Young Women and Men's Attitude towards Childbearing

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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.

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’ interactions (9), empowering of women (10) as well as education levels, counseling centers, and

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other services provided by health care providers (11, 12).

In depth recognition of childbearing behaviors’ determinants helps the fertility control counselors 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-weeks 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)
<table>
<thead>
<tr>
<th>Item</th>
<th>Sex</th>
<th>Highly agree (1) %</th>
<th>Agree (2) %</th>
<th>Neutral (3) %</th>
<th>Disagree (4) %</th>
<th>Highly disagree (5) %</th>
<th>Mean±SD</th>
<th>Mann-Whitney U</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generation continuity is one of the important purposes of human creation</td>
<td>Women</td>
<td>37.5</td>
<td>44.7</td>
<td>13.8</td>
<td>3.3</td>
<td>0.7</td>
<td>4.15±0.82</td>
<td>P=0.04 Z=-2.94</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>50.0</td>
<td>38.9</td>
<td>8.9</td>
<td>2.2</td>
<td>0.0</td>
<td>4.36±0.74</td>
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</tr>
<tr>
<td>2. Having a child is an inherent need</td>
<td>Women</td>
<td>41.7</td>
<td>47.0</td>
<td>8.6</td>
<td>2.6</td>
<td>0.0</td>
<td>4.27±0.73</td>
<td>P=0.99 Z=0.01</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>38.9</td>
<td>54.4</td>
<td>4.4</td>
<td>2.2</td>
<td>0.0</td>
<td>4.30±0.66</td>
<td></td>
</tr>
<tr>
<td>3. If you have children, you will not be alone in old age</td>
<td>Women</td>
<td>34.2</td>
<td>36.2</td>
<td>15.8</td>
<td>11.8</td>
<td>2.0</td>
<td>4.07±0.9</td>
<td>P=0.13 Z=1.47</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>38.9</td>
<td>44.4</td>
<td>5.6</td>
<td>8.9</td>
<td>2.2</td>
<td>4.08±1.1</td>
<td></td>
</tr>
<tr>
<td>4. Having a child can consolidate marital relationships</td>
<td>Women</td>
<td>36.4</td>
<td>43</td>
<td>11.9</td>
<td>8.6</td>
<td>0.0</td>
<td>4.07±0.9</td>
<td>P=0.86 Z=0.17</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>34.4</td>
<td>44.4</td>
<td>15.6</td>
<td>5.6</td>
<td>0.0</td>
<td>4.07±0.85</td>
<td></td>
</tr>
<tr>
<td>5. Children are considered as financial and emotional sources for parents’ old age</td>
<td>Women</td>
<td>14.1</td>
<td>39.6</td>
<td>32.9</td>
<td>11.4</td>
<td>2.0</td>
<td>3.52±0.94</td>
<td>P=0.9 Z=0.06</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>19.9</td>
<td>32.2</td>
<td>32.2</td>
<td>15.6</td>
<td>1.1</td>
<td>4.03±5.1</td>
<td></td>
</tr>
<tr>
<td>6. Childbearing is essential for increasing the number of Muslims</td>
<td>Women</td>
<td>15.2</td>
<td>35.1</td>
<td>27.2</td>
<td>17.2</td>
<td>5.3</td>
<td>3.37±1.09</td>
<td>P=0.97 Z=0.03</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>23.3</td>
<td>25.6</td>
<td>26.7</td>
<td>10.0</td>
<td>14.4</td>
<td>3.33±1.33</td>
<td></td>
</tr>
<tr>
<td>7. Each child is considered as a workforce within a family</td>
<td>Women</td>
<td>11.9</td>
<td>29.8</td>
<td>32.5</td>
<td>21.2</td>
<td>4.6</td>
<td>3.23±1.06</td>
<td>P=0.75 Z=0.31</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>8.9</td>
<td>32.2</td>
<td>32.2</td>
<td>21.1</td>
<td>5.6</td>
<td>3.17±1.04</td>
<td></td>
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<tr>
<td>8. Boys can support families</td>
<td>Women</td>
<td>12.6</td>
<td>35.8</td>
<td>25.2</td>
<td>23.8</td>
<td>2.6</td>
<td>3.31±1.05</td>
<td>P=0.10 Z=1.63</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>12.2</td>
<td>48.9</td>
<td>21.1</td>
<td>15.6</td>
<td>2.2</td>
<td>3.53±0.97</td>
<td></td>
</tr>
<tr>
<td>9. Girls can give parents encouragement</td>
<td>Women</td>
<td>33.1</td>
<td>40.4</td>
<td>21.2</td>
