Cukurova Medical Journal
ÇUKUROVA ÜNİVERSİTESİ TIP FAKÜLTESİ

Cukurova Med J 2022;47(1):283-291
DOI: 10.17826/cumj.1029011

ARAŞTIRMA / RESEARCH

Psychological symptoms and sexual satisfaction in polygamic and monogamic wives

Poligamik ve monogamik evliliklerdeki kadınlarda psikolojik semptomlar ve cinsel doyum

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Cukurova Medical Journal 2022;47(1):283-291

Abstract

Purpose: This study aimed to investigate the sexual satisfaction and mental health indicators in polygamous and monogamous women in Turkey. The study included 108 female participants: 36 monogamous wives and 72 polygamous wives.
Materials and Methods: The participants were evaluated with the Symptom Check List (SCL-90-R) and Golombok-Rust Inventory of Sexual Satisfaction (GRISS).
Results: There were significant differences between the groups regarding the total GRISS score and Dissatisfaction, Sensuality, Vaginismus, and Anorgasmia subscale scores. In comparing the SCL-90 scores with ANOVA, the senior wife group had significantly higher scores in the Depression subscales. Monogamic wives had higher satisfaction from their sexual lives and had less frequent psychiatric symptoms than polygamic wives.
Conclusion: It is important to raise awareness about the polygamic family structure, draw attention to often neglected issues such as sexual health, and improve the health services provided to this group.

Keywords:. Sexuality, polygamy, monogamy, sexual satisfaction, women, marriage

Öz

Amaç: Bu çalışmanın amacı bir Türk Örnekleminde poligamik ve monogamik evliliklere dahil olan kadınların cinsel doyum düzeyleri ile ruh sağlığı ile ilgili belirtileri araştırmaktır. Çalışmaya 72 poligamik, 36 monogamik evlilik yapmış toplam 108 kadın katılmıştır.
Gereç ve Yöntem: Katılımcılara değerlendirme için Golombok Rust Cinsel Doyum Ölçeği (GRCDÖ) ve SCL-90-R uygulanmıştır.
Bulgular: GRCDÖ ile yapılan karşılaştırmada iki grup arasında, Toplam Puan, Doyum, Dokunma, Vaginismus ve Anorgazmi alt ölçekleri arasında anlamlı fark bulunmuştur. SCL-90 puanları ANOVA ile karşılaştırıldığında Polgamik evliliklerdeki ilk eşler (Senior Wife) Depresyon alt ölçeğinden anlamlı olarak yüksek puan ortalamasına sahipti. Monogamik evliliklerdeki kadınlar, Poligamik evliliklerdeki kadınlara göre cinsel yaşamlarından daha yüksek doyuma sahip olduğu, daha az psikiyatrik semptoma sahip olduğu saptanmıştır.
Sonuç: Çok eşli aile yapısı hakkında farkındalık yaratmak, cinsel sağlık gibi sıklıkla ihmal edilen konulara dikkat çekmek ve bu gruba verilen sağlık hizmetlerini iyileştirmek önemlidir.

Anahtar kelimeler: Cinsellik, poligami, monogami, cinsel doyum, kadın, evlilik

INTRODUCTION

Polygamy involves multiple spouses in a marriage[1]. There are several types of polygamy. In polyandry, a woman is married to multiple male partners, whereas in polygyny, a male is married to multiple female partners. In polygynandry, multiple male and female partners are married in a group marriage. The most common type of polygamy in the world is polygyny[2]. Therefore, in our study, the polygamy term will stand for polygyny.

While many social and economic changes (i.e., women's education, urbanization, and industrialization) have reduced this tradition,

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Geliş tarihi/Received: 24.06.2020 Kabul tarihi/Accepted: 31.07.2020

polygamy continues to exist in many parts of the world and to be accepted socially[3,4]. Several factors help maintain polygamy. The polygamic group consists of patriarchal families with strong kinship ties living within a tribal structure. These families mainly live in rural areas and tend to have several children; divorce is not welcome in this group[5,6]. Another factor for polygamy is religion. The present study focused on polygamy in Turkey, where most of the population are Muslims, and in Islam, polygamy is approved conditionally. In the Holy Quran (the sacred text for Muslims), marrying up to four women is not prohibited if the husband is fair and treats his wives equally. Another Quranic verse tells that it is impossible to behave equally to all wives[7]. This conditional and partial approval was interpreted as the preference of monogamy[8]. After the foundation of the modern republic, polygamy was banned in Turkey. With the new civil code, women had the right to divorce and get their share from their husbands' property, attempting to eliminate gender inequality[9,10].

