ELSEVIER

Contents lists available at ScienceDirect

# **Archives of Psychiatric Nursing**

journal homepage: www.elsevier.com/locate/apnu



# Predictors of marital adjustment among child brides

Seher Durğut<sup>a</sup>, Sezer Kısa<sup>b,\*</sup>

- <sup>a</sup> Bitlis Government Hospital, Department of Obstetrics and Gyneocology, Bitlis, Turkey
- b Oslo Metropolitan University, Faculty of Health Sciences, Department of Nursing and Health Promotion, Kjeller, Oslo, Norway



ARTICLE INFO

Keywords: Adaptation Child bride Early marriage Marital adjustment Women

#### ABSTRACT

The researchers aim was to examine the predictors of marital adjustment among child brides in Turkey. The sample included 246 women who were between 18 and 49 years of age, got married while under the age of 18, not divorced, who spoke Turkish or Kurdish, by using convenience sampling method. We used a marital adjustment scale and a survey form to collect data. Our findings indicated that marital adjustment was low among child brides. The factors affecting women's marital adjustment were duration and types of the marriage, number of pregnancies and physical violence. The incidence of physical violence was inversely correlated with the scores of marital adjustment of women, while the women's age, education, income level, number of living children, age, and the education level of their partner was not correlated. The results of this study would be useful for nurses, midwives, social workers, and counselors who assist women who are facing domestic violence.

#### Introduction

Marital adjustment is a significant aspect of family life, which shapes couple's satisfaction and well-being (Allendorf & Ghimire, 2013; Basharpoor & Sheykholeslami, 2015). According to Locke and Williamson, marital adjustment is a multidimensional concept and forms by the harmony with men and women in terms of friendship, agreement on core values, emotional proximity, accommodation, and happiness (Locke & Williamson, 1958). Marital adjustment has been found to be strongly associated with physical and psychological well-being of individuals (Basharpoor & Sheykholeslami, 2015; Hollist, Miller, Falceto, & Fernandes, 2007; Robles, Slatcher, Trombello, & McGinn, 2014). In addition to diseases such as depression, heart diseases, and cancer, selfesteem, dissatisfaction and domestic violence are among the most common problems in an inharmonious marriage (Umberson, Williams, Powers, Liu, & Needham, 2006; Williams, 2003). A number of affecting factors have been emphasized in studies on the marital adjustment such as age, gender, duration of marriage, employment status, marriage form, unrealistic expectations, level of education, number of children, absence of age difference between couples, acquaintance before marriage, social support, physical environment, positive emotions, religiosity, and the possibility of acquiring new skills and information, and lack of preparation for marriage and child marriages (Batool & Khalid, 2012; Jamabo & Ordu, 2012; Rahmani, Alahgholi, Merghati, et al., 2009; Tutarel Kışlak & Göztepe, 2012; Zhang, Ho, & Yip, 2012).

Child marriage is defined as a formal marriage or informal union before age 18 (UNICEF, 2001). Although found in most countries of the world, child marriages are much more widespread and common in underdeveloped or developing countries (UNFBA, 2012). A report indicated that nearly one in every four adolescent girls aged 15–19 in the developing countries is currently married or in a union (UNFBA, 2012). Worlwide, 8% of women between the ages of 20 and 24 were married before age 15 and one in every four women was married before age 18. In less developed countries, this rate ranged between 15 and 42% (UNICEF, 2016). Countries in the eastern and western parts of Africa and South Asia rank among the highest in the world (UNICEF, 2016) and Turkey is the highest in Europe with regards to the rates of child brides (UNICEF, 2016). In Turkey, 22% of women between the ages of 25 and 49 were married by the time they turned 18 and 4% got married before their 15th birthday (TDHS, 2013).

Child marriages are an important human rights issue that hampers every aspect of a girl's development. Düzen and Atalay (2014) reported that the risk of death for women between 10 and 14 years old during pregnancy is five times higher than for women between 20 and 24 years old. Respectively, infants born to mothers in the first age bracket were five times more probable to die than those born to mothers in the second age bracket. According to the International Women's Research Center (ICRW), child brides were likely to be exposed to double the amount of physical violence and three times the amount of sexual violence in comparison to older age groups (ICRW, 2007). In addition, depression and suicide rates were found to be higher in child marriages (Gage, 2013). In addition to the negative impact on the mother's and infant's health due to frequent and early pregnancies (Hampton, 2010), complications in pregancy and childbirth such as obstetrics fistula,

E-mail address: SezKisa@hioa.no (S. Kısa).

