8% (n=40) as wealthy. The families of 17.3% (n=79) of the participants had a history of migration before the marriage. Close-kin marriage was present between the parents of 31.1% (n=142) of the women. Among the participants, 17.3% (n=79) were subjected to physical abuse and 1.8% (n=6) were subjected to sexual abuse before the marriage.

Among the interviewed women, 36.4% (n=166) declared that they got married before the age of 18. The mean age of marriage was 19.3 ± 4.3 in

the whole group. In the group who had got married before the age of 18, the mean age of first marriage was 15.3 ± 1.4 years. Thus, 51.8% (n=86) of these women were younger than 15 years at the time of marriage. The youngest age of marriage was reported as 10 years. In the study group, 4.2% (n=19) did not perform civil marriages, while 1.3% (n=6) did not solemnize religious marriage. The youngest age of pregnancy reported in the study was 13. The mean number of children among all the participants was calculated as 3.48 ± 2.34 (lowest=0, highest=13).

In the study population, those who were married off in return to a bride price was 21.3% (n=96). The bride price was less than 1000 TL in 15.6% (n=15), between 1000 and 5000 TL in 3.5% (n=35), over 5000 TL in 25% (n=24), while 22.9% (n=22) did not specify any amount. In the case of 3 women, the bride price was over 100,000 TL. One of them declared that she was kidnapped and thus her husband had to pay a total bride price of 250,000 TL for her. The ratio of the women who were given in marriage through bride exchange or betrothal in the cradle was 3.5% (n=16).

Among all the participants, the ratio of those married with their relatives was 36.6% (n=167). This ratio was observed to be higher than the ratio of those with close-kinship between their parents (31.1%, n=1429).

Among the participants, 11.2% (n=51) were subjected to physical or verbal abuse by their husbands. In order to obtain the view of the participants about their general health, the question "do you have any health problems?" was directed to them. Among the women, 34.6% (n=152) answered positively to this question. Also, 33.3% (n=97) replied that they had chronic pain of unknown origin which the physicians could not diagnose.

In the second step of the analysis of the study data, women who had got married before the age of 18 (underage marriage) were compared with those who had got married at the age of 18 or later (**Table 1 and Table 2**).

The group who got married before the age of 18 shared similar characteristics with the group who got married at the age of 18 or later in terms of the mean number of siblings, the rank among the siblings, any history of migration before the marriage, performance of civil marriage, and any sexual abuse during childhood.

DISCUSSION

To the best of our knowledge this is the first study investigated the chronic pains of unknown origin pointing to somatisation in early-age marriage population.

In our study, the mean age of first marriage was 19.3 years and the rate of underage marriage was 36.4%. Among those who had got married before adulthood, 51.8% were married before the age of 15 and the lowest age of marriage was 10 years. In Western Europe, the age of first marriage may be up to 30.1 years of age (12). On the other hand, this age may be as low as 15.9 in developing countries (13). A study conducted in our country in 2003 has shown that 34.7% of all women get married before the age of 18. This ratio may rise up to 50% in economically less developed eastern regions. A study conducted in the south-east of Turkey has revealed the mean age of first marriage as 18.6 years (10). The ratio of underage marriage has been rising in the economically underdeveloped rural regions of our country (11). The ratio of underage marriages in our study, which has been found to be closed to the mean age of the whole of Turkey although we are in the south-east of the country, may be explained with the fact that we have only enrolled women who live in the provincial centre.

Table 1. Comparison in terms of the non-parametric variables of women who got married before the age of 18 with those who got married at the age of 18 or later.