A polygamic family has unique features. The wife who entered marriage before other spouses is called the senior wife, and the latest wife is called the junior wife[11]. The senior and the junior wives can live in the same house or separate houses. The polygamic household is usually crowded, which may lead to several problems. There may be competition, confrontation, anger, and jealousy among wives[12,4]. In some polygamic marriages, some wives cooperate with others to protect their own and their children's health. They cooperate both for household duties and child-rearing as well as non-household jobs such as agricultural activities. They may also compete for the income and attention of their husband. This condition is called co-operative conflict. This concept has been defined especially in some West African societies[13]. The status of the wives varies from one society to another. Contrary to the senior wife's secondary position in Arab societies, they are in a big sister position and have power over the husband in Turkish societies[14].

There have been several studies on polygamic wives. A general finding of these studies is lower life satisfaction, marital satisfaction, and self-esteem; more negative family function; worse mental health in polygamic wives[15,16,17,18]. Other studies have shown that children of polygamic families also have worse mental health and lower education level than monogamic families[19,20,21,22]. An interesting review by Fenske[23] about African societies concluded that modern education does not reduce polygamy. Another review study by Bove and Valeggia[24] concluded that sexually transmitted infections are more common, and condom use is less common in polygamic families. There are also publications about the low fertility rates of polygamic women[25,26,27]. Although polygamic marriages still exist in Turkey, only a few studies addressed the relationship between polygamic family and mental health[28,29]. Moreover, to the best of our knowledge, there has been no study on polygamic wives' sexual function. This study aimed to evaluate the relationship between polygamic marriage and women's sexual satisfaction and mental health indicators. Polygamic women are considered a disadvantaged subgroup in terms of mental health practice. Therefore, the study tested the hypothesis that polygamic wives had lower sexual satisfaction and more negative mental health indicators.

MATERIALS AND METHODS

The questions of this study are whether family structure (polygamic or monogamic) has an effect on sexual function and mental health symptoms and how polygamic wives are affected from these effects. The town center of Ceyhan, a township in the Province of Adana in southern Turkey, was chosen as the study universe. Ceyhan is 45 km from the provincial capital of Adana and has a population of 160,171 as of 2016. Women constitute 49.81% of the population. Ceyhan's economy is mostly based on agriculture, and the town receives immigration from the southeastern part of Turkey. Polygamy is common among the immigrant population[30].

Sample

All of the participants were females and divided into three groups: the monogamic wife, the polygamic senior wife, and the polygamic junior wife. Only the polygamic marriages involving two wives were included. In polygamic wives, senior and junior wives were selected from the same family. Exclusion criteria were being under 18 years of age, having conditions that impair cognitive functions at the level that prevents participation in the study (i.e., mental retardation, active psychosis, and mania), lack of Turkish language skills required to fill in questionnaires or communicate with the interviewer.

Procedure

The participants were recruited by the snowball method. Two women who lived in the same area as the participants and had at least secondary school education were selected for data collection. In the first step, the interviewers were trained about the study's characteristics, the questions of the survey, how to approach the participants, and how to deal with the difficulties in filling the survey forms. In the second step, the interviewers went to the participants' houses and informed them about the survey. They were informed that their identities would be kept anonymous if they want, the information will be confidential and will be used only for scientific purposes, and they can withdraw from the study whenever they want, during data collection or later phases. To make participants feel comfortable, the data collection appointments were set up at their homes for a senior psychiatrist and data collectors to visit them. First, the senior psychiatrist interviewed the participants for the eligibility check. Informed consent was obtained from all individuals included in the study. Then, private interviews were conducted by data collectors. The participants who had problems in filling the scales received help from data collectors. No payment was made to the subjects for the interviews. The study was approved by Ethics committee of the Adana Numune Research and Education Hospital. (ANEAH.EK.2015/161). Permission was obtained from TR Ministry of Health Public Health Agency (23859870/260).

Measures

Sociodemographic characteristics form

Sociodemographic characteristics included the participant's age, the age of husband, marriage status (monogamic, polygamic), education status, income level, number of children, and employment information.

Symptom Check List (SCL-90-R)

Symptom Check List (SCL-90-R) is a self-report scale developed by Derogatis[31]. The SCL-90 includes 90 5-point Likert-type items to measure psychiatric symptoms and the stress level experienced by an individual. The items are scored from 0 to 4. It has nine subscales (somatization, interpersonal sensitivity, obsession-compulsion, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism). Global Symptom Index (GSI) is the mean of scorings for all subscales. The validity and reliability study for its Turkish version was performed by Dag[32]. Cronbach's alpha coefficient for the item reliability of GSI was reported to be 0.97. Test-retest reliabilities were 0.65-0.87 for the subscales and 0.90 for GSI.