<sup>\*</sup> Corresponding author.

prolonged childbirth, obstructed labor, low birth weight infants and unaware of their rights to access contraception (Raj, Saggurti, Balaiah, & Silverman, 2009), early marriages were also associated with social and economic development (Raj et al., 2009), women's basic education, work life access, feminization of poverty, violence, abuse and victimization, nutritional status, life satisfaction and problems related to marital adjustment (Erulkar, 2013; Goli, Rammohan, & Singh, 2015; Nour, 2006; Stanley, Ragan, Rhoades, & Markman, 2012; Tezcan & Coskun, 2004; UNICEF, 2016). A review study indicated that age at marriage has a strong effect on the country's fertility rate by increasing the crude birth rate that has a positive impact on population growth (Marphatia, Ambale, & Reid, 2017), A recent study from Sub-Saharan Africa indicated that improving gender equitable norms and opportunities for girls are likely to improve social status of women in the community (Petroni, Steinhaus, Fenn, Stoebenau, & Gregowski, 2017). Age at marriage has a strong effect on women's empowerment and agency within households and their status in the broader community (Marphatia et al., 2017). In patriarchal societies, society chooses different ways to control women's behavior and sexuality. In order to control women's sexuality, girls are forced to marry at an early age. Early married girls give birth to many children, cannot work in a job that brings money due to child care, cannot make their own decisions (Kaynak Malatyalı, 2014; Petroni et al., 2017). Men decide about education of the children and expenditures, health care needs. Such cultural practices cause gender inequality and a decrease in the social status of women (Bates, Maselko, & Schuler, 2007; Marphatia et al., 2017; Nour, 2006; Petroni et al., 2017).

## Turkey

When the issue of child brides in Turkey is examined, it is seen that there are various reasons for the continuation of child marriage, including poverty, having a poor education, exposure to violence, traditional practices, the protection of honor and gender view of the family (Düzen & Atalay, 2014; Kaynak Malatyalı, 2014; Tezcan & Coşkun, 2004; UNICEF, 2005). Children, especially girls, are seen as an economic burden on some families due to poverty. In addition, families get money under the dowry system which is a sum of money; men pay to the brides' family in order to marry their daughters, when they marry their girls (Tezcan & Coşkun, 2004). Therefore, families force their daughters into marriage at a young age. In these cases, the choice of partner is often made by the head of the family or the parents, marriage is seen as an economic adjustment rather than a personal choice. Moreover, Turkish girls are under the obligation to protect their virginity. Early marriage is perceived as a way to protect the reputation of the family by preventing sexual relations outside of marriage (Boran, Gökçay, Devecioğlu, & T., 2013; Kaynak Malatyalı, 2014). Traditional practices among different kinds of marriage such as dowry, berdel (changing the girls between families) and cradle, which still exists in some parts of Turkish society also cause girls to be married at an early age.

Improving the quality of marital life is extremely important in terms of the physical and psychological health of married individuals. However, there is little information on the marital adjustment of child brides. This is almost a new topic which is not extensively studied in Turkey. Therefore, the researchers aimed to examine the predictors of marital adjustment among child brides in Turkey. The main objectives of the study were to determine the marital adjustment of the child brides and to examine the factors like age, partners` age, educational status, income level, number of living children, age at marriage, marriage types, and presence of physical violence on marital adjustment of child brides.

#### Methods

## Samples

This descriptive study included 246 women (using convenience sampling) who were admitted to the Obstetrics and Gynecology Clinic of the Bitlis Government Hospital, were between 18 and 49 years of age, got married while under the age of 18, not divorced, who spoke Turkish or Kurdish and agreed to participate in the study. Out of 288 women, 21 women refused to participate in the study due to fear of facing a legal investigation, and not getting a permission from their husbands, 12 women did not want to state their opinions about their marriage, and 9 women stated lack of time. According to Erulkar, in order to have the greatest impact in reducing the prevalence of child marriage, programs to address child marriage should focus on regions where a large proportion of girls are married before the age of 15 (Erulkar, 2013). Bitlis is located in the eastern part of Turkey and had one of the highest child marriage rates in 2014 (TSI, 2014).

#### Data collection

Researchers developed a survey form in the direction of literature (Boran et al., 2013; Tutarel Kışlak, 1999; Yalçın, 2014). They used the survey form and the marital adjustment scale (MAS) to collect data. The first part of the validated survey form included the socio - demographic information of the participants, the second part included the questions related to pregnancy and childbirth and the third part included questions about marriage life. We carried out a pilot study involving 40 women who were not included in the main study. Based on the pilot study results, the survey form was found to be appropriate in terms of usability. Data collection was done between 1 July and 31 October 2014. The implementation of the data collection tools took about 25 min for each participant. The tools were completed by the women. For illiterate participants, the researcher instructed the survey questions. The researcher knows the language spoken in the area, Kurdish, and created a reassuring environment for women in the sample.

# Marital adjustment scale

The MAS is a 15-item scale developed by Locke and Wallace (1959). Although it was developed in 1959, it still continues to be a widely used tool for evaluating marital relationships. The validity and reliability of the Turkish version was tested by Tutarel Kışlak (1999). The MAS placed couples and individuals into satisfied and dissatisfied groups according to their scores and measured their marital happiness. The MAS consists of one question related to general compliance, a single item scored as 0 (very unhappy) to 35 (perfectly happy); eight questions about the possible areas of agreement, six of the eight questions scored on a 6-point Likert scale ranging from 0 (Always disagree) to 5 (Always agree), a single item scored on a 6-point Likert scale ranging from 0 (Always disagree) to 8 (Always agree) another single item scored ranging from 0 (Always disagree) to 15 (Always agree) on the same scale; and six questions to measure conflict resolution, commitment, and communication. The maximum point for the scale is 60, and the minimum score is 0. The highest score indicates that women are happy in their marriages, while the lowest score indicates unhappiness. The cut-off point was determined to be 43.5 to distinguish individuals with compatible and incompatible marriage by Tutarel Kışlak. Cronbach's alpha coefficient was 0.84 (Tutarel Kışlak, 1999). Cronbach alpha internal consistency coefficient was found to be 0.90 and the reliability coefficient was 0.76 in the present study.