	Before 18 years N=166	18 years or later N=288	Statistical analysis (χ^2)	<i>p</i>
Financial status before marriage				
Poor	51 (30.7%)	48 (16.7%)	15.778	<0.001
Middle class	97 (58.4%)	219 (76%)		
Wealthy	18 (10.8%)	21 (7.3%)		
Migration in the family before marriage				
Yes	28 (17%)	53 (18.4%)	0.147	0.402
No	137 (83%)	235 (83.6%)		
Physical abuse in childhood				
Yes	37 (22.4%)	42 (14.6%)	4.479	0.040
No	128 (77.6%)	246 (85.4%)		
Verbal abuse in childhood				
Yes	28 (17.1%)	36 (12.5%)	1.798	0.207
No	136 (82.9%)	252 (87.5%)		
Sexual abuse in childhood				
Yes	3 (2.4%)	3 (1.3%)	0.671	0.416
No	120 (97.6%)	233 (98.7%)		
Did you solemnize religious marriage?				
Yes	164 (98.8%)	185 (99.7%)	1.165	0.558
No	2 (1.2%)	1 (0.3%)		
Did you perform civil marriage?				
Yes	160 (96.4%)	276 (96.2%)	0.014	0.906
No	6 (3.6%)	11 (3.8%)		
Has any bride price been paid for you?				
Yes	53 (32.1%)	43 (15.1%)	17.902	<0.001
No	112 (67.8%)	241 (84.9%)		
Did any bride exchange occur?				
Yes	12 (7.8%)	4 (1.5%)	10.295	0.001
No	142 (92.2%)	258 (98.5%)		
Has your opinion been asked before you got married?				
Yes	105 (65.6%)	237 (84.6%)	21.272	<0.001
No	55 (34.4%)	43 (15.4%)		
Is there close-kin marriage between you and your husband?				
Yes	81 (48.8%)	86 (29.9%)	16.235	<0.001
No	85(51.2%)	201 (70.1%)		
Is there close-kin marriage between your parents?				
Yes	46 (27.7%)	96 (33.3%)	1.450	0.136
No	120 (72.3%)	192 (66.7%)		
Do you have any health problems?				
Yes	80 (49.7%)	72 (26%)	25.232	<0.001
No	81 (50.3%)	205 (74%)		
Do you have any pain of unknown origin?				
Yes	49 (46.2%)	48 (%26.1)	12.254	<0.001
No	57 (53.8%)	136 (%73.9)		
Have you been exposed to physical or verbal abuse by your husband?				
Yes	26(15.6%)	25 (8.7%)	5.148	0.018
No	140 (84.4%)	263 (91.3%)		
Do you consider yourself pious?				
Yes	162 (97.6%)	25 (95.1%)	1.577	0.455
No	4 (2.4%)	14 (4.9%)		

Table 2. Comparison in terms of the parametric variables of women who got married before the age of 18 with those who got married at the age of 18 or later.

	Before 18 years N=166 (Mean±SD)	18 years or later N=288 (Mean±SD)	Statistical analysis (t)	p
Number of siblings	7.3±2.8	7.1±2.3	0.94	0.34
Your rank among siblings	3.5±2.1	3.7±2.4	-0.81	0.41
Number of people living at home	5.8±2.4	4.0±2.1	3.62	<0.001
Husband's age at the time of marriage	22.4±4.6	25.2±5.1	-5.80	<0.001
Age difference with the husband	7.0±4.5	3.6±4.1	8.24	<0.001
Number of children	4.65±2.38	2.81±2.02	8.36	<0.001
Age of first pregnancy	17.3±3.3	22.3±4.1	-13.94	<0.001
Number of miscarriages	1.1±1.3	0.7±1.3	2.79	0.005
Educational status (years)	2.6±2.5	4.5±4.6	-2.48	0.014

Mean educational status of the whole group: 3.9±4.1 years

In our study, the ratio of those who did not perform civil marriage was 4.2%, while the ratio of those who did not solemnize religious marriage was 1.3%. Those who were underage at the time of the marriage had performed civil marriage after they came of age. The reason why both civil marriage and religious marriage were so common in our study may be explained by the local traditions, restrictions of Islam - which is the religion of the great majority in the region - on extramarital sex, and the fact that religious marriage cannot replace civil marriage according to the Turkish Legislation (14).

While the religion of the majority in our region is Islam, there was no significant difference between both groups in terms of piety ($p>0.05$). This point shows that piety does not play a role in underage marriage.