<td>4.0</td>
<td>1.3</td>
<td>4.04±0.9</td>
<td>P=0.75 Z=0.3</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>30.3</td>
<td>50.6</td>
<td>12.4</td>
<td>6.7</td>
<td>0.0</td>
<td>4.04±0.83</td>
<td></td>
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<tr>
<td>10. Having a child increases the sense of responsibility in parents</td>
<td>Women</td>
<td>54.6</td>
<td>38.2</td>
<td>4.6</td>
<td>2.6</td>
<td>0.0</td>
<td>4.44±0.7</td>
<td>P=0.13 Z=1.49</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>42.7</td>
<td>51.7</td>
<td>4.5</td>
<td>1.1</td>
<td>0.0</td>
<td>4.35±0.62</td>
<td></td>
</tr>
<tr>
<td>11. Children are the cause of cheerfulness in the family</td>
<td>Women</td>
<td>49.3</td>
<td>42.1</td>
<td>5.9</td>
<td>2.6</td>
<td>0.0</td>
<td>4.38±0.71</td>
<td>P=0.9 Z=0.09</td>
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<tr>
<td></td>
<td>Men</td>
<td>48.9</td>
<td>44.4</td>
<td>5.6</td>
<td>1.1</td>
<td>0.0</td>
<td>4.41±0.65</td>
<td></td>
</tr>
<tr>
<td>12. Birth of a new child brings about renewal and vitality in life</td>
<td>Women</td>
<td>38.8</td>
<td>43.4</td>
<td>14.5</td>
<td>3.3</td>
<td>0.0</td>
<td>4.17±0.79</td>
<td>P=0.58 Z=0.55</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>38.9</td>
<td>50.0</td>
<td>7.8</td>
<td>3.3</td>
<td>0.0</td>
<td>4.24±0.73</td>
<td></td>
</tr>
<tr>
<td>13. A child is a motivation to life</td>
<td>Women</td>
<td>40.3</td>
<td>45.6</td>
<td>11.4</td>
<td>2.0</td>
<td>0.7</td>
<td>4.22±0.78</td>
<td>P=0.8 Z=0.24</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>39.1</td>
<td>46.0</td>
<td>10.3</td>
<td>3.4</td>
<td>1.1</td>
<td>4.18±0.84</td>
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</tr>
<tr>
<td>14. Having a child is an incentive for more work and efforts by parents</td>
<td>Women</td>
<td>46.4</td>
<td>41.7</td>
<td>10.6</td>
<td>0.7</td>
<td>0.7</td>
<td>4.32±0.74</td>
<td>P=0.4 Z=0.83</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>36.0</td>
<td>58.0</td>
<td>4.5</td>
<td>1.1</td>
<td>0.0</td>
<td>4.29±0.6</td>
<td></td>
</tr>
<tr>
<td>15. Children complete the family structure</td>
<td>Women</td>
<td>45.3</td>
<td>42.7</td>
<td>8.7</td>
<td>2.7</td>
<td>0.7</td>
<td>4.29±0.79</td>
<td>P=0.68 Z=0.4</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>40.2</td>
<td>51.7</td>
<td>1.1</td>
<td>6.9</td>
<td>0.0</td>
<td>4.25±0.79</td>
<td></td>
</tr>
<tr>
<td>16. Interactions between the siblings can improve their social and communicative skills</td>
<td>Women</td>
<td>38.4</td>
<td>51.0</td>
<td>9.3</td>
<td>1.3</td>
<td>0.0</td>
<td>4.26±0.68</td>
<td>P=0.1 Z=1.62</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>25.6</td>
<td>64.4</td>
<td>8.9</td>
<td>1.1</td>
<td>0.0</td>
<td>4.14±0.61</td>
<td></td>
</tr>
<tr>
<td>17. Each person can have more family members and relatives through more childbearing</td>
<td>Women</td>
<td>23.5</td>
<td>39.6</td>
<td>25.5</td>
<td>10.1</td>
<td>1.3</td>
<td>3.73±0.97</td>
<td>P=0.16 Z=1.40</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>18.2</td>
<td>35.2</td>
<td>34.1</td>
<td>8.0</td>
<td>4.5</td>
<td>3.54±1.02</td>
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<tr>
<td>Continuous of Table 1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Having more children increases parents’ adherence to marital life</td>
<td>Women</td>
<td>21.2</td>
<td>31.1</td>
<td>27.2</td>
<td>17.2</td>
<td>3.3</td>
<td>3.49±1.10</td>
<td>P=0.38 Z=0.87</td>
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<tr>
<td></td>
<td>Men</td>
<td>13.3</td>
<td>40.0</td>
<td>20.0</td>
<td>22.2</td>
<td>4.4</td>
<td>3.35±1.10</td>
<td></td>
</tr>
<tr>
<td>19. Having more</td>
<td>Women</td>
<td>6.6</td>
<td>32.5</td>
<td>34.4</td>
<td>27.8</td>
<td>8.6</td>
<td>2.9±1.05</td>
<td>P=0.1</td>
</tr>
</tbody>
</table>
### Childbearing Attitudes in Young Women and Men

