

Young Women and Men's Attitude towards Childbearing

Talat Khadivzadeh (PhD)¹, Seyyedeh Adeleh Rahmanian (MSc)^{2*}, Habibollah Esmaily (PhD)³

¹ Assistant Professor, Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran

² Graduated, Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran

³ Professor, Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO

Article type:
Original article

Article History:
Received: 09-Nov-2016
Accepted: 04-Apr-2017

Key words:
Attitude
Childbearing
Men
Premarital counseling
Women

ABSTRACT

Background & aim: Attitude is taken into account as the most important determinant of behavior. However, the present knowledge considering opinions of the youths on the verge of marriage is not sufficient. Therefore, this study aimed to investigate the attitudes towards childbearing in women and men on the verge of marriage attending health centers in Mashhad, Iran.

Methods: This cross-sectional study was conducted in 2016 on 170 women and 100 men referring to the premarital counseling centers. The participants were selected through convenience sampling method. The data were collected using the Childbearing Attitudes Scale and analyzed by descriptive statistics and independent t-test by the SPSS.

Results: The mean scores of attitudes to childbearing in women and men were 164.03 ± 21.62 and 158.86 ± 24.91 , respectively, with no significant difference ($P=0.11$). The mean desired number of children was 2.23 ± 1.01 in women and 2.14 ± 0.9 in men. There were significant differences between the attitudes of women and men in terms of the impacts of childbirth on women's body shape ($P=0.01$), childbearing as one of the purposes of human creation ($P=0.04$), and the relationship between the number of children and their upbringing quality ($P=0.002$). A significant relationship was found between the attitudes and ideal number of children ($P=0.001$).

Conclusion: Attitudes towards childbearing among young adults on the verge of marriage were not so favorable. Consequently, it is essential to implement comprehensive training programs in order to enhance the positive views both in women and men towards childbearing.

► Please cite this paper as:

Khadivzadeh T, Rahmanian SA, Esmaily H. Young Women and Men's Attitude towards Childbearing. Journal of Midwifery and Reproductive Health. 2018; 6(3): 1345-1356. DOI: 10.22038/jmrh.2018.20033.1212

Introduction

The drastic decline in fertility rate is taken into account as one of the significant changes throughout the world (1). Over the past 25 years, Iran has also faced a sharp fall in fertility indices. In this respect, the census statistics have shown that the total fertility rate in Iran has reached lower than that of replacement (2). The World Bank estimates that Iran's population growth rate will reach 1.32%, 1.13%, and 1% during 2015-2019, 2020-2024, and 2025, respectively (3).

Prolongation of this fertility trend can lead to some serious problems, especially regarding economy, such as workforce reduction, which

can have negative impacts on investments and consumption. Moreover, the society will confront an aging population in a near future (4) imposing the heavy undertaking costs on the society. From the social aspect, a generation gap and a change in family structure will be created (5).

Therefore, the diminished tendency for having children has also been added to the list of nationwide issues which are in need of solutions (3). The previous studies investigated some of the influential factors, including childbearing motivations (2, 6), religious beliefs (7), pressure exerted by others (8), the spouses'

* Corresponding author: Seyyedeh Adeleh Rahmanian, Graduated, Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran. Tel: 09368850346; Email: rahmaniana921@mums.ac.ir

interactions (9), empowering of women (10) as well as education levels, counseling centers, and other services provided by health care providers (11, 12).

In depth recognition of childbearing behaviors' determinants helps the fertility control counsellors to provide the couples with more suitable recommendations and practices. It seems that changes in couples' fertility behaviors might result from major variations in their attitudes toward childbearing (13). Attitudes are a complex mode of feelings, desires, ideas, or tendencies which can lead to a kind of preparedness to behave based on various experiences (14). Attitudes are also considered as the most important elements of behavior (15). As a result, investigating the attitudes of young people at the onset of their marital life can help with predicting their behavior in the future to some extent. Negative opinions about childbearing can be reformed through correct planning and timely interventions.

While most studies conducted in Iran have focused on identifying different factors affecting failure in childbearing as well as desirable number and gender of children, few studies have shed light on the attitudes of people to having children. In the study performed by Kearny et al. (2016) on 358 women aged 18-30 years, opinions and pressures exerted by key people around them were noted as a remarkable factor contributing to delays in childbearing in Australia (16).

The best time to assess the attitudes, take essential measures, and educate the youngs about the risks of pregnancy in older ages is during their visits at premarital counseling units as their first referral to health centers. Likewise, Tough et al. (2007) investigated the Canadian couples awareness about the prenatal hazards. They found that 70% of these couples knew that aging was directly linked with pregnancy problems, but less than half of them had knowledge about augmented risks of preterm delivery and caesarean section with increased age at the pregnancy (17). Tyden et al. (2006) also notes giving awareness to young women as one of the tasks of health staffs (18).

In other words, fertility within each community is affected by the attitudes and

norms governing fertility and childbearing. Therefore, it is necessary to design questionnaires based on the cultural, social, and religious conditions to better identify fertility problems and delineate solutions. It should be noted that questionnaires employed in most studies in this domain are derived from the western ones. With this background in mind, this study aimed to measure the attitudes towards childbearing, using a culture-based questionnaire among men and women on the verge of marriage attending health centers of Mashhad, Iran in 2016.