Golombok-Rust Inventory of Sexual Satisfaction (GRISS)

This is a self-report scale used to determine the quality of sexual relationships and evaluate sexual dysfunction in heterosexual men and women[33]. GRISS has separate forms for males and females, each including 28 items with 5-grade Likert type (Responses: Never, Rarely, Sometimes, Often, and Always). Each item is scored between 0 and 4, with some items scored in reverse. The female version of the scale includes seven subscales: frequency, communication, satisfaction, avoidance, sensuality, vaginismus, and anorgasmia. The validity and reliability study of the Turkish version was performed by Tugrul et al.[34]. Cronbach's alpha value for the female version was 0.91, and the split-half reliability coefficient was 0.91 in females. We performed a reliability analysis for GRISS in our sample and found a Cronbach's alpha value of 0.873 for the total score and high coefficients for most of the subscale scores except for infrequency (0.186).

Statistical analysis

To summarize the data, mean ± standard deviation (SD) was used for continuous variables and percentages for categorical variables. The Shapiro-Wilk test was used to control the normal distribution of the numeric variables since the sample size for each of the groups based on marital status was below 50 (Q-Q plot and histogram graphics were used to control the presence of normal distribution). One-way analysis of variance (ANOVA) was used to compare marital status when sociodemographic and other clinical parameters were normally distributed. Tukey test is used as a post-hoc analysis for the purpose of intergroup comparison. The analysis of covariance (ANCOVA) model was used to control for age in the comparisons of groups regarding the SCL-90 and GRISS scores. To compare the groups regarding the categorical variables, the Pearson chi-square test was used in RxC tables when the expected cell count was above five, and the Fisher-Freeman-Halton test was used when the expected cell count was below five. One of the questions of the study was the effect of the effect of family structure (polygamic and monogamic) and therefore, regression analysis

was used to assess the effect of family structure on sexual function and mental health symptoms. Family structure was taken as an independent variable, and age, years of education, and income status were controlled. The regression analysis was repeated for each of the dependent variables. Statistical analyses were performed using Jamovi (version 1.6.3, 2020, retrieved from https://www.jamovi.org), JASP (version 0.13.1, retrieved from https://jasp-stats.org), and IBM SPSS (version 23.0 for Windows, 2015, IBM Corp., Armonk, NY). A p-value of <0.005 was accepted to be significant for most of the comparisons. A p-value of <0.05 was accepted to be significant for the ANCOVA test results.

RESULTS

The study included 108 female participants: 36 monogamic wives and 72 polygamic wives. The sociodemographic features of the participants were given in Table 1. The mean age and number of children of the senior wives were higher, and their education level and marriage age were lower than other groups (p<0.0001, p<0.001, p<0.0001, and p<0.001, respectively).

There were significant differences among the groups regarding the total GRISS score and the Frequency, Dissatisfaction, Non-sensuality, Vaginismus, and Anorgasmia subscale scores (Table 2) in ANOVA. To control for the effect of age, ANCOVA was performed for these variables. Total GRISS score (p=0.025) and Non-sensuality subscale score (p=0.046) remained significantly lower in monogamic wives than in the other two groups (p<0.001 and p<0.001, respectively). Controlling for the influence of age, the junior wives had significantly higher scores in the Dissatisfaction, Vaginismus, and Anorgasmia subscales compared with the monogamic wives (p=0.01, p<0.001, and p=0.001, respectively)

Table 1. Sociodemographic characteristics of the participants.

	Senior wife (n=30)	Junior wife (n=42)	Monogamous wife (n=36)	Analysis	Statistical Analysis Between Groups*
Age	45.73 ± 15.22	36.57 ± 10.26	33.94 ± 9.08	p<0.001, F=9.58	1>2, 1>3
Age at marriage	16.8 ± 2.9	20.0 ± 4.69	19.66 ± 3.04	p<0.001, F=7.44	1<2, 1<3
Economic Status					
<min wages	(26) 86.7%	(26) 61.9%	(20) 55.6%	p=0.020, X2=7.82	
>min wages	(4) 13.3%	(16) 38.1%	(16) 44.4%		
Number of children	4.53 ± 2.29	2.61 ± 2.24	2.83 ± 2.0	p<0.001, F=7.80	1>2, 1>3
Wife's education (year)	0.93 ± 2.34	3.42 ± 4.59	5.50 ± 5.40	p<0.001, F=8.98	1<2, 1<3
Occupation					
Housewife	(30) 100%	(38) 90.5%	(34) 94.4%	p=0.222, X2=3.02	
Employed	(0) 0%	(4) 9.5%	(2) 5.6%		

*Tukey's test, 1: Senior wife, 2: Junior wife, 3: Monogamous wife.