## Ethical dimension of research

The researchers received written permission from the Bitlis Hospital to conduct the study. The Gaziantep University, Faculty of Medicine

Ethics Committee approved the study (05.05.2014-No 164). Verbal and written permission was collected from the participants in the study. Women were not reimbursed for their time; participation was completely voluntary and anonymous.

# Statistical analysis

We input the data in the SPSS (version 18) for analysis. Mean scores of independent samples t-test and Anova test were calculated for normally distributed values. Findings were reported to be significant at a level < 05. We used the linear regression analysis to test the effect of independent categorical variables such as education, employment, family type, age at marriage, duration of marriage, presence of physical violence, etc. and their single and overall effect on the dependent variable of the marital adjustment (MA). Moreover, we used the mean, standard deviation, minimum and maximum ranges and percentages.

#### Results

Socio-demographic and marriage characteristics of the women and their partners

The average age of the women participating in the study was  $29.09 \pm 7.991$  (min = 18, max = 48), 53.3% of the women were between 18 and 28 year old, 58.9% were born in a village, 35.8% were illiterate,95.9% were housewives and 36.6% were living in a nuclear family. The average age of the women's partners was  $34.65 \pm 8.6$  (min = 18, max = 55), 8.9% of the women's partners were 49 years and older, 33.3% completed elementary school, and 15.9% were unemployed. The women's average age at marriage was  $16.05 \pm 1.1$  (min = 12, max = 17), 11% of women got married between the ages of 12 and 14 years, 53.3% of the women stated that there was a 0–5 year disparity in age between them and their spouses. About 70% were married to their partners through an arranged marriage, 55.3% stated that their family received a dowry from the men's family and 39.0% were physically harmed by their partner.

The mean MAS score of the participants

In this study, the mean MA score of the women was found to be  $37.79 \pm 9.13$  (min = 5, max = 56). It was determined that 64.2% of the women had a score of 43 points or less and 35.8% had > 43 points or more.

MAS scores according to the socio-demographic characteristics

The mean MA scores of women aged 29–38 years were  $37.05 \pm 9.61$  (min = 6, max = 55),  $37.4 \pm 11.45$  (min = 5, max = 56) for women aged 18–28 and  $40.52 \pm 7.98$  (min = 20, max = 53) for women between 39 and 48 years. The mean scores of women born in the city area were  $42.46 \pm 7.40$  (min = 25, max = 56),  $36.31 \pm 10.37$  for women born in the municipality, and  $36.44 \pm 11.02$  in the villages. Literate women with elementary school education levels had  $39.27 \pm 8.63$  for scores of MA,  $38.13 \pm 11.77$  for women with a middle school education, and  $35.71 \pm 11.61$  for illiterate women. The MA scores of employed women were  $33.70 \pm 13.69$  (min = 5,max = 56). There was no statistically significant difference between the mean scores of MA and the women's age, educational level, employment status of both spouses, and birth place (p > 0.05) (Table 1).

MAS scores according to the marriage characteristics

MA scores for 12–14 year old married women were  $36.03\pm11.54$  (min = 6, max = 54) and  $38.00\pm10.33$  (min = 5, max = 56) for women between 15 and 17 years old. The mean scores of MA according to marriage age were not found to be significant (p>0.05). Women who had 21–30 years of marriage had higher MA scores  $38.91\pm9.98$  (min = 6, max = 53) compared to other groups of marriage duration. The mean scores of MA according to marriage duration were found to be significant (p<0.05). The mean scores of MA were found to be higher for women who had self arranged marriages ( $40.56\pm10.10$ ) compared to women with self arranged marriage without families approval ( $31.20\pm14.28$ ) and women with berdel marriage ( $32.37\pm11.00$ ). The difference between form of marriage and the

 $\textbf{Table 1} \\ \textbf{MAS scores according to the socio-demographic characteristics of the women and their partners (n = 246). }$ 

Characteristics	n	Mean SD	Min	Max	Statistical values	
Age (years)					F	р
18–28	131	$37.48 \pm 11.45$	5	56		_
29-38	79	$37.05 \pm 9.61$	6	55	1.490	0.228
39–48	36	$40.52 \pm 7.98$	20	53		
Partner's age (years)					F	p
18–28	73	$39.54 \pm 10.71$	5	56		
29–38	100	$36.05 \pm 10.57$	5	55	0.005	0.933
39-48	51	$39.13 \pm 9.66$	6	55		
49 years and older	22	$36.77 \pm 10.17$	14	51		
Educational status					F	p
Illiterate	88	$35.71 \pm 11.61$	5	54		
Literate + elementary	113	$39.27 \pm 8.63$	9	55	2.935	0.055
Secondary and higher	45	$38.13 \pm 11.77$	5	56		
Employment status					t	p
Unemployed	236	$37.96 \pm 10.30$	5	55	1.264	0.207
Employed	10	$33.70 \pm 13.69$	5	56		
Partner's employment status					t	p
Unemployed	43	$35.00 \pm 13.54$	5	54		
Employed	203	$38.38 \pm 9.62$	5	56	-1.937	0.054
Place of birth					F	p
City	56	$42.46 \pm 7.40$	25	56		
Province	45	$36.31 \pm 10.37$	7	54	1.275	0.131
District	145	$36.44 \pm 11.02$	5	55		
Family type					t	p
Nuclear Family	156	$37.55 \pm 10.33$	5	56		•
Extended Family	90	$38.20 \pm 10.73$	5	54	0.463	0.644

Table 2 MAS Scores according to the marriage characteristics and the presence of physical violence (n = 246).