Materials and Methods

This cross-sectional study was performed on 170 women and 100 men on the verge of marriage, referring to premarital counseling clinics of Mashhad, Iran. The sample size was calculated according to the study performed by Khadivzadeh et al. (2014) on opinions about governmental incentives for childbearing and their relationship with fertility preferences in Mashhad (119). According to their study, the standard deviation of tendency for fertility in couples was 2.88. Therefore, considering $\alpha=0.05$, $d=0.4$, $\sigma=2.88$, and $z_{1-\alpha/2}=1.96$ a total of 200 individuals (100 people for each gender) were calculated using the following equation:

$$n = \left(\frac{z_{1-\alpha/2} \times \sigma}{d} \right)^2 = \left(\frac{1.96 \times 2.88}{0.4} \right)^2 \approx 200$$

Given the higher availability and cooperation by women, 170 women were recruited to present a more precise study. As a result, the 170 women and 100 men attending premarital counseling clinics of health centers were selected through multistage convenient sampling. Eighteen women and ten men failed to complete the questionnaire and were excluded leading to the final 152 women and 90 men participants.

The inclusion criteria entailed: 1) being Iranian and living in Mashhad or the surrounding villages, 2) getting married for the first time, 3) having reading and writing ability, and 4) expressing willingness to participate in the study. The exclusion criteria encompassed incomplete responses to the questionnaire or refusing to cooperate. The study locations were

premarital counseling clinics of Danesh Amooz and Vahdat health centers which were randomly selected out of the four premarital counseling clinics of Mashhad.

After explaining the research objectives to the participants and obtaining their consent, the questionnaires were submitted to them. The data were collected using the demographic questionnaire in addition to a scale based on cultural attitudes towards childbearing (47 items) developed in 2013 by Khadivzadeh et al. (20). It should be noted that the content and face validity were confirmed in another study (21). To score the questionnaire, a five-point Likert scale ranging from totally agree (score 5) to totally disagree (score 1) was used.

The questionnaire was submitted to 10 members of the nursing, midwifery, reproductive health, and medical education staff at Mashhad University of Medical Sciences. The internal consistency of the questionnaire was calculated using Cronbach's alpha coefficient, which was obtained as 0.49. Results of the two-week test-retest revealed the reliability of this questionnaire to be desirable ($r=0.97$ and $P<0.001$).

All the data was analyzed using the SPSS version 16. In order to compare the results between the two gender groups and to compare the scores of questionnaire items, independent t-test and Mann-Whitney U test were used. In addition, the correlation between the demographic variables and opinions about childbearing were assessed using Pearson correlation. P -value < 0.05 was considered as significant.

Results

Our findings demonstrated that the mean and the standard deviation of women's age was 24.42 ± 5.23 years with a minimum of 15 and maximum of 38 years old. Regarding the place of residence, 98.7% of the female participants lived in urban areas and 1.3% in villages. Moreover, 0.7, 5.9, 21, and 72.4% of the women respondents had elementary school, middle school, high school, and academic education, respectively. In terms of occupation, 20.4% of the female participants were employees, 34.7% were students, 31.3% were housewives, and

13.6% had other jobs. Only 5.3% and 14.1% of these women had mothers and fathers with academic degrees, respectively. Considering the level of income, 77.9% of the participants had adequate income, while 12.5% had income of lower than the adequate, and 9.6% had an income of higher than adequate.

Furthermore, the mean and standard deviation of men's age was found to be 27.06 ± 4.3 years with a minimum of 19 and maximum of 39 years old. Our results also revealed that 99.1% of the male participants were living in urban areas and 0.9% of them were from villages. It should be noted that 90% of men were holding a high school diploma and higher degrees. In terms of occupation, 30% of the men were employees, while 66.7% of them were self-employed, and 3.3% were university students. Only 4.1% and 12.08% of them had mothers and fathers with academic degrees, respectively. Considering the income, 76.4% of the participants had adequate income, 16.5% had income of lower than adequate, and 7.1% had an income of higher than adequate.

Attitude Difference between Women and Men

The mean score of opinions about childbearing was 164.03 ± 21.62 (out of 235) and 158.86 ± 24.91 in women and men, respectively. The results of independent t-test did not indicate any significant difference in the attitudes to childbearing between the women and men ($P=0.11$).

According to the results of Mann-Whitney U test, there was a significant difference between the opinions of women and men regarding the items 1, 33, and 38. Men agreed more with item 1 which states that generation continuity is one of the important purposes of human creation ($P=0.04$). In addition, women approved item 33 (i.e., having a lower number of children can increase the quality of their upbringing) more than men ($P=0.002$). Considering item 38 (i.e., pregnancy and childbirth reduce the attractiveness of the women's body and lead to their premature aging), men agreed more in comparison with women ($P=0.01$). Table 1 demonstrates the mean of attitude score for women and men towards various questionnaire items.

Table 1. Mean and standard deviation for each item of the childbearing attitude questionnaire in women (n=152) and men (n=90)