Table 2. The comparison of the GRISS scores of the groups.

GRISS	Senior wife (n=30)	Junior wife (n=42)	Monogamous wife (n=36)	Analysis	Covariate Age	Statistical Analysis Between Groups*	Partial eta^2
Total Score	50.4 ± 21.12	57.36 ± 19.09	39.82 ± 9.90	p<0.001	0.025	1>3, 2>3	0.162
Infrequency	4.71 ± 1.82	4.31 ± 1.64	3.52 ± 1.63	p=0.020	-	-	0.076
Non-communication	4.78 ± 2.78	5.05 ± 2.40	4.41 ± 2.72	p=0.580	-	-	-
Dissatisfaction	6.42 ± 4.24	8.05 ± 4.53	5.17 ± 3.03	p=0.010	-	-	0.088
Avoidance	5.92 ± 3.36	6.84 ± 4.07	6.05 ± 4.66	p=0.600	-		
Non-sensuality	8.71 ± 4.68	7.63 ± 3.54	4.82 ± 2.76	p<0.001	0.046	1>3,2>3	0.165
Vaginismus	4.42 ± 3.16	7.57 ± 3.66	5.29 ± 3.66	p=0.001	0.974	-	0.129
Anorgasmia	7.21 ± 4.55	9.42 ± 3.45	5.88 ± 3.35	p=0.001	0.394	-	0.144

*Tukey's test 1: Senior wife, 2: Junior wife, 3: Monogamous wife. GRISS: Golombok Rust Inventory of Sexual Satisfaction

In the comparison of the SCL-90 scores with ANOVA, significant differences were found between the groups regarding the Somatization, Anxiety, Obsessive-Compulsive, Depression, Phobic Anxiety, and GSI subscales (p<0.001, p=0.004, p=0.002, p<0.001, p=0.001, p=0.001, respectively) (Table 3). ANCOVA was performed to control the effect of age on these variables, and the Depression (p=0.040) and GSI (p=0.032) scores were significantly different among the groups.

Table 1. The comparison of the SCL-90 scores of the groups

SCL -90	Senior wife (n=30)	Junior wife (n=42)	Monogamous wife (n=36)	Analysis	Covariate Age	Statistical Analysis Between Groups*	Partial eta²
Somatization	1.98 ± 0.58	1.44 ± 0.73	1.10 ± 0.82	p<0.001	0.258	-	0.188
Anxiety	1.54 ± 0.60	1.13 ± 0.58	1.05 ± 0.69	p=0.004	0.188	-	0.098
Obsessive-compulsive	1.66 ± 0.61	1.49 ± 0.58	1.13 ± 0.66	p=0.002	0.074	-	0.108
Depression	1.88 ± 0.59	1.76 ± 0.77	1.09 ± 0.73	p<0.001	0.040	1>3, 2>3	0.190
Interpersonal sensitivity	1.46 ± 0.69	1.77 ± 0.84	1.22 ± 0.63	p=0.006	-	-	0.094
Psychoticism	0.92 ± 0.49	0.88 ± 0.57	0.85 ± 0.50	p=0.860	-	-	-
Paranoid ideation	1.21 ± 0.63	1.41 ± 0.88	1.09 ± 0.80	p=0.180	-	-	-
Hostility	1.64 ± 1.00	1.28 ± 1.01	1.03 ± 1.00	p=0.056	-	-	-
Phobic anxiety	1.18 ± 0.82	0.72 ± 0.59	0.65 ± 0.41	p=0.001	0.084	-	0.118
Additional items	1.66 ± 0.59	1.44 ± 0.55	1.13 ± 0.88	p=0.010	-	-	0.084
GSI	1.55 ± 0.43	1.36 ± 0.56	1.04 ± 0.63	p=0.001	0.032	1>3, 2>3	0.122

*Tukey's test, 1: Senior wife, 2: Junior wife, 3: Monogamous wife. SCL-90: Symptom checklist-90, GSI: Global Severity Index.

Family Structure'ın Regression analyses were performed to evaluate the effect of family structure (polygamic or monogamic) on sexual function and mental health symptoms. Family structure was a predictor of mental health symptoms. Educated women had less somatic symptoms. Phobic anxiety and somatic symptoms were more frequent in the older age group (Table 4). Family structure was a predictor for the general quality of sexual relationship and orgasm. Increased age was associated with a decreased vaginismus score and had a negative effect on communication and sexual satisfaction (Table 5).