Characteristics	n	Mean SD	Min	Max	Statistical values	
Age at marriage (years)					t	p
12–14	27	$36.03 \pm 11.54$	6	54		
15–17	219	$38.00 \pm 10.33$	5	56	0.067	0.294
Duration of marriage (years)					F	p
0–10	112	$37.55 \pm 11.79$	5	56		
11–20	81	$37.48 \pm 9.030$	9	55	4.150	0.043
21-30	47	$38.91 \pm 9.982$	6	53		
31 years and over	6	$37.66 \pm 6.439$	30	44		
Age disparity between couples (years)					F	p
0–5	131	$38.59 \pm 8.971$	5	56		•
6–10	91	$36.89 \pm 12.48$	5	55	0.030	0.644
11–15	19	$35.63 \pm 9.833$	14	51		
16 years and more	5	$41.40 \pm 8.384$	34	51		
Relation to partner					F	p
First-degree relatives	69	$39.85 \pm 8.47$	15	54		•
Second- degree relatives	51	$35.00 \pm 9.91$	6	53	1.061	0.380
No relationship	126	$37.79 \pm 11.42$	5	56		
Status of dowry given before marriage					t	p
Yes	136	$37.17 \pm 10.85$	5	55	-1.027	0.479
No	110	$38.55 \pm 9.95$	9	56		
Presence of physical violence					t	p
Yes	96	$31.27 \pm 11.08$	5	52	-9.010	0.00
No	150	$41.96 \pm 7.535$	19	56		
Form of marriage					F	p
Arranged marriage (A <sup>1</sup> )	173	$37.54 \pm 10.09$	5	55		•
Self arranged marriage (A <sup>2</sup> )	55	$40.56 \pm 10.10$	10	56	8.673	0.034
Self arranged marriage (without family's approval(A <sup>3</sup> )	10	$31.20 \pm 14.28$	5	49		
Berdel (A <sup>4</sup> ) ***Difference: A <sup>2</sup> -A <sup>3</sup> , A <sup>2</sup> -A, <sup>4</sup>	8	32.37 ± 11.00	14	43		

mean scores of MA were found to be significant (p < 0.05). In this study, women who experienced physical violence (31.27  $\pm$  8.11) were found to have lower mean scores of MA compared to women who had not been exposed to physical violence (41.96  $\pm$  7.535). A statistically significant difference was found between the physical violence experience in marriage and the mean scores of MA (p < 0.05) (Table 2).

# MAS scores according to the fertility characteristics

A statistically significant difference was found between the number of pregnancies and the mean scores of MA (p < 0.05). Women with 0 to 5 pregnancies (38.20  $\pm$  10.69) were found to have higher scores of MA compared to those women with 11 or more pregnancies (29.87  $\pm$  14.94). The difference between the mean scores of MA were not found to be significant according to the number of living children and age of first pregnancy (p > 0.05) (Table 3).

**Table 3** MAS scores according to the fertility characteristics (n = 246).

with scores according to the returnly characteristics (ii = 240).							
	n	Mean SD	Min	Max	Statistical values		
Age of first pregnancy					t	р	
17 and under	76	$36.17 \pm 10.95$	5	55	1.582	0.115	
18 and older	143	$38.04 \pm 9.93$	6	56			
Number of pregnancies					F	p	
0-5 (A <sup>1</sup> )	168	$38.20 \pm 10.69$	5	56			
6–10 (A <sup>2</sup> )	70	$37.70 \pm 9.04$	18	55	1.476	0.036	
11 ve üzeri (A <sup>3</sup> )	8	$29.87 \pm 14.94$	6	46			
***Difference: A <sup>1</sup> -A <sup>2</sup> , A <sup>1</sup> -A <sup>3</sup>							
Number of living children					F	p	
0–3	140	$37.74 \pm 11.30$	5	56			
4–6	84	$37.65 \pm 8.21$	18	54	1.009	0.466	
7 and more	22	$38.63 \pm 12.79$	6	55			

# Linear regression analysis

According to multiple linear regression analysis, the incidence of violence was inversely associated with the scores of MA of women with standardized beta coefficients of -0.534~(p<0.05), while the women's age, education, income level, number of living children, age, and the education level of their partner was not associated with the scores of the marital adjustment of women, with standardized beta coefficients of 0.14, 0.10, 0.06, 0.02, 0.00 and -0.08, respectively (Table 4).

### Discussion

Marriage adjustment plays a crucial role in marital life and is one of the important factors affecting the physical and psychological health of individuals (Baker et al., 2000; Basharpoor & Sheykholeslami, 2015; Hollist et al., 2007; Robles et al., 2014). The most important factors

Table 4
Linear regression analysis of MAS scores.