Item	Sex	Highly agree (1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Highly disagree (5) %	Mean±SD	Mann-Whitney U
1- Generation continuity is one of the important purposes of human creation	Women	37.5	44.7	13.8	3.3	0.7	4.15±0.82	P=0.04 Z=-2.04
	Men	50.0	38.9	8.9	2.2	0.0	4.36±0.74	
2- Having a child is an inherent need	Women	41.7	47.0	8.6	2.6	0.0	42.7±0.73	P=0.99 Z=-0.01
	Men	38.9	54.4	4.4	2.2	0.0	4.30±0.66	
3- If you have children, you will not be alone in old age	Women	34.2	36.2	15.8	11.8	2.0	4.07±0.9	P=0.13 Z=-1.47
	Men	38.9	44.4	5.6	8.9	2.2	4.08±1	
4- Having a child can consolidate marital relationships	Women	36.4	43	11.9	8.6	0.0	4.07±0.9	P=0.86 Z=-0.17
	Men	34.4	44.4	15.6	5.6	0.0	4.07±0.85	
5- Children are considered as financial and emotional sources for parents' old age	Women	14.1	39.6	32.9	11.4	2.0	3.52±0.94	P=0.9 Z=-0.06
	Men	19.9	32.2	32.2	15.6	1.1	4.03±5.1	
6- Childbearing is essential for increasing the number of Muslims	Women	15.2	35.1	27.2	17.2	5.3	3.37±1.09	P=0.97 Z=-0.03
	Men	23.3	25.6	26.7	10.0	14.4	3.33±1.33	
7- Each child is considered as a workforce within a family	Women	11.9	29.8	32.5	21.2	4.6	3.23±1.06	P=0.75 Z=-0.31
	Men	8.9	32.2	32.2	21.1	5.6	3.17±1.04	
8- Boys can support families	Women	12.6	35.8	25.2	23.8	2.6	3.31±1.05	p=0.10 Z=-1.63
	Men	12.2	48.9	21.1	15.6	2.2	3.53±0.97	
9- Girls can give parents encouragement	Women	33.1	40.4	21.2	4.0	1.3	4.0±0.9	P=0.75 Z=-0.3
	Men	30.3	50.6	12.4	6.7	0.0	4.04±0.83	
10- Having a child increases the sense of responsibility in parents	Women	54.6	38.2	4.6	2.6	0.0	4.44±0.7	P=0.13 Z=-1.49
	Men	42.7	51.7	4.5	1.1	0.0	4.35±0.62	
11- Children are the cause of cheerfulness in the family	Women	49.3	42.1	5.9	2.6	0.0	4.38±0.71	P=0.9 Z=-0.09
	Men	48.9	44.4	5.6	1.1	0.0	4.41±0.65	
12- Birth of a new child brings about renewal and vitality in life	Women	38.8	43.4	14.5	3.3	0.0	4.17±0.79	P=0.58 Z=-0.55
	Men	38.9	50.0	7.8	3.3	0.0	4.24±0.73	
13- A child is a motivation to life	Women	40.3	45.6	11.4	2.0	0.7	4.22±0.78	P=0.8 Z=-0.24
	Men	39.1	46.0	10.3	3.4	1.1	4.18±0.84	
14- Having a child is an incentive for more work and efforts by parents	Women	46.4	41.7	10.6	0.7	0.7	4.32±0.74	P=0.4 Z=-0.83
	Men	36.0	58.0	4.5	1.1	0.0	4.29±0.6	
15- Children complete the family structure	Women	45.3	42.7	8.7	2.7	0.7	4.29±0.79	P=0.68 Z=-0.4
	Men	40.2	51.7	1.1	6.9	0.0	4.25±0.79	
16- Interactions between the siblings can improve their social and communicative skills	Women	38.4	51.0	9.3	1.3	0.0	4.26±0.68	P=0.1 Z=-1.62
	Men	25.6	64.4	8.9	1.1	0.0	4.14±0.61	
17- Each person can have more family members and relatives through more childbearing	Women	23.5	39.6	25.5	10.1	1.3	3.73±0.97	P=0.16 Z=-1.40
	Men	18.2	35.2	34.1	8.0	4.5	3.54±1.02	
Continuuous of Table 1.								
18- Having more children increases parents' adherence to	Women	21.2	31.1	27.2	17.2	3.3	3.49±1.10	P=0.38 Z=-0.87
	Men	13.3	40.0	20.0	22.2	4.4	3.35±1.10	