Table 4. Predictors of the GRISS measures: standardized regression effect and R-square

GRISS	Family structure	Age	Education	Economic Status	R-square
Total Score	-12.826**	0.398*	-0.115	-1.121	0.161**
Infrequency	-0.836*	0.018	0.049	0.967**	0.125**
Non-communication	0.164	0.029	-0.279**	-0.633	0.239**
Dissatisfaction	-1.902*	0.097*	-0.015	-0.960	0.094**
Avoidance	-0.205	0.056	0.149	1.891*	0.051
Non-sensuality	-2.196**	0.122**	-0.204**	0.374	0.334**
Vaginismus	-1.518	-0.094**	-0.021	-1.340	0.093**
Anorgasmia	-2.844**	0.058	0.132	-1.005	0.103**

*p<0.05, **p<0.01 GRISS: Golombok Rust Inventory of Sexual Satisfaction. Family Structure: Between polygamy and monogamy

Table 5. Predictors of the GRISS measures: Standardized regression effect and R-square

SCL-90	Family structure	Age	Education	Economic Status	R-square
Somatization	-0.501**	0.014*	-0.014	-0.399*	0.171**
Anxiety	-0.289*	0.000	0.000	-0.212	0.020
Obsessive-compulsive	-0.446**	-0.003	0.001	0.023	0.065*
Depression	-0.787**	-0.004	0.019	0.100	0.174**
Interpersonal sensitivity	-0.499**	-0.010	0.009	0.134	0.067*
Psychoticism	-0.145	-0.003	0.025*	0.001	0.025
Paranoid ideation	-0.476**	-0.008	0.061**	0.044	0.135**
Hostility	-0.480*	-0.010	0.018	0.220	0.025
Phobic anxiety	-0.155	0.012*	0.004	0.226	0.090**
Additional items	-0.410**	0.006	0.013	-0.046	0.044
GSI	-0.434**	0.001	0.012	-0.014	0.077*

*p<0.05 **p<0.01, CL-90: Symptom checklist-90, GSI: Global Severity Index. Family Structure: Between Polygamy and monogamy

DISCUSSION

Our study indicated that polygamic wives had more frequent psychological symptoms than monogamic wives. The polygamic wives scored higher than monogamic wives in all of the SCL-90 subscales except the paranoid, psychotic, and anger subscales. The depression and GSI scores were significantly different among the groups after controlling for the effect of age with ANCOVA. Also, we found that family structure was a predictor in all subscales except the psychosis and the phobia subscales. Al-Krenawi [17,35] and Al-Krenawi et al.[18,36,37] conducted studies with SCL-90 in several cultures and found more psychiatric symptoms in senior wives than monogamic wives. Similar differences were found in the studies with semi-structured interviews. Ozkan et al.[29] found higher somatization disorder, Yilmaz et al[38] found higher dysthymia, post-traumatic stress disorder, somatic symptom disorder, and panic disorder in senior wives. Moreover, two separate studies from Turkey found higher Beck Depression Inventory (BDI) scores in senior wives than other groups[28,38].

There are several reasons for higher psychological stress in polygamic wives compared to their monogamic counterparts. Marriages of senior wives are usually arranged marriages[39]. The intense stress experienced by senior wives was conceptualized by Al-Sherbiny[40] as the First Wife Syndrome. In this life-crisis, senior wives can experience anxiety, depression, and various somatic complaints[40]. In addition, there may be competition and confrontation among co-wives[41]. These confrontations may lead to violence if unresolved. Several studies have found that polygamic wives were abused more frequently than monogamic wives. Violence may be in the form of physical, emotional, or sexual violence and may come from the husband or other wives[8,39].

Another important finding of our study was a higher quality of sexual relationship and sexual functions in the monogamic wives than their polygamic counterparts. A more detailed analysis indicated that senior wives had problems in the infrequency and sensuality, while junior wives had problems in satisfaction, anorgasmia, and vaginismus dimensions. When ANCOVA was performed for these variables to control age and total GRISS score, the non-sensuality subscale score remained a significant factor. Since there was no significant difference between monogamic wives and junior wives, the differences between these two groups in terms of the satisfaction, anorgasmia, and vaginismus subscales of GRISS may reflect the negative effects of polygamy on sexuality.

The regression analysis revealed that family structure was an important factor for the general quality of sexual relations, satisfaction, and orgasm. Age was a significant predictor of vaginismus.