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>20- Couples need more children in order to decrease pressures exerted by those around them</td>
<td>13.5</td>
<td>3.3</td>
<td>Z=1.64</td>
</tr>
<tr>
<td>P=0.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21- Couples need fewer children in order to decrease pressures exerted by those around them</td>
<td>5.6</td>
<td>10.0</td>
<td>Z=1.43</td>
</tr>
<tr>
<td>P=0.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-1.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22- Delays in childbearing lead to the stigmatization of couples with infertility</td>
<td>8.7</td>
<td>10.0</td>
<td>Z=0.1</td>
</tr>
<tr>
<td>P=0.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23- The pieces of advice for childbearing by religious authorities are important to me</td>
<td>15.7</td>
<td>10.1</td>
<td>Z=1.8</td>
</tr>
<tr>
<td>P=0.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24- Educated people in society do not agree with increased fertility</td>
<td>30.4</td>
<td>5.4</td>
<td>Z=0.26</td>
</tr>
<tr>
<td>P=0.07</td>
<td></td>
<td></td>
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<tr>
<td>Z=-0.52</td>
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<tr>
<td>25- Higher education lowers the need to have children</td>
<td>4.5</td>
<td>5.4</td>
<td>Z=0.83</td>
</tr>
<tr>
<td>P=0.4</td>
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<td>Z=-0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26- Income and social collaboration decreases the need to have children</td>
<td>15.6</td>
<td>6.8</td>
<td>Z=0.28</td>
</tr>
<tr>
<td>P=0.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27- Having fewer children is a sign of social prestige</td>
<td>21.6</td>
<td>15.2</td>
<td>Z=0.21</td>
</tr>
<tr>
<td>P=0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28- Parents with more children pay less attention to their education and upbringing</td>
<td>15.7</td>
<td>13.5</td>
<td>Z=0.02</td>
</tr>
<tr>
<td>P=0.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29- I blame individuals for having a lot of children</td>
<td>20.7</td>
<td>18.7</td>
<td>Z=0.58</td>
</tr>
<tr>
<td>P=0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30- I am concerned about Iran’s aging population in the future</td>
<td>19.9</td>
<td>18.7</td>
<td>Z=1.23</td>
</tr>
<tr>
<td>P=0.21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=1.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31- I am worried that low fertility rate can threaten Iran’s security</td>
<td>31.0</td>
<td>29.2</td>
<td>Z=1.38</td>
</tr>
<tr>
<td>P=0.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32- Childerns can increase working and psychological pressures on parents</td>
<td>31.0</td>
<td>3.3</td>
<td>Z=1.38</td>
</tr>
<tr>
<td>P=0.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33- If you have fewer children, you can increase the quality of their upbringing</td>
<td>3.3</td>
<td>0.0</td>
<td>Z=3.13</td>
</tr>
<tr>
<td>P=0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-3.13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Continuous of Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>34- Continuing education by parents is more important than childbearing</td>
<td>16.9</td>
<td>11.3</td>
<td>Z=0.36</td>
</tr>
<tr>
<td>P=0.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z=-0.36</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Childbearing Tendencies**

The mean and the standard deviation of the desired number of children in women was $2.32\pm1.01$ with a minimum and maximum of zero and five, respectively. The mentioned number was $2.14\pm0.9$ 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 $1.07\pm0.61$ with a minimum of zero and a maximum of two and the mean of ideal number of sons was $1.16\pm0.69$ with a minimum of zero and a maximum of three.