marital life								
19- Having more children lowers the possibility of divorce.	Women	6.6	32.5	34.4	27.8	8.6	2.9±1.05	P=0.1 Z=-1.64
	Men	13.5	31.5	20.2	27.0	7.9	3.15±1.19	
20- Couples need more children in order to decrease pressures exerted by those around them	Women	3.3	12.5	27.0	40.1	17.1	2.44±1.02	P=0.69 Z=-0.38
	Men	5.6	12.2	23.3	46.7	12.3	2.52±1.04	
21- Couples need fewer children in order to decrease pressures exerted by those around them	Women	10.0	30.0	46.0	12.0	2.0	3.34±0.88	P=0.15 Z=-1.43
	Men	10.0	45.6	28.9	10.0	5.6	3.44±0.99	
22- Delays in childbearing lead to the stigmatization of couples with infertility	Women	8.7	37.3	26.7	22.7	4.7	3.22±1.04	P=0.1 Z=-1.64
	Men	13.5	20.2	30.3	22.5	13.5	2.97±1.23	
23- The pieces of advice for childbearing by religious authorities are important to me	Women	10.1	24.8	36.2	16.8	12.1	3.04±1.14	P=0.42 Z=-0.79
	Men	15.7	23.6	32.6	19.1	9.0	3.17±1.18	
24- Educated people in society do not agree with increased fertility	Women	5.4	35.8	37.8	16.9	4.1	3.01±0.95	P=0.7 Z=-0.26
	Men	6.8	28.4	29.5	26.1	9.1	2.97±1.09	
25- Higher education lowers the need to have children	Women	5.4	35.8	37.8	16.9	4.1	3.21±0.92	P=0.4 Z=-0.83
	Men	4.5	36.0	29.2	25.8	4.5	3.10±0.98	
26- Income and social collaboration decreases the need to have children	Women	6.8	36.1	28.8	15.0	3.4	3.27±0.91	P=0.52 Z=-0.63
	Men	9.0	40.4	30.3	15.7	4.5	3.33±0.99	
27- Having fewer children is a sign of social prestige	Women	15.2	45.7	25.8	9.3	4.0	3.58±0.98	P=0.7 Z=-0.28
	Men	21.6	35.2	22.7	12.5	8.0	3.5±1.19	
28- Parents with more children pay less attention to their education and upbringing	Women	13.5	35.1	24.3	22.3	4.7	3.30±1.10	P=0.82 Z=-0.21
	Men	15.7	36.0	18.0	14.6	15.7	3.21±1.31	
29- I blame individuals for having a lot of children	Women	18.7	42.7	26.0	10.7	2.0	3.72±1.33	P=0.9 Z=-0.02
	Men	20.7	41.4	21.8	12.6	3.4	3.63±1.05	
30- I am concerned about Iran's aging population in the future	Women	18.7	27.3	38.7	10.7	4.7	3.44±1.05	P=0.5 Z=-0.58
	Men	20.2	31.5	33.7	6.7	7.9	3.49±1.12	
31- I am worried that low fertility rate can threaten Iran's security	Women	13.4	28.2	39.6	13.4	5.4	3.30±1.03	P=0.21 Z=-1.23
	Men	19.9	30.3	34.8	9.0	6.7	3.97±1.15	
32- Children can increase working and psychological pressures on parents	Women	2.7	31.3	32.7	27.2	6.1	2.97±0.97	P=0.49 Z=-0.68
	Men	8.0	29.9	17.2	31.0	13.8	2.87±1.21	
33- If you have fewer children, you can increase the quality of their upbringing	Women	4.0	31.5	19.5	35.6	9.4	2.85±1.09	P=0.002 Z=-3.13
	Men	9.0	10.1	14.6	46.1	20.2	2.41±1.18	
Continuous of Table 1.								
34- Continuing education by parents is	Women	11.3	40.7	36.0	8.0	4.0	3.47±0.93	P=0.71 Z=-0.36

more important than childbearing	Men	16.9	36.0	33.7	7.9	5.6	3.50±1.04	
35- Maintaining jobs for women is more important than childbearing	Women	14.0	49.3	26.0	6.7	4.0	3.62±0.94	P=0.24 Z=-1.16
	Men	17.0	36.4	28.4	9.1	9.1	3.43±1.15	
36- Children are good deeds commemorated after a person's death	Women	29.8	37.1	27.2	4.6	1.3	3.89±0.93	P=0.08 Z=-1.75
	Men	36.4	43.2	15.9	1.1	3.4	4.07±0.93	
37- Each pregnancy and childbirth is accompanied by fear and worry for mothers	Women	2.0	9.3	29.1	41.1	18.5	2.35±0.95	P=0.48 Z=-0.7
	Men	5.7	10.2	28.4	37.5	18.2	2.47±1.08	
38- Childbirth causes reduced women's attractiveness and premature aging	Women	3.3	21.1	34.2	32.2	9.2	2.76±0.99	P=0.01 Z=-2.34
	Men	14.8	25.0	27.3	25.0	8.0	3.13±1.18	
39- In any case, two children is enough	Women	6.6	27.0	33.6	23.7	9.2	2.98±1.07	P=0.25 Z=-1.14
	Men	8.0	21.6	27.3	31.8	11.4	2.82±1.13	
40- In today's society, no one values motherhood	Women	20.1	38.9	26.8	10.1	4.0	3.61±1.04	P=0.8 Z=-0.22
	Men	19.5	43.7	20.7	10.3	5.7	3.91±3.23	
41- Having a child disturbs human tranquility	Women	18.0	42.0	23.3	10.0	6.7	3.54±1.10	P=0.68 Z=-0.4
	Men	27.7	42.0	11.4	12.5	11.4	3.72±2.43	
42- Having a child results in loss of fun and humor opportunities	Women	15.9	45.7	25.8	8.6	4.0	3.60±0.98	P=0.28 Z=-1.17
	Men	29.5	36.4	12.5	13.6	8.0	3.65±3.27	
43- Growing rate of childbearing can increase poverty within the society	Women	11.9	49.7	22.5	13.2	2.6	3.54±0.95	P=0.8 Z=-0.16
	Men	25.3	29.9	24.1	13.8	6.9	3.52±1.2	
44- Children reduce mothers' social relationships	Women	9.9	38.4	36.4	12.6	2.6	3.40±0.92	P=0.5 Z=-0.53
	Men	17.2	34.5	14.9	23.0	10.3	3.25±1.27	
45- Childbearing should decrease because of existing inflation	Women	6.7	27.3	30.7	26.0	9.3	2.96±1.08	P=0.9 Z=-0.052
	Men	10.2	27.3	22.7	27.3	12.5	2.95±1.21	
46- Having more children does not allow people to live their own desired life	Women	6.0	37.3	27.3	25.3	4.0	3.16±0.99	P=0.6 Z=-0.45
	Men	15.9	31.8	19.3	22.7	10.2	3.20±1.25	
47- Children bring livelihood with themselves	Women	39.7	34.4	18.5	5.3	2.0	4.04±0.98	P=0.28 Z=-1.07
	Men	49.4	27.0	14.6	4.5	4.5	4.12±1.10	

Childbearing Tendencies

The mean and the standard deviation of the desired number of children in women was 2.32±1.01 with a minimum and maximum of zero and five, respectively. The mentioned number was 2.14±0.9 in men with a minimum of zero and a maximum of three children (Figure 1).