Bride price is a tradition prevalent mostly in the eastern regions of our country and represents the dowry paid in terms of money or goods to the bride's family by the groom (15). In the whole study group, the ratio of bride price given at the

time of marriage was 21.3%. In a study conducted in 1996, the ratio of bride price in Turkey was found as 28% (10). According to the results of our study, although its prevalence is falling, the tradition of bride price is still continuing. The rate of bride price observed in our study was higher among those married before adulthood in comparison to those married after the age of 18 (32.1% and 15.1%, respectively; $p<0.001$). Also, the financial status of those who got married before adulthood was lower than the group married at the age of 18 or later ($p<0.01$). Indeed, underage marriage is more frequently observed in lower socio-economic groups. Especially in patriarchal societies, early marriage of the girls may help families of lower financial status to avoid food, clothing and school expenses and may even contribute to the family through the bride price (16, 17). This may be the reason why we observed the tradition of bride price more frequently in underage marriages.

No difference was observed in terms of close-kinship between the parents in the group that

got married before the age of 18 and those who got married in adulthood (Table 1). This has shown us that financial factors play a greater role in underage marriage than close-kinship between the parents.

Among those who got married before the age of 18, the rate of the women whose opinion was asked before the marriage was lower than the adult marriage group (Table 1). The traditions of bride exchange, betrothal in the cradle and close-kin marriage were also more frequently observed in this group (Table 1). A previous study conducted in our region has revealed that culture-specific marriage patterns such as close-kin marriage, bride exchange and arranged marriage are more frequently observed in underage marriages (8). The belief that women are sentimental and therefore cannot make sound decisions like men, that women are valued according to their virginity and chastity, and that these values are a part of family honour which is too important to be left to women's discretion may be the reasons behind the culture-specific types of marriage such as bride exchange, betrothal in the cradle, and close-kin marriage common in the patriarchal society of our region (10).

Women entering into underage marriages are less able to express/realise themselves in their marriage than women who get married in adulthood and they are therefore at greater risk of physical and sexual abuse. In our study, women who got married before adulthood were subjected to greater domestic violence from their husbands (Table 1). Previously conducted studies on underage marriage have also revealed that women who get married before adulthood are more frequently subjected to violence from their husbands (18).

Our study is the first one that evaluated sexual abuse before underage marriage and no difference was observed in terms of the sexual abuse before marriage between the women who got married before adulthood and those who got married at the age of 18 or later ($p>0.05$). Epidemiological studies have revealed the frequency of childhood sexual abuse among women to be between 6% and 62% (19, 20). This ratio was 2.4% among those who got married before adulthood and 1.3% in those who got married after reaching adulthood. The fact that the ratio observed in our study is much lower than the literature may be explained with a number of reasons:

1. In our region, any sexual activity out of wedlock is religiously and culturally shunned and regarded as an act hurting the family honour.
2. Fearing illegal punishment methods such as honour killing as a result of these acts, which are regarded as shameful, the participants may have refrained from reporting sexual abuse and/or such sexual abuse may have occurred in lesser amounts due to the same reason.

One of the most important results of our study is that the frequency of any disease among the women who got married before the age of 18 was statistically significantly higher ($p<0.001$). The health problems observed in women who get married before adulthood are generally related to reproductive and sexual health and there is no study focussing on the problems of general health. Reproductive and sexual health is negatively affected in women who get married before the age of 18 and they do not benefit from health centres adequately (18). This may further affect the general health of these women. The results of our study point out that underage

marriage has an impact not only on sexual and reproductive health, but also on general health.

In our study, the frequency of chronic pain of unknown origin was statistically significantly higher in women who got married before the age of 18 ($p < 0.001$). Both physiological and psychological mechanisms play a role in the aetiology of the pain of unknown origin (21). The term somatisation refers to the physical symptoms caused by intrapsychological conflicts (22). For the diagnosis of somatisation, there must be symptoms strong enough to require medical help, which cannot be explained by any physical disorder (23). In our study, through the question "do you have any chronic pains that the doctors could not find out the cause of?", we focussed on chronic pains that cannot be explained by any physical disorder and point to somatisation. Keeping in regard that the frequency of psychiatric disorders is higher in women who got married before adulthood (6). We have observed that chronic pains of unknown origin pointing to somatisation are more frequent among women who get married before the age of 18.

In conclusion, Underage marriage is commonly observed in our region and financial status, traditional marriage patterns and customs such as bride price are the contributing factors. They more frequently describe illness or chronic pain of unknown origin. This is indicative of the fact that underage marriage has a negative impact on women's health.