<table>
<thead>
<tr>
<th>Question</th>
<th>Women</th>
<th>Men</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>P-Value</th>
<th>Z-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>35- Maintaining jobs for women is more important than childbearing</td>
<td>14.0</td>
<td>17.0</td>
<td>26.0</td>
<td>6.7</td>
<td>4.0</td>
<td>3.62±0.94</td>
</tr>
<tr>
<td></td>
<td>49.3</td>
<td>36.4</td>
<td>28.4</td>
<td>9.1</td>
<td>9.1</td>
<td>3.43±1.15</td>
</tr>
<tr>
<td>36- Children are good deeds commemorated after a person's death</td>
<td>29.8</td>
<td>36.4</td>
<td>27.2</td>
<td>4.6</td>
<td>1.3</td>
<td>3.89±0.93</td>
</tr>
<tr>
<td></td>
<td>37.1</td>
<td>43.2</td>
<td>15.9</td>
<td>1.1</td>
<td>3.4</td>
<td>4.07±0.93</td>
</tr>
<tr>
<td>37- Each pregnancy and childbirth is accompanied by fear and worry for mothers</td>
<td>2.0</td>
<td>5.7</td>
<td>9.3</td>
<td>29.1</td>
<td>41.1</td>
<td>2.35±0.95</td>
</tr>
<tr>
<td></td>
<td>1.1</td>
<td>10.2</td>
<td>28.4</td>
<td>37.5</td>
<td>18.2</td>
<td>2.47±1.08</td>
</tr>
<tr>
<td>38- Childbirth causes reduced women's attractiveness and premature aging</td>
<td>3.3</td>
<td>14.8</td>
<td>21.1</td>
<td>34.2</td>
<td>32.2</td>
<td>2.76±0.99</td>
</tr>
<tr>
<td></td>
<td>25.0</td>
<td>6.6</td>
<td>27.3</td>
<td>25.0</td>
<td>8.0</td>
<td>3.13±1.18</td>
</tr>
<tr>
<td>39- In any case, two children is enough</td>
<td>20.1</td>
<td>19.5</td>
<td>38.9</td>
<td>26.8</td>
<td>10.1</td>
<td>3.61±1.04</td>
</tr>
<tr>
<td></td>
<td>21.6</td>
<td>15.9</td>
<td>20.7</td>
<td>10.3</td>
<td>5.7</td>
<td>3.91±3.23</td>
</tr>
<tr>
<td>40- In today's society, no one values motherhood</td>
<td>18.0</td>
<td>27.7</td>
<td>42.0</td>
<td>23.3</td>
<td>10.0</td>
<td>3.54±1.10</td>
</tr>
<tr>
<td></td>
<td>27.7</td>
<td>11.4</td>
<td>42.0</td>
<td>12.5</td>
<td>6.7</td>
<td>3.72±2.43</td>
</tr>
<tr>
<td>41- Having a child disturbs human tranquility</td>
<td>15.9</td>
<td>12.5</td>
<td>45.7</td>
<td>25.8</td>
<td>8.6</td>
<td>3.60±0.98</td>
</tr>
<tr>
<td></td>
<td>25.0</td>
<td>13.6</td>
<td>36.4</td>
<td>13.6</td>
<td>8.0</td>
<td>3.65±3.27</td>
</tr>
<tr>
<td>42- Having a child results in loss of fun and humor opportunities</td>
<td>11.9</td>
<td>25.3</td>
<td>49.7</td>
<td>22.5</td>
<td>13.2</td>
<td>3.54±0.95</td>
</tr>
<tr>
<td></td>
<td>29.9</td>
<td>13.8</td>
<td>24.1</td>
<td>13.8</td>
<td>6.9</td>
<td>3.52±1.2</td>
</tr>
<tr>
<td>43- Growing rate of childbirth can increase poverty within the society</td>
<td>9.9</td>
<td>17.2</td>
<td>38.4</td>
<td>36.4</td>
<td>12.6</td>
<td>3.40±0.92</td>
</tr>
<tr>
<td></td>
<td>34.5</td>
<td>23.0</td>
<td>14.9</td>
<td>23.0</td>
<td>10.3</td>
<td>3.25±1.27</td>
</tr>
<tr>
<td>44- Children reduce mothers' social relationships</td>
<td>6.7</td>
<td>10.2</td>
<td>27.3</td>
<td>30.7</td>
<td>26.0</td>
<td>2.96±1.08</td>
</tr>
<tr>
<td></td>
<td>27.3</td>
<td>22.7</td>
<td>27.3</td>
<td>12.5</td>
<td>9.3</td>
<td>2.95±1.21</td>
</tr>
<tr>
<td>45- Childbearing should decrease because of existing inflation</td>
<td>6.0</td>
<td>15.9</td>
<td>37.3</td>
<td>27.3</td>
<td>25.3</td>
<td>3.16±0.99</td>
</tr>
<tr>
<td></td>
<td>31.8</td>
<td>19.3</td>
<td>27.3</td>
<td>22.7</td>
<td>10.2</td>
<td>3.20±1.25</td>
</tr>
<tr>
<td>46- Having more children does not allow people to live their own desired life</td>
<td>39.7</td>
<td>49.4</td>
<td>34.4</td>
<td>18.5</td>
<td>5.3</td>
<td>4.04±0.98</td>
</tr>
<tr>
<td></td>
<td>27.0</td>
<td>4.5</td>
<td>14.6</td>
<td>4.5</td>
<td>4.5</td>
<td>4.12±1.10</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Attitudes towards childbearing in women</th>
<th>Attitudes towards childbearing in men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.04, P=0.6</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.08, P=0.28</td>
</tr>
<tr>
<td>Birth order</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.12, P=0.14</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=-0.14, P=0.09</td>
</tr>
<tr>
<td>Level of participants’ education</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=-0.01, P=0.8</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=-0.11, P=0.2</td>
</tr>
<tr>
<td>Level of education among participants’ mothers</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.01, P=0.8</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=-0.11, P=0.2</td>
</tr>
<tr>
<td>Level of education among participants’ fathers</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.06, P=0.4</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=-0.05, P=0.6</td>
</tr>
<tr>
<td>Level of income</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.14, P=0.1</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.09, P=0.3</td>
</tr>
<tr>
<td>Number of sisters</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.02, P=0.9</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.09, P=0.37</td>
</tr>
<tr>
<td>Number of brothers</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.09, P=0.2</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.02, P=0.7</td>
</tr>
<tr>
<td>Number of sister’s daughters</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.02, P=0.7</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.04, P=0.6</td>
</tr>
<tr>
<td>Number of sister’s sons</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.14, P=0.08</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=-0.09, P=0.34</td>
</tr>
<tr>
<td>Number of brother’s daughters</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.3, P=0.6</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.04, P=0.5</td>
</tr>
<tr>
<td>Number of brother’s sons</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=-0.04, P=0.5</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.02, P=0.7</td>
</tr>
<tr>
<td>Number of desired children</td>
<td>r&lt;sub&gt;s&lt;/sub&gt;=0.34, P≤0.001</td>
<td>r&lt;sub&gt;p&lt;/sub&gt;=0.27, P=0.001</td>
</tr>
</tbody>
</table>