In women's opinion, the mean of ideal number of daughters was 1.07±0.61 with a minimum of zero and a maximum of two and the mean of ideal number of sons was 1.16±0.69 with a minimum of zero and a maximum of three.

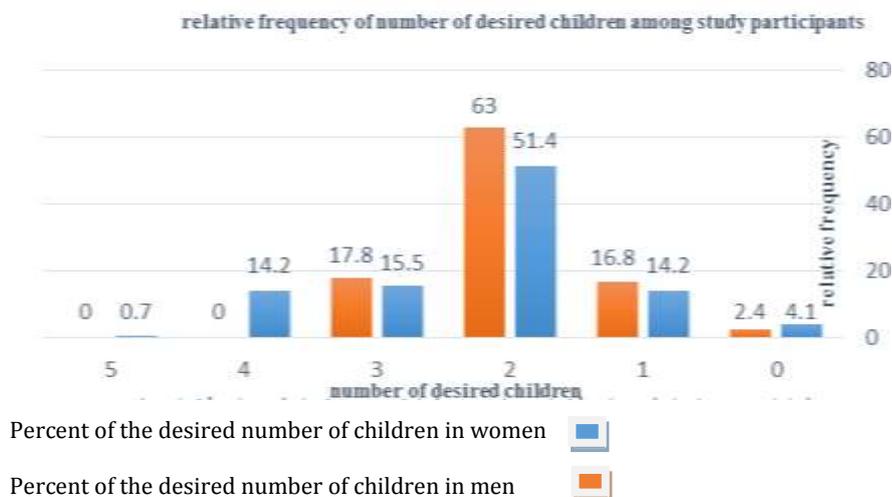


Figure 1. Relative frequency of the desired number of children among the participants

In this respect, 15.5% of women had no desire to have daughters, 61.5% of them had tendency to have one daughter, and 23% wanted to have two daughters. Moreover, 13.5, 60.1, 23, and 3.4% of the women had no predisposition to have sons, had desire to have one son, tended to have two sons, and were willing to have three sons, respectively.

The mean of ideal number of daughters among men was 1.02 ± 0.52 with a minimum and maximum of zero and two, respectively. On the other hand, the mean of desired number of sons in men's opinion was 1.28 ± 1.4 with a minimum of one and a maximum of three. Furthermore, 24% of men had no desire to have daughters and 76% of them tended to have one daughter.

In addition, 18, 56, and 26% of men tended to have one, two, and three sons, respectively.

Relationships between the Attitudes and Demographic Variables

In this study, a significant relationship was observed between the attitudes towards childbearing among women and men on the verge of marriage and the number of their desired children. However, no significant relationship was found between the attitudes with age, birth order, level of education, parental education, level of income, the number of sisters and brothers (Table 2), place of residence (urban or rural areas), and the occupational status.

Table 2. Relationship between attitudes towards childbearing and demographic variables

Variable	Attitudes towards childbearing in women	Attitudes towards childbearing in men
Age	$r_p=0.04, P=0.6$	$r_p=-0.08, P=0.28$
Birth order	$r_s=0.12, P=0.14$	$r_s=-0.14, P=0.09$
Level of participants' education	$r_s=-0.01, P=0.8$	$r_s=-0.11, P=0.2$
Level of education among participants' mothers	$r_s=0.01, P=0.8$	$r_s=-0.11, P=0.2$
Level of education among participants' fathers	$r_s=0.06, P=0.4$	$r_s=-0.05, P=0.6$
Level of income	$r_s=0.14, P=0.1$	$r_s=0.09, P=0.3$
Number of sisters	$r_s=0.02, P=0.9$	$r_s=0.09, P=0.37$
Number of brothers	$r_s=0.09, P=0.2$	$r_s=-0.02, P=0.7$
Number of sister's daughters	$r_s=0.02, P=0.7$	$r_s=-0.04, P=0.6$
Number of sister's sons	$r_s=0.14, P=0.08$	$r_s=-0.09, P=0.34$
Number of brother's daughters	$r_s=0.3, P=0.6$	$r_s=-0.04, P=0.5$
Number of brother's sons	$r_s=-0.04, P=0.5$	$r_s=-0.02, P=0.7$
Number of desired children	$r_s=0.34, P<0.001$	$r_s=0.27, P=0.001$

r_s =Spearman's correlation, r_p =Pearson correlation

Relationship between Ideal Child Number and other Variables

The ideal number of children among women on the verge of marriage had a significant relationship with birth order, number of sisters, as well as the number of sister's daughters and sons. The ideal number of children among men on the verge of marriage was also correlated with birth order and the number of brother's sons.

Moreover, our results showed that the ideal

number of daughters among women had a relationship with birth order, number of sisters, and number of sister's daughters and sons. Likewise, the ideal number of sons was significantly correlated with birth order and the number of sisters' sons.

Furthermore, the ideal number of sons among men was correlated only with the number of brother's sons; while the ideal number of daughters had no relationship with any of the variables (Table 3).