The mean depression subscale scores in the polygamic group were higher than those of the monogamic group. There is a two-way relationship between depression and sexual problems. This relationship is critical as mood disorders and sexual dysfunctions are very common in society[42]. It is well known that depressed women have decreased sexual interest and response[43]. The severity of sexual dysfunction increases with the severity of depression[44]. It has also been found that antidepressant drugs used to treat depression may cause sexual dysfunction[45].

Marriage and the quality of family relationships are among the factors that affect sexual satisfaction. Strait et al. have found that marital quality is associated with high sexual satisfaction[46]. In a longitudinal study, Fallis et al. have found that sexual satisfaction is a powerful predictor for relationship satisfaction in the subsequent relationship[47]. Couples with more harmonious marriage were found to have higher sexual satisfaction[48].

Lower quality of sexual relationships and functions in polygamic wives than monogamic wives may be due to less time spent with their husbands[41]. Although we did not assess the amount of private time between spouses, a previous study found that polygamic husbands were not fair in their relations with their wives. In studies in Syria, Jordan, and Palestine, Al-Krenawi[17,35] and Al-Krenawi et al.[18] have consistently demonstrated that polygamic wives had lower family satisfaction and family function than their monogamic counterparts.

Vaginismus is still a common problem in Turkey. It is one of the most common problems leading to visits to sex therapy clinics[49,50]. Vaginismus is a phobic reaction to sexual intercourse. A field study by Yilmaz et al.[51] found the prevalence of vaginismus to be 15.3% and decrease with age. Studies on the sexual response cycle in the vaginismus cases in Turkey have found more significant problems with sensuality,

satisfaction, and orgasm[50,52,53]. These data are consistent with our findings.

Yıldırım et al. reported that difficulty in having an orgasm was the second most common reason for visit to sex therapy clinics and that women diagnosed with vaginismus had more problems related to orgasm[54]. Although the family structure affected orgasm, higher scores in only junior wives might be explained by other factors. The variables that we used for orgasm-related disorders can explain only 10% of the variance. In junior wives, the effect of vaginismus on orgasm may be higher than the effect of family structure.

In conclusion, monogamic wives had higher satisfaction from their sexual lives and had less frequent psychiatric symptoms than polygamic wives.

Our study has several limitations. The first limitation is the small sample size from a small town. It is difficult to generalize the results. Secondly, the group's education level was relatively low, and the interviewers needed help in answering some of the questions. Thirdly, talking about sexuality is still a taboo in some parts of Turkey; therefore, it is hard to predict bias in these answers definitively. Fourth, antidepressant uptake of study subjects are not controlled. The potential sexual side effects of antidepressants can lead tomistaken results. Finally, we included senior and junior wives, both married to a single male, which may have caused problems due to non-independence. Currently available literature on the mental aspects of polygamic marriage is scarce. Moreover sexuality is often neglected in studies about the family structure. Obtaining data on this topic is a strength of our study. In this regard, prospective longitudinal researches in terms of psychiatric effects of polygamic marriages will be highly appreciated. Both gender can be specifically investigated and results can be evaluated for a better judgement.

Yazar Katkıları: Çalışma konsepti/Tasarımı: EY; Veri toplama: EY; Veri analizi ve yorumlama: EY; Yazı taslağı: EY; İçeriğin eleştirel incelenmesi: EY; Son onay ve sorumluluk: EY; Teknik ve malzeme desteği: EY-; Süpervizyon: EY; Fon sağlama (mevcut ise): yok.
Etik Onay: Bu çalışma için Adana Numune Eğitim ve Araştırma Hastanesi Girişimsel Olmayan Klinit Araştırmalar Etik Kurulundan 27.05.2015 tarih ve 161 sayılı kararı ile etik onay alınmıştır.
Hakem Değerlendirmesi: Dış bağımsız.
Çıkar Çatışması: Yazarlar çıkar çatışması beyan etmemişlerdir.
Finansal Destek: Yazarlar finansal destek beyan etmemişlerdir.
Author Contributions: Concept/Design : EY; Data acquisition: EY; Data analysis and interpretation: EY; Drafting manuscript: EY; Critical revision of manuscript: EY; Final approval and accountability: EY; Technical or material support: EY; Supervision: EY; Securing funding (if available): n/a.
Ethical Approval: For this study, ethical approval was obtained from the Ethics Committee of Adana Numune Training and Research Hospital Non-Interventional Clinitical Research dated 27.05.2015 and numbered 161.
Peer-review: Externally peer-reviewed.
Conflict of Interest: Authors declared no conflict of interest.
Financial Disclosure: Authors declared no financial support