r<sub>s</sub>=Spearman’s correlation, r<sub>p</sub>=Pearson correlation
Factors Affecting Prenatal Care


**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).

<p>| Table 3. Relationship between ideal number of children in participants’ opinion and other variables |
|-----------------------------------------|-----------------------------------------|-----------------------------------------|</p>
<table>
<thead>
<tr>
<th>Ideal child number</th>
<th>Ideal number of daughters</th>
<th>Ideal number of sons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>$r_s=0.27, P=0.001$</td>
<td>$r_s=0.24, P=0.003$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.3, P=0.008$</td>
<td>$r_s=0.04, P=0.7$</td>
</tr>
<tr>
<td>Number of sisters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>$r_s=0.19, P=0.01$</td>
<td>$r_s=0.18, P=0.02$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.15, P=0.09$</td>
<td>$r_s=0.08, P=0.12$</td>
</tr>
<tr>
<td>Number of brothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>$r_s=0.12, P=0.13$</td>
<td>$r_s=0.14, P=0.08$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.12, P=0.15$</td>
<td>$r_s=0.19, P=0.10$</td>
</tr>
<tr>
<td>Number of sister’s daughters</td>
<td>$r_s=0.23, P=0.004$</td>
<td>$r_s=0.25, P=0.002$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.18, P=0.07$</td>
<td>$r_s=0.05, P=0.2$</td>
</tr>
<tr>
<td>Number of sister’s sons</td>
<td>$r_s=0.27, P=0.001$</td>
<td>$r_s=0.25, P=0.002$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.07, P=0.1$</td>
<td>$r_s=0.09, P=0.3$</td>
</tr>
<tr>
<td>Number of brother’s daughters</td>
<td>$r_s=0.05, P=0.5$</td>
<td>$r_s=0.02, P=0.8$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.08, P=0.6$</td>
<td>$r_s=0.08, P=0.8$</td>
</tr>
<tr>
<td>Number of brother’s sons</td>
<td>$r_s=0.11, P=0.18$</td>
<td>$r_s=0.09, P=0.26$</td>
</tr>
<tr>
<td>Men</td>
<td>$r_s=0.25, P=0.01$</td>
<td>$r_s=0.12, P=0.28$</td>
</tr>
</tbody>
</table>

$r_s$=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 desireable 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, 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 in 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.

Recommendations
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.

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

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Conflicts of interest
The authors declare no conflicts of interest

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