Table 3. Relationship between ideal number of children in participants' opinion and other variables

		Ideal child number	Ideal number of daughters	Ideal number of sons
Birth order	Women	$r_s=0.27, P=0.001$	$r_s=0.24, P=0.003$	$r_s=0.22, P=0.006$
	Men	$r_s=0.3, P=0.008$	$r_s=0.04, P=0.7$	$r_s=0.12, P=0.06$
Number of sisters	Women	$r_s=0.19, P=0.01$	$r=0.18, P=0.02$	$r_s=0.12, P=0.12$
	Men	$r_s=0.15, P=0.09$	$r_s=0.08, P=0.12$	$r_s=0.09, P=0.14$
Number of brothers	Women	$r_s=0.12, P=0.13$	$r_s=0.14, P=0.08$	$r_s=0.08, P=0.28$
	Men	$r_s=0.12, P=0.15$	$r_s=0.19, P=0.10$	$r_s=0.07, P=0.28$
Number of sister's daughters	Women	$r_s=0.23, P=0.004$	$r_s=0.25, P=0.002$	$r_s=0.14, P=0.08$
	Men	$r_s=0.18, P=0.07$	$r_s=0.05, P=0.2$	$r_s=0.15, P=0.06$
Number of sister's sons	Women	$r_s=0.27, P=0.001$	$r_s=0.25, P=0.002$	$r_s=0.18, P=0.02$
	Men	$r_s=0.07, P=0.1$	$r_s=0.09, P=0.3$	$r_s=0.18, P=0.18$
Number of brother's daughters	Women	$r_s=0.05, P=0.5$	$r_s=0.02, P=0.8$	$r_s=0.07, P=0.38$
	Men	$r_s=0.08, P=0.6$	$r_s=0.08, P=0.8$	$r_s=0.09, P=0.38$
Number of brother's sons	Women	$r_s=0.11, P=0.18$	$r_s=0.09, P=0.26$	$r_s=0.11, P=0.15$
	Men	$r_s=0.25, P=0.01$	$r_s=0.12, P=0.28$	$r_s=0.25, P=0.02$

r_s =Spearman's correlation

Discussion

The purpose of this study was to evaluate the attitudes towards childbearing among the women and men on the verge of marriage who attended the health centers of Mashhad, Iran in 2016. The mean scores for attitudes towards childbearing among women and men showed that such attitudes were not favorable enough. Moreover, there was not a significant difference between the opinions of women and men.

Mousavi et al. (2013) performed a study on childbearing status and attitudes towards it among young families living in Qazvin, Iran. They also found no significant difference between men and women and the attitudes were consistent with the findings of the present study. On the other hand, men's and women's opinions about childbearing were negative in their investigation which is not in line with the

results of present study (22). Although the attitudes of the individuals in our study were not negative, they were not favorable enough. Therefore, it is required to implement some interventions in order to improve the attitudes towards childbearing.

Chan et al. (2015) conducted another study on intentions and opinions about parenting among Chinese students in Hong Kong. The authors found that these individuals were reluctant to have children, although they were aware of the decline in fertility rate with age (23). Accordingly, it could be concluded from their results that the attitudes to childbearing were not so desirable.

In a similar study, Eshaghi (2014) shed light on the theory of opposition between quantity and quality of children. Becker assumes in the mentioned theory that parents want their

children to be desirable because of altruism. Today, the number of children is not the goal for mothers, but their upbringing is of utmost importance (24). In another investigation, Enayat (2013) found that the concerns about training and controlling children were among the justifications to reduce childbearing (25).

The findings of present study suggest that women's agreement with item 33 is also consistent with results of the studies performed by Eshaghi and Enayat. Therefore, the authorities who are in charge should consider this issue. It seems that women are likely to have positive opinions about having children, in case they know that favorable conditions are provided for upbringing and growth of their children.

Men agreed more than women with the fact that pregnancy and childbirth could reduce the women's physical attractiveness and lead in premature aging. Consistently, the results of Mahmoudian et al. (2015) revealed that the western media and internet have created the concept of ideal body shapes for new generations. Images invoke that pregnancy can change the shape and size of body and has negative effects on childbearing decisions (26). This issue highlights the necessity of giving more information, particularly to young men. It should be mentioned that the training courses about having children are rarely held for men and it seems essential to education the men referring to the clinics and provide them with appropriate information in order to correct their attitudes.

In the current study (Table 1), 60.8% of women and 56.8% of men agreed with item 27 (i.e., having fewer children is a sign of social prestige) and only 13.3% of women and 20.5% of men disagreed with the given item. Considering item 29 (i.e., I blame individuals who have many children), 61.4% of women and 12.7% of men agreed with this attitude; while 12.7 and 16% of women and men disagreed, respectively. According to the report released by the Tehran Institute for Statistics, 31.1% of young people on the verge of marriage believed that other would criticize them if they have more than two children (27).

Bourdieu et al. also argued that preference is a social issue and depends on the status of

people within communities. Therefore, fashion designers always consider the tastes of higher social class people in society and reduced childbearing may arise as a vogue (28). Our findings regarding these items also support the arguments of Bourdieu and highlight the need for addressing this cultural issue which is threatening childbearing.

In summary, report of the Institute for Statistics (2015) assessed the attitudes of young people on the verge of marriage and the married women aged 15-49 years to fertility in Iran. They revealed that 18.7% of the youth considered academic achievement and occupation of women more important than childbearing (27). In the present study, 52% of women and 54.9% of men assumed continuing their education more important than having children. In addition, 63.3% of women and 53.4% of men believed that maintaining jobs for women was more vital than raising children.

According to the mentioned report by Tehran Institute for Statistics, 29.4% of the young adults believed that having children was difficult and could disturb convenience. In the present study, 60% of women and 64.7% of men stated that children account for anguish in parents. However, the report by the Institute for Statistics and the results of the current study underlined the positive characteristics of childbearing expressed by young people. In the given report of Tehran Institute for Statistics, 85% of the young adults regarded childbearing as a reinforcer of responsibility. In the present study, 92.8% of women and 94.4% of men agreed with this issue.