	Unstandardized coefficients		Standardized coefficients	t	Sig.
	В	Std. error	Beta		
(Constant)	33.755	3.237		10.427	0.000*
Age	0.194	0.169	0.148	1.148	0.252
Educational status	1.547	0.934	0.106	1.657	0.099
Income level	0.905	0.870	0.063	1.041	0.299
Number of living children	0.124	0.415	0.025	0.298	0.766
Physical violence by partner	-11.423	1.263	-0.534	-9.044	$0.000_{*}$
Partners' age	0.003	0.150	0.002	0.017	0.987
Partners' educational status	-0.839	0.594	-0.089	-1.412	0.159

R = 0.54, R square = 0.30.

affecting marital adjustment in the literature are stated as marriage age (Yizengaw, 2014). Early marriages are seen all over the world (McFarlane, Nava, Gilroy, & Maddoux, 2016), but they are more prevalent in developing countries such as Turkey (TDHS, 2013). Therefore, we aimed to examine the predictors of marital adjustment among child brides in Turkey, where one of the highest rates of child marriages in Europe have been reported (UNICEF, 2016). Based on the findings, we found that the level of marital adjustment among child brides was low, but it was found to be higher among women who had self arranged marriages, fewer pregnancies, a short marriage duration, and not experienced physical violence. We believe that our results will help to guide future studies on this subject and can be used to determine the direction of help and advice on this hard to reach population.

In the present study, it was found that one out of every 10 women (ages 12–14) in the early adolescent age was married. As it is expected, when we look at the characteristics of the sample, we see that the sample is highly overrepresented by poor, rural, unemployed, and illiterate women which itself explain why this problem exits. The latest statistics showed that the age of marriage in the eastern and southeastern regions of Turkey has fallen to 12 (TDHS, 2013). Customary practices are mainly directed by the socio-cultural life in these regions, children who are unfit for marriage, both physically and psychologically, are forced to marry by their families for several reasons, including poverty and the protection of the families honor by preventing the premarital loss of virginity (Düzen & Atalay, 2014; Kaynak Malatyalı, 2014; Tezcan & Coskun, 2004; UNICEF, 2005). The finding of this study shows that there is a great need for discussing how to advocate for more resources for these families so their economic circumstances do not get dictate what becomes an unfortunate destiny for their daughters.

We found that marital adjustment was low among child brides and there is a connection between marital adjustment and marriage duration. Women's marital adjustment increases with a higher duration of marriage. There are conflicting results in the literature regarding the effect of the marriage duration on marital adjustment. Some national and international studies indicate that a longer marriage causes a decrease in marital adjustment (Bharambe & Baviskar, 2013; Ertop Güzel & Altay, 2012; Haj-Yahia, 2002), while other studies showed that a longer marriage increases marital adjustment (Jose & Alfons, 2007; Rahmani et al., 2009). Bharambe and Baviskar (2013) stated that couples who live together for a significant amount of time were expected to have formed a close relationship so they adjust very well to marriage.

We determined that the age disparity between spouses is not associated with marital adjustment. According to TDHS (2013), 43% of women were married to men who were at least five years older than them and 10% of women's partners were 10 years and older. Studies reported that there is a significant relationship between age difference and marital adjustment and a five-year and higher age difference between spouses was found to decrease marital adjustment (Rahmani

et al., 2009; Zhang et al., 2012). Our research result is inconsistent with the literature.

The form of marriage was found to be one of the determinants of marital adjustment. There appears to be two basic approaches when considering the ways of choosing spouses in Turkey. The first one is to choose a spouse without the intervention of someone else then to present your choice for the family's approval (self arranged marriage). The second approach is when the families decide who the children will marry (arranged marriage). In this society, the majority of marriages are still arranged by families (Kisa, Zeyneloglu, Yilmaz, & Guner, 2014). In the present study, women who had self arranged marriage had higher marital adjustment. Individuals who had an arranged marriage did not have the opportunity to get to know each other before marriage which can create problems in the marriage. This finding was consistent with the previous studies. The national studies showed that women who had a self-arranged marriage had higher marital adjustment (Ertop Güzel & Altay, 2012; Hortacsu, 2007). A study by Locke noted that length of acquaintance plays an important role in marital adjustment, especially for women, so couples who have less than one year of acquaintance have a lower marital adjustment (Locke & Williamson, 1958). Stanley et al. (2012) found that both premarital adjustment and premarital relationship satisfaction were variables that predicted harmony in marriage.

The researchers found that the reduction in the number of pregnancies is associated with increased marital adjustment. The research results were consistent with the literature (Yalçın, 2014). Batool and Khalid (2012) indicated that as the number of children increased, marriage adjustment decreased. Pregnancy is a factor that creates dissatisfaction in the marital life due to the restriction of the couple's time to show affection and compassion to each other and decrease in the sexual function during pregnancy (Da Costa et al., 2015; Kisa et al., 2014).