REFERENCES

1. Bennion J, Joffe LF. Introduction. In The polygamy question,(Ed Bennion J, Joffe LF): Colorado, Utah University Press.2015;1-22.
2. Al-Krenawi A. Psychosocial Impact of Polygamy in the Middle East. New York, Springer, 2014.
3. Lesthaeghe RJ. Production and reproduction in sub-saharan Africa: an overview of organizing principles. In Reproduction and social organization in sub-saharan Africa. (Ed Lesthaeghe RJ):13-8. Berkeley, University of California Press. 1989.
4. Slonim-Nevo V, Al-Krenawi A, Yuval-Shani B. Polygynous marriage in the Middle East: stories of success and failures. Ethnology. 2008;47:195-208.
5. Abu Rabia R. Redefining polygamy among the Palestinian bedouins in Israel: colonialism, patriarchy, and resistance. Am Univ J Gend SocPolicy Law. 2011;19:459-93.
6. Okten S. Gender and power: the system of gender in southeastern Anatolia. J. Int Soc Res. 2009;2:302-12.
7. Ali Y. The Meaning of the Holy Qur'an, Washington DC, Amana Corporation, 1993.
8. Hassouneh-Phillips D. Polygamy and wife abuse: a qualitative study of Muslim women in America. Health Care Women Int. 2001;22:735-48.
9. Kuyaksil A. Women's rights and its development in the Turkish constitutions. Mustafa Kemal University Journal of Sciences Institute. 2009;6:328-52.
10. Yalcın I. Restrictions on polygamy in contemporary Islamic legislation. Journal of the Human and Social Sciences Researches. 2017;6:1707-25.
11. Chaleby, K. Women of polygamous marriages in an inpatient psychiatric service in Kuwait. J Nerv Ment Dis. 1985;173:56-8.
12. Al-Krenawi A. Polygamy and mental health: An international perspective. EC Psychol Psychiatr. 2016;1:1-3
13. Madhavan S. Best of friends and worst of enemies: competition and collaboration in polygyny. Ethnology. 2002;41:69-84
14. Yilmaz E, Tamam L, Bal U. Polygamy ve ruh sağlığına etkisi. Psikiyatride Güncel yaklaşımlar. 2015;7:221-8.
15. Abbo C, Ekblad S, Waako P, Okello E, Muhwezi W, Musisi S. Psychological distress and associated factors among the attendees of traditional healing practices in Jinja and Iganga districts, Eastern Uganda: a cross-sectional study. Int J Ment Health Syst. 2008;2:16.
16. Chaleby K. Women of polygamous marriages in outpatient psychiatric services in Kuwait.