It should be noted that 80.2% of the youth considered children as a consolidating factor for the family. In the present study, 79.4% of women and 78.8% of men believed that having children could consolidate marital relationships. Living without children was also considered unemotional and dispirited by 77.4% of the young people. In this study, 82.2% of women and 88.9% of men also recognized the birth of new child as a vital and rejuvenation factor. Furthermore, 64.9% of the young individuals assumed that children could assist parents in old ages. In the current study, 70.4% of women and 83.3% of men believed

that they will not be alone in old age if they have children. Moreover, 53.7 and 51.1% of women and men supposed that children could be emotional and financial support sources during aging, respectively (27).

Therefore, recognizing the interesting aspects of having children for the youth and their positive opinions about this issue can result in improved training programs that promote childbearing. It seems programs that can be implemented and continued at all local, regional, and national levels are required in order to correct the attitudes of young men and women to some items and the aforementioned comments. As negative opinions about childbearing form up in the youth, the positive ones can be gradually nurtured by such programs. It can be concluded that these programs should be implemented throughout childhood when the framework for thinking is shaped.

In the present study, the mean desired number of children in women and men was 2.23 ± 1.01 and 2.14 ± 0.9 , respectively and did not have a statistically significant difference. The study performed by Khadivzadeh et al. (2015) on young couples in Mashhad, Iran showed that the mean preferred number of children by couples was 2.37 ± 1.11 (19), which is more than the mean obtained in the present study. The mean desired number of children in women in the study by Eslamlou was 1.81 ± 0.74 and the given value was 1.93 ± 0.76 in men (29) suggesting that the favorable number of children was lower than the replacement limit and it was not in agreement with the findings of present study. According to the report released by the Institute for Statistics, the mean desired number of children among young women and men on the verge of marriage was 2.2 and 2.4 children, respectively (27).

In the current study, 51.4, 15.5, 14.2, 14.2, and 4.1% of the women tended to have two, three, four, one and any children, respectively. As released in the report by the Institute for Statistics, 62.2% of women who were about to get married wanted to have two children, 20.5% of them liked to have three to four children, 14.8% of them preferred just one child, and 0.7% were not about to have any children. In this study, most men liked to have

two followed by three children. It was found that 16.8% of the men wanted just one child and 2.4% of these individuals did not like to have any children. In the report of the Institute for Statistics, 57.5% of men on the verge of marriage were interested in having two children, 23.9% were in favor of having three to four children, 13.3% preferred just one child, and 1.1% did not want a child (27).

In both studies, having two children was of interest among most individuals and having three children was fortunately preferred over an only child by people. However, the percentage of those who desired to have just one child, was significant which should be of particular interest to officials and policy-makers. In addition, there were young people who did not want to have any children and this issue needs effective programs for correcting their attitudes.

In our study, as shown in Table 3, the desired number of children in men and women was significantly correlated with the number of family members. However, results of the study conducted by Mousavi et al. (2013) showed no significant difference between the attitudes of people living in big or small families towards the number of children (22).

Consequently, the results of this study and being aware of the attitudes of young adults can assist the staff of premarital counseling clinics. It seems that the opinions of young adults can be corrected through emphasizing on aspects of childbearing attitudes and preferences evaluated in the present study.

Conclusion

It could be concluded from the results of this study that the attitudes of young women and men to childbearing are not desirable and there is a need to design and implement appropriate interventional programs. The findings revealed the necessity of planning in order to enhance the premarital counseling, encourage the youths, and promote childbearing.

Considering the findings of this study, it seems essential to design interventional counseling programs regarding the aspects of childbearing attitudes investigated in this study for men and women on the verge of marriage. Furthermore, as childbearing attitudes form during the whole life beginning in childhood, it

is recommended to develop interventional counseling programs for parents in health clinics.

Among the limitations of this study was the reluctance of some young men to participate in the present investigation and complete the given questionnaire.

Acknowledgements

The present study was a part of the master's thesis completed by the second author. We hereby appreciate all the people involved in this study, including all the personnel of Vahdat and Danesh Amooz Health Centers as well as all those who cooperated in this study. We would also like to extend our gratitude to the Vice-Chancellor of Research at Mashhad University of Medical Sciences for financial support.