Results of this stud indicated highly significant relationship between marital adjustment and physical violence. Linear regression analysis also supported this conclusion. According to multiple linear regression analysis, the occurrence of violence was inversely correlated with the scores of marital adjustment. The finding was consistent with other studies. Previous studies stated that physical violence is closely linked with marital satisfaction and reduced the marital adjustment of women (Schumacher & Leonard, 2005; Simpson, Doss, Wheeler, & Christensen, 2007; Testa & Leonard, 2001). A study from Palestian reported that abused women expressed higher levels of negative patterns of communication with husbands and lower levels of commitment to marriage, marital satisfaction, affection, harmony, and happiness compared to nonabused women (Haj-Yahia, 2002). As expected, studies also stated that child marriages increase girls' vulnerability to sexual abuse and intimate partner violence (Begum, Donta, Nair, & Prakasam, 2015; Hong Le, Tran, Nguyen, & Fisher, 2014; Kidman, 2016). A study (2014) reported that women who experienced physical abuse, had early age at

p < 0.05.

marriage compared to women without violence (Ahmadi et al., 2017). Especially in the rural part, child marriages that develop in line with the decisions and preferences of the families, increase the domestic violence against woman due to the structural characteristics of the society. In such marriages, the decision of the girl is often ignored. Eventually, this situation will make marital adjustment difficult.

#### Conclusion

Studies associated with marital adjustment are particularly important in societies where child marriage is common such as Turkey. This study further builds the case of the negative impact of child marriage on women. In this study, the relationships between variables such as educational status, the age gap between spouses, number of pregnancies, number of living children, physical violence and marital adjustment are examined. Based on the findings of this study, we conclude that there is no significant relationship between demographic variables and the marital adjustment of women. However, we found that marital adjustment was associated with marriage duration, form of marriage, number of pregnancies. In addition, marital adjustment was found to be low among women who experienced physical violence. We also indicated that women married before 14 years have a greater likelihood of experiencing physical violence by their partner. The results of this study would be useful for nurses, midwives, social workers, and counselors who assist women who are facing domestic violence.

The social and cultural structure of the conventional, conservative, and patriarchal values, marital issues—especially in rural areas—are seen as taboo and not to be talked about openly, women may not feel comfortable discussing marital issues. Therefore, the following conclusions have been made in this study.

- Couples should be encouraged to take counseling about the problems they have experienced in their marriage in order to ensure a more fulfilling relationship.
- They should be educated about marital adjustment by planning and implementing an effective counseling in the pre-marital period.
- Community awareness programs and media based information campaigns using different kinds of communication such as interpersonal, mass and digital about the problems caused by child marriage such as intimate partner violence, should be increased.
- Because there are limited studies on this issue, further research is
  necessary to retest this issue in detail by making comparisons, with
  women who married at 18 or after age of 18 and. When retesting
  this issue, It is recommended that other types of violence could also
  be investigated.
- This research was confined to only finding individual correlations to marital adjustment scores with various variables. We also recommend future research to focus on to find how these factors may interact to influence the marital adjustment scores of child brides.

# Limitations of the study

There are several limitations in this study. Firstly, the results are limited to women who came to the hospital from the towns, and villages of the province of Bitlis. Second, selecting a sample from the obstetrics and Gynecology clinic may have resulted in a selection bias and only one type of responses which may not be generalizable. Third, because of the culture-bound and sensitive nature of the topic, the women in this study were not randomly selected. We included eligible women, who went to the clinic on selected study days, and chose them to be part of the study. This may have hindered the possibility of the women to give honest responses. Fourth, we only collected data about physical violence in this study. Other types of violence were not included as an influencing variable. Moreover, data only for women married before the age of 18 is presented in this study. We did not collect data from women married after age of 18 to make comparison

and no information was collected from their partners. Despite these limitations, we believe that the research results will contribute to the literature on this subject.

### Acknowledgement

We greatly appreciate the support of the hospital and all the staff of the obstetrics and gynecology clinic for their continuous support and guidance during the study. We also would like to thank the women who voluntarily participated in this study.

#### **Funding**

No funding was received for this study.

## Declaration of conflicting interest

The authors have no conflicts of interest.