REFERENCES

1. U.N. Convention on the elimination of all forms of discrimination against women 2009. Available from: <http://www.un.org/womenwatch/daw/cedaw/>.
2. UNICEF. Protecting Against Abuse, Exploitation And Violence: Child Marriage: UNICEF; 2007. Available from: http://www.unicef.org/progressforchildren/2007n6/index_41848.htm.
3. Ahmad K. Pregnancy complications kill 70,000 teenagers a year. *Lancet*. 2004;363(9421):1616-.
4. Edirne T, Can M, Kulusari A, Yildizhan R, Adali E, Akdag B. Trends, characteristics, and outcomes of adolescent pregnancy in eastern Turkey. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics*. 2010;110(2):105-8.
5. Raj A. When the mother is a child: the impact of child marriage on the health and human rights of girls. *Arch Dis Child*. 2010;95(11):931-5.
6. Le Strat Y, Dubertret C, Le Foll B. Child marriage in the United States and its association with mental health in women. *Pediatrics*. 2011;128(3):524-30.
7. Hacettepe University Institute of Population Studies, Turkey Demographic and Health Survey. In: Tezcan S, editor. Ankara, Turkey: Hacettepe Üniversitesi Hastaneleri Basimevi; 2008.
8. Ertem M, Saka G, Ceylan A, Deger V, Ciftci S. The factors associated with adolescent marriages and outcomes of adolescent pregnancies in Mardin Turkey. *J Comp Fam Stud*. 2008;39(2):229-39.
9. Gokce B, Ozsahin A, Zencir M. Determinants of adolescent pregnancy in an urban area in Turkey: a population-based case-control study. *Journal of biosocial science*. 2007;39(2):301-11.
10. Ertem M, Kocturk T. Opinions on early-age marriage and marriage customs among Kurdish-speaking women in southeast Turkey. *The journal of family planning and reproductive health care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists*. 2008;34(3):147-52.
11. Institute TS. Provincial/county center and town/village populations - 2011 2011. Available from: http://rapor.tuik.gov.tr/reports/rwervlet?adnksdb2&ENVID=adnksdb2Env&report=wa_turkiye_il_koy_sehir.RDF&p_il1=21&p_kod=2&p_yil=2011&p_dil=1&desformat=html.
12. Nault F. Twenty years of marriages. *Health reports / Statistics Canada, Canadian Centre for Health Information = Rapports sur la sante / Statistique Canada, Centre canadien d'information sur la sante*. 1996;8(2):39-47(Eng); 1-50.

13. Aryal RH. Socioeconomic and cultural differentials in age at marriage and the effect on fertility in Nepal. *Journal of biosocial science*. 1991;23(2):167-78.
14. Türk Medeni Kanunu (The Turkish Civil Code), Stat. 4721 (22 Kasım 2001, 2001).
15. Definition of the bride price Turkish Language Institute. Available from: http://www.tdk.gov.tr/index.php?option=com_gts&ara_ma=gts&guid=TDK.GTS.52fe0ad72a7122.20555598.
16. Nour NM. Health consequences of child marriage in Africa. *Emerging infectious diseases*. 2006;12(11):1644-9.
17. Svanemyr J, Chandra-Mouli V, Christiansen CS, Mbizvo M. Preventing child marriages: first international day of the girl child "my life, my right, end child marriage". *Reproductive health*. 2012;9:31.
18. Santhya KG. Early marriage and sexual and reproductive health vulnerabilities of young women: a synthesis of recent evidence from developing countries. *Current opinion in obstetrics & gynecology*. 2011;23(5):334-9.
19. Golding JM. Sexual assault history and limitations in physical functioning in two general population samples. *Research in nursing & health*. 1996;19(1):33-44.
20. Finkelhor D. The international epidemiology of child sexual abuse. *Child abuse & neglect*. 1994;18(5):409-17.
21. Williams AC, Johnson M. Persistent pain: not a medically unexplained symptom. *The British journal of general practice : the journal of the Royal College of General Practitioners*. 2011;61(591):638-9.
22. Marin C, Carron R. The origin of the concept of somatization. *Psychosomatics*. 2002;43(3):249-50.
23. Lipowski ZJ. Somatization: the concept and its clinical application. *The American journal of psychiatry*. 1988;145(11):1358-68.