Conflicts of interest

The authors declare no conflicts of interest

References

1. Kaboudi M, Ramezankhani A, Manouchehri H, Hajizadeh E, Haghi M. The decision-making process of childbearing: a qualitative study. *Journal of Payesh*. 2013; 12(5):505-515.
2. Khadivzadeh T, Arghavani E, Shakeri MT. Relationship between fertility motivations and preferences in couples. *The Iranian Journal of Obstetrics, Gynecology and Infertility*. 2014; 17(114):8-18 (Persian).
3. Kalantari S, Abaszadeh M, Amin-Mozafari F, Rakei-Bonab N. Sociological evaluation of affinity to child bearing and some related factors: married adolescents of Tabriz district case study. *Applied Social*. 2010; 37(1):83-104.
4. Ghazanfarpour M, Kaviani M, Abdollahian S, Bonakchi H, Najmabadi Khadijeh M, Naghavi M, et al. The relationship between women's attitude towards menopause and menopausal symptoms among postmenopausal women. *Gynecological Endocrinology*. 2015; 31(11):860-865.
5. Ayatollahi Z, Hoseini S, Hekmatnia M, Sayyah M, Mahmoudi M, Namjoo B. *Family planning and population*. 24th ed. Tehran: Publication Office of Education; 2014.
6. Khadivzadeh T, Ghazanfarpour M, Kareshki H, Arghavani E. The factorial structure of the Persian version of childbearing questionnaire in first time engaged couples in Iran. *Journal of Obstetrics and Gynaecology*. 2017; In Press.
7. Khadivzadeh T, Arghavani E. Religious beliefs and fertility preferences among engaged couples, referring to premarital counseling centers of Mashhad, Iran. *Journal of Midwifery and Reproductive Health*. 2014; 2(4):238-245.
8. Khadivzadeh T, Latifnejad Roudsari R, Bahrami M, Taghipour A, Abbasi Shavazi MJ. The influence of social network on couples' intention for having the first child. *Iranian Journal of Reproductive Medicine*. 2013; 11(3):209-218.
9. Khadivzadeh T, Latifnejad Roudsari R, Bahrami M, Taghipour A, Abbasi Shavazi MJ. "caring for my family integrity": fertile couples' first childbearing experience in the urban society of Mashhad, Iran. *Human Fertility*. 2014; 18(1):60-69.
10. Khadivzadeh T, Latifnejad Roudsari R, Bahrami M. The influence of gender role and women's empowerment on couples' fertility experiences in the urban society of Mashhad, Iran. *Journal of Midwifery and Reproductive Health*. 2014; 2(3):170-179.
11. Rahmati R, Khadivzadeh T, Esmaily H, Bahrami HR. Evaluation of the performance of the health care workers in giving consultation about the fertility promotion. *Journal of Midwifery and Reproductive Health*. 2017; 5(2):911-918.
12. Khadivzade T, Hoseinpour M. The relationship between cesarean delivery and fertility tendencies in women attending health centers in Mashhad. *Journal of Midwifery and Reproductive Health*. 2017; In Press.
13. Mansourian MK, Khoshnevis A. Married women's attitude and sexual preferences about reproductive practice: Tehran case study. *Journal of Social Sciences and Humanities of Shiraz University*. 2006; 24(2):129-146.
14. Shirkavand S. Formation and attitude change. *Management Development*. 2003; 57:16-9.
15. Saffarinia M. *Changing attitudes and behavior of consumers energy psychology*. Tehran: Book Online; 2006.
16. Kearney AL, White KM. Examining the psychosocial determinants of women's decisions to delay childbearing. *Human Reproduction*. 2016; 31(8):1176-1178.
17. Tough S, Tofflemire K, Benzies K, Fraser-Lee N, Newburn-Cook C. Factors influencing childbearing decisions and knowledge of perinatal risks among Canadian men and women. *Maternal and Child Health Journal*. 2007; 11(2):189-198.
18. Tydén T, Svanberg AS, Karlström PO, Lihoff L, Lampic C. Female university students' attitudes to future motherhood and their understanding about fertility. *The European Journal of Contraception & Reproductive Health Care*. 2006; 11(3):181-189.
19. Khadivzadeh T, Arghavani E, Shakeri MT. Attitude toward governmental incentives on childbearing and its relationship with fertility preferences in couples attending premarital counseling clinic in health centers in Mashhad. *Journal of Mazandaran*

- University of Medical Sciences. 2015; 24(120):1-13 (Persian).
20. Khadivzadeh T. Exploring the process of fertility behavior regulation by couples in urban society of Mashhad. [PhD Dissertation]. Mashhad: Mashhad University of Medical Sciences; 2013 (Persian).
 21. Rahmati R. Comparing the effect of education, applying webinar or group discussion on attitude and behavior of health providers about the counseling with fertility promotion approach. [Master Dissertation]. Mashhad, Iran: Mashhad University of Medical Sciences; 2016.
 22. Mousavi F, Ghafelebashi M. A study of attitudes towards childbearing in young families of Qazvin city. *Women and Family Studies*. 2013; 1(2):111-134 (Persian).
 23. Chan CH, Chan TH, Peterson BD, Lampic C, Tam MY. Intentions and attitudes towards parenthood and fertility awareness among Chinese university students in Hong Kong: a comparison with Western samples. *Human Reproduction*. 2015; 30(2):364-372.
 24. Eshaghi M, Mohebbi SF, Papinezhad SF, Jahandar S. Challenges working women having children in a qualitative study. *Women in Development & Politics*. 2014; 12(1):111-134.
 25. Enayat H, Parnian L. The study of cultural globalization and tendency to fertility. *Society Journal of Women*. 2013; 4(2):109-136.
 26. Mahmoudian H, Moghaddas S. Media consumption, and reproductive behavior management body. *Culture Strategy*. 2014; 31:173-196.
 27. Statistical Research Center. Examine the attitudes of young people in the marriage and the 15-49 year-old women married to childbearing and knowledge of socioeconomic and cultural effects; 2015.
 28. Piltan F, Rahmanian M. Sociological study of factors affecting willingness to childbearing women and married men (Case study: Women and men 52 to 52 years old in Jahrom). *Social Development Studies*. 2015; 7(2):121-134 (Persian).
 29. Farrokh-Eslamlou H, Vahabzadeh Z, Moeini R, Moghaddam Tabrizi F. Pre-marriage couples fertility attitude following recent childbearing persuasive policies in Iran. *Urmia of Journal Nursing and Midwifery Faculty*. 2014; 11(10): 836-846.