International Journal of Family Psychiatry. 1987;8:25-34.
17. Al-Krenawi A. Mental health and polygamy: The Syrian case. World J Psychiatry. 2013;3:1-7.
18. Al-Krenawi A, Graham JR, Al Gharaibeh F. A comparison study of psychological, family function marital and life satisfactions of polygamous and monogamous women in Jordan. Community Ment Health J. 2011;47:594-602.
19. Al-Krenawi A, Lightman ES. Learning achievement, social adjustment, and family conflict among Bedouin-Arab children from polygamous and monogamous families. J Soc Psychol. 2000;140:345-55.
20. Cherian VI. Corporal punishment and academic achievement of xhosa children from polygynous and monogamous families. J Soc Psychol. 1994;134:387-90
21. Eapen V, Al-Gazali L, Bin-Othman S, Abou-Saleh M. Mental health problems among school children in the United Arab Emirates: prevalence and risk factors. J Am Acad Child Adolesc Psychiatry. 1998;37:880-6.
22. Elbedour S, Bart WM, Hektner JM. Scholastic achievement and family marital structure: bedouin Arab adolescents from monogamous and polygamous families in Israel. J Soc Psychol. 2000;140:503-15.
23. Fenske J. African polygamy: past and present. J Dev Econ. 2015;117: 58-73.
24. Bove R, Valeggia C. Polygyny and women's health in sub-saharan Africa. Soc Sci Med.2008;68:21-9.
25. Ezeh AC. Polygyny and reproductive behavior in sub-saharan Africa: a contextual analysis. Demography. 1997;34:355-68.
26. Garenne M, Van de Walle E. Polygyny and fertility among the sereer of Senegal. Popul Stud. 1989;43:267-83.
27. Mulder MB. Marital status and reproductive performance in kipsigis women. Popul Stud. 1989;43:285-304.
28. Ozer A, Orhan FM, Ekerbiçer HC. Sociodemographic variables and depression in Turkish women from polygamous versus monogamous families. Health Care Women Int. 2013;34:1024-34.
29. Ozkan M, Altindag A, Oto R, Sentunali E. Mental health aspects of Turkish women from polygamous versus monogamous families. Int J Soc Psychiatry. 2006;52:214-20.
30. Arslan DA. Sociological analysis of the demographic structure of Adana. Journal of Human Sciences. 2016;13:3768-93.
31. Derogatis LR. SCL-90: Administration, scoring and procedure manual-I for the revised version, Baltimore, John Hopkins University, School of Medicine, Clinical Psychometrics Unit. 1983.
32. Dag I. Reliability and validity of the Symptom Check List (SCL-90-R) for university students. Turk Psikiyatri Derg. 1991;2:5-12
33. Rust J, Golombok S. The GRISS: a psychometric instrument for the assessment of sexual dysfunction. Arch Sex Behav. 1986;15:157-65.
34. Tugrul C, Oztan N, Kabakci E. Standardization of golombok-rust sexual satisfaction inventory. Turk Psikiyatri Derg. 1993;4:83-8.
35. Al-Krenawi A. A study of psychological symptoms, family function, marital and life satisfactions of polygamous and monogamous women: The Palestinian case. Int J Soc Psychiatry. 2010;58:79-86.
36. Al-Krenawi A, Graham JR. A comparison of family functioning, life and marital satisfaction, and mental health of women in polygamous and monogamous marriages. Int J Soc Psychiatry. 2006;52: 5-17.
37. Al-Krenawi A, Slonim-Nevo V. The psychosocial profile of bedouin Arab women living in polygamous and monogamous marriages. Fam Soc. 2008;89:139-49.
38. Yılmaz E, Tamam L. The relationship between polygamy and psychiatric disorders in Turkish women. Int J Soc Psychiatry. 2018;64:821-7.
39. Al-Krenawi A, Lev-Wiesel R. Wife abuse among polygamous and monogamous Bedouin Arab families. J Divorce Remarriage. 2008;36:151-65.
40. Al-Sherbiny LAM. The case of first wife in polygamy: Description of an Arab culture-specific tradition. Arab Psy Net 2005;8:9-26.
41. Al-Krenawi A. Family therapy with a multiparental/multispousal family. Fam Process. 1998;37:65-82.
42. Hartmann U. Depression and sexual dysfunction. J Mens Health Gen. 2007;4:18-25.
43. Lykins AD, Janssen E, Graham CA. The relationship between negative mood and sexuality in heterosexual college women and men. J Sex Res. 2006;43:136-43.
44. Fabre LF, Clayton AH, Smith LC, Goldstein IM, Derogatis LR. Association of major depression with sexual dysfunction in men. J Neuropsychiatry Clin Neurosci. 2013;25:308-18.
45. Baldwin DS, Thomas SC, Birtwistle J. Effects of antidepressant drugs on sexual function. Int J Psychiatry Clin Pract. 1997;1:47-58.
46. Strait JG, Sandberg JG, Larson JH, Harper JM. The relationship between family-of-origin experiences and sexual satisfaction in married couples. J Fam Ther. 2015;37:361-85.
47. Fallis EE, Rehman US, Woody EZ, Purdon C. The longitudinal association of relationship satisfaction and sexual satisfaction in long-term relationships. J Fam Psychol. 2016;30:822-31.
48. Tuncer SK, Aydin E, Kasimoglu N, Aydemir B, Baykan SA. Investigation of the effects of marital adjustment on sexual life quality of married women. Asian Journal of Pharmacy, Nursing and Medical Sciences. 2018;6:31-44.
49. Ozdemir YO, Simsek F, Incesu C, Koc K. Sociodemographic and clinical characteristics of subjects referred to a multidisciplinary sexual

dysfunction outpatient clinic. European Journal of Sexual Health. 2006;15:14-5.
50. Dogan S. Vaginismus and accompanying sexual dysfunctions in a Turkish clinical sample. J Sex Med. 2009;6:184-92.
51. Yilmaz E, Zeytinci İE, Sari S, Karababa İF, Cilli AS, Kucur R. Investigation of sexual problems in married population living in the center of Konya. Turk Psikiyatri Derg. 2010;21:126-34.
52. Tugrul C, Kabakci E. Vaginismus and its correlates. Sex Relation Ther. 1997;12:23-34.
53. Dogan S, Saracoglu GV. The assessment of sexual knowledge, marital characteristics, sexual function and satisfaction in women with lifelong vaginismus. Balkan Med J. 2009;26:151-8.
54. Yıldırım EA, Akyuz F, Hacıoglu, M, Essizoglu A, Cakmak AC, Cakmak, E et al. Relationship between presenting complaint and clinical diagnosis in outpatients applying to the sexual dysfunction clinic. Noro Psikiyatr Ars. 2011;48:24-30.