#### References

- Ahmadi, R., Soleimani, R., Jalali, M. M., Yousefnezhad, A., Roshandel Rad, M., & Eskandari, A. (2017). Association of intimate partner violence with socio-demographic factors in married women: A population-based study in Iran. Psychology, Health & Medicine, 22(7), 834–844. http://dx.doi.org/10.1080/13548506.2016.
- Allendorf, K., & Ghimire, D. J. (2013). Determinants of marital quality in an arranged marriage society. Social Science Research, 42(1), 59–70. http://dx.doi.org/10.1016/j. ssresearch.2012.09.002.
- Baker, B., Paquette, M., Szalai, J. P., Driver, H., Perger, T., Helmers, K., ... Tobe, S. (2000). The influence of marital adjustment on 3-year left ventricular mass and ambulatory blood pressure in mild hypertension. Archives of Internal Medicine, 160(22), 2452-2458
- Basharpoor, S., & Sheykholeslami, A. (2015). The relation of marital adjustment and family functions with quality of life in women. European Journal of Psychological Assessment, 11(3), 432–441. http://dx.doi.org/10.5964/ejop.v11i3.859.
- Bates, L. M., Maselko, J., & Schuler, S. R. (2007). Women's education and the timing of marriage and childbearing in the next generation: Evidence from rural Bangladesh. Studies in Family Planning, 38(2), 101–112.
- Batool, S. S., & Khalid, R. (2012). Emotional intelligence: A predictor of marital quality in Pakistani couples. Pakistan Journal of Psychological Research, 27(1), 65–88.
- Begum, S., Donta, B., Nair, S., & Prakasam, C. P. (2015). Socio-demographic factors associated with domestic violence in urban slums, Mumbai, Maharashtra, India. *The Indian Journal of Medical Research*, 141(6), 783–788. http://dx.doi.org/10.4103/0971-5916.160701.
- Bharambe, K. D., & Baviskar, P. A. (2013). A study of marital adjustment in relation to some psycho-socio factor. *International Journal of Humanities and Social Science Invention*, 2(6), 8–10.
- Boran, P., Gökçay, G., Devecioğlu, E., & T., E. (2013). Çocuk gelinler. [Child Brides]. *Marmara Medical Journal*, 26, 58–62.
- Da Costa, D., Zelkowitz, P., Dasgupta, K., Sewitch, M., Lowensteyn, I., Cruz, R., ... Khalife, S. (2015). Dads get sad too: Depressive symptoms and associated factors in expectant first-time fathers. *American Journal of Men's Health*. http://dx.doi.org/10.1177/ 1557988315606963.
- Düzen, N., & Atalay, Z. (2014). Türkiye'deki erken yaşta evlilikleri farklı bakış açılarından bakarak değerlendirmeyi ve var olan çözüm önerilerini geliştirmeyi amaçlayan özgür Proje. Retrieved from http://www.myweb.sabanciuniv.edu/bac/files/2013/10/Özgür-Proje-Final-Raporu.
- Ertop Güzel, N., & Altay, B. (2012). 15-49 Yaş arası evli kadınların kullandıkları aile planlaması yönteminin eş uyumuna etkisinin incelenmesi. [Investigation of the effect on marital adjustment of family planning method used by married women aged between 15-49]. Kırıkkale Üniversitesi Tıp Fakültesi Dergisi, 14(3), 1-8.
- Erulkar, A. (2013). Early marriage, marital relations and intimate partner violence in Ethiopia. *International Perspectives on Sexual and Reproductive Health*, 39(1), 6–13. http://dx.doi.org/10.1363/3900613.
- Gage, A. J. (2013). Association of child marriage with suicidal thoughts and attempts among adolescent girls in Ethiopia. *The Journal of Adolescent Health*, 52(5), 654–656. http://dx.doi.org/10.1016/j.jadohealth.2012.12.007.
- Goli, S., Rammohan, A., & Singh, D. (2015). The effect of early marriages and early childbearing on women's nutritional status in India. Maternal and Child Health Journal, 19(8), 1864–1880. http://dx.doi.org/10.1007/s10995-015-1700-7.
- Haj-Yahia, M. M. (2002). The impact of wife abuse on marital relations as revealed by the Second Palestinian National Survey on Violence Against Women. *Journal of Family Psychology*, 16(3), 273–285.
- Hampton, T. (2010). Child marriage threatens girls' health. JAMA, 304(5), 509–510. http://dx.doi.org/10.1001/jama.2010.1009.
- Hollist, C. S., Miller, R. B., Falceto, O. G., & Fernandes, C. L. (2007). Marital satisfaction and depression: A replication of the Marital Discord Model in a Latino sample. *Family Process*, 46(4), 485–498.

- Hong Le, M. T., Tran, T. D., Nguyen, H. T., & Fisher, J. (2014). Early marriage and intimate partner violence among adolescents and young adults in Viet Nam. *Journal of Interpersonal Violence*, 29(5), 889–910. http://dx.doi.org/10.1177/0886260513505710.
- Hortaçsu, N. (2007). Family- versus couple-initiated marriages in Turkey: Similarities and differences over the family life cycle. Asian Journal of Social Psychology, 10(2), 103–116
- ICRW (2007). New insights on preventing child marriage: A global analysis of factors and programs. Retrieved from http://www.icrw.org/files/publications/NewInsights-on-Preventing-Child-Marriage.pdf.
- Jamabo, T., & Ordu, S. N. (2012). Marital adjustment of working class and non-working class women in Port Harcourt metropolis, Nigeria. *International Journal of Psychology* and Counselling, 4(10), 123–126.
- Jose, O., & Alfons, V. (2007). Do demographics affect marital satisfaction? *Journal of Sex & Marital Therapy*, 33(1), 73–85.
- Kaynak Malatyalı, M. (2014). Türkiye'de 'Çocuk Gelin Sorunu. [Problem of child bride in Turkey]. Nesne Psikoloji Dergisi, 2(3), 27–38.
- Kidman, R. (2016). Child marriage and intimate partner violence: A comparative study of 34 countries. *International Journal of Epidemiology*. http://dx.doi.org/10.1093/ije/ dyw225.
- Kisa, S., Zeyneloglu, S., Yilmaz, D., & Guner, T. (2014). Quality of sexual life and its effect on marital adjustment of Turkish women in pregnancy. *Journal of Sex & Marital Therapy*, 40(4), 309–322. http://dx.doi.org/10.1080/0092623x.2012.751071.
- Locke, H. J., & Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. Marriage and Family Living, 21(3), 251–255.
- Locke, H. J., & Williamson, R. C. (1958). Marital adjustment: A factor analysis study. American Sociological Review, 23(5), 562–569.
- Marphatia, A. A., Ambale, G. S., & Reid, A. M. (2017). Women's marriage age matters for public health: A review of the broader health and social implications in South Asia. Frontiers in Public Health, 5, 269. http://dx.doi.org/10.3389/fpubh.2017.00269.
- McFarlane, J., Nava, A., Gilroy, H., & Maddoux, J. (2016). Child brides, forced marriage, and partner violence in America: Tip of an iceberg revealed. *Obstetrics and Gynecology*, 127(4), 706–713. http://dx.doi.org/10.1097/aog.000000000000001336.
- Nour, N. M. (2006). Health consequences of child marriage in Africa. Emerging Infectious Diseases, 12(11), 1644–1649. http://dx.doi.org/10.3201/eid1211.060510.
- Petroni, S., Steinhaus, M., Fenn, N. S., Stoebenau, K., & Gregowski, A. (2017). New findings on child marriage in sub-Saharan Africa. *Annals of Global Health*, 83(5–6), 781–790. http://dx.doi.org/10.1016/j.aogh.2017.09.001.
- Rahmani, A., Alahgholi, L., Merghati, K., ... (2009). How does sexual satisfaction relate to marital satisfaction among Iranians. *International Journal of Gynecology & Obstetrics*, 107(Supplement S2), S1–S765.
- Raj, A., Saggurti, N., Balaiah, D., & Silverman, J. G. (2009). Prevalence of child marriage and its effect on fertility and fertility-control outcomes of young women in India: A cross-sectional, observational study. *Lancet*, 373(9678), 1883–1889. http://dx.doi. org/10.1016/s0140-6736(09)60246-4.
- Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin*, 140(1), 140–187. http://dx.doi.org/10.1037/a0031859
- Schumacher, J. A., & Leonard, K. E. (2005). Husbands' and wives' marital adjustment,

- verbal aggression, and physical aggression as longitudinal predictors of physical aggression in early marriage. *Journal of Consulting and Clinical Psychology*, 73(1), 28–37. http://dx.doi.org/10.1037/0022-006x.73.1.28.
- Simpson, L. E., Doss, B. D., Wheeler, J., & Christensen, A. (2007). Relationship violence among couples seeking therapy: Common couple violence or battering? *Journal of Marital and Family Therapy*, 33, 270–283.
- Stanley, S. M., Ragan, E. P., Rhoades, G. K., & Markman, H. J. (2012). Examining changes in relationship adjustment and life satisfaction in marriage. *Journal of Family Psychology*, 26(1), 165–170. http://dx.doi.org/10.1037/a0026759.
- TDHS (2013). Turkish demographic and health survey. Turkey 2013 DHS final report. Retrieved from http://www.hips.hacettepe.edu.tr/TNSA\_2013\_ana\_rapor.pdf.
- Testa, M., & Leonard, K. E. (2001). The impact of husband physical aggression and alcohol use on marital functioning: Does alcohol "excuse" the violence? Violence and Victims, 16(5), 507–516.
- Tezcan, S., & Coşkun, Y. (2004). The age at first marriage changes in the last quarter of the 20th century and current marriage characteristics in Turkey. *Turkish Journal of Population Studies*. 26, 15–34.
- TSI (2014). Evlenme ve boşanma istatistikleri. Retrieved from http://www.tuik.gov.tr/prehaber.
- Tutarel Kışlak, Ş. (1999). Evlilik uyum ölçeğinin Güvenilirlik, Geçerlilik Çalışması [Reliability and validity study of marital adjustment scale]. 3P (Psikiyatri Psikoloji Psikofarmakoloji) Dergisi, 7, 50–57.
- Tutarel Kışlak, Ş., & Göztepe, I. (2012). Duygu dışa vurumu, Empati, Depresyon ve Evlilik Uyumu Arasındaki İlişkiler. [The Relation Among Expressed Emotion, Depression, Emphaty and Marital Adjustment]. Ankara Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 3(2). 27–45.
- Umberson, D., Williams, K., Powers, D. A., Liu, H., & Needham, B. (2006). You make me sick: Marital quality and health over the life course. *Journal of Health and Social Behavior*, 47(1), 1–16. http://dx.doi.org/10.1177/002214650604700101.
- UNFBA (2012). In E. Loaiza, & S. Wong (Eds.). Marrying too young. End child marriage.
  UNICEF (2001). In A. Hawke (Ed.). Early marriage: Child spouses, Florence, Italy. Retrieved from http://www.unicef-icdc.org.
- UNICEF (2005). Early marriage: A harmful traditional practice. a statistical exploration. 40. Retrieved from http://www.unicef.org.
- UNICEF (2016). Current status + progress child marriage is a violation of human rights, but is all too common. Retrieved from http://data.unicef.org/child-protection/child-marriage.
- Williams, K. (2003). Has the future of marriage arrived? A contemporary examination of gender, marriage, and psychological well-being. *Journal of Health and Social Behavior*, 44(4), 470–487.
- Yalçın, H. (2014). Evlilik uyumu ile sosyo-demografik özellikler arasındaki ilişki. [Relations between adaptation of the marriage and demographic characteristics]. Eğitim ve Öğretim Arastırmaları Dergisi, 3(1), 250–261.
- Yizengaw, E. S. (2014). Marital adjustment among early, age appropriate arranged and love matched marriage, Motta, North, West, Ethiopia. Homeopathy, 2(4), 65–73.
- Zhang, H., Ho, P. S., & Yip, P. S. (2012). Does similarity breed marital and sexual satisfaction? *Journal of Sex Research*, 49(6), 583–593. http://dx.doi.org/10.1080/00224499.2011.574240.