Original Article

The role of social determinant of health in couples' infertility

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Abstract

Background: Infertility is a medical and social status that can cause social, emotional and psychological disturbances in infertile couples. The purpose of this study was to determine the role of social determinants of health among infertile couples.

Methods: This descriptive cross-sectional study was carried out in 6 months. The participants in this study were infertile couples referring to Tabriz Jahade Daneshgahi Infertility Treatment Center which is one of the referral centers for infertility treatment in northwestern Iran. Self-administered questionnaire with closed questions was provided to the participants using a Likert scale to collect data. The questionnaire included demographic data including age, sex, occupation, place of living, income, history of the cause and duration of infertility and social protection of individuals.

Results: The total number of participants was 205, with a mean age of 6.89±33.78 years. In examining the cause of infertility, 66 (39.1%) had male infertility, 48 (28.4%) had female infertility, 54 (32%) had both female and male, and one case (0.6%) with an unknown cause. In different levels of education, the male factor as a cause of infertility in each level was more prevalent, which showed a significant difference only at the level of the bachelor's degree. In examining the degree of satisfaction with utilizing existing opportunities and facilities in a society based on the income of the participants in the study; all those with the lowest degree of satisfaction belong to the lowest income group of the community.

Conclusion: Social factors influencing health have greatly influenced the incidence and cause of couples' infertility who want to have a child.

Keywords: Female; Incidence; Infertility; Male; Social Determinants of Health

Introduction

Infertility is a medical and social status that can cause social, emotional and psychological disturbances in infertile couples. Although couples are often expected to have a child, there are a significant number of infertile people who may be subject to social, economic, physical and psychological effects. Childbearing ability is considered as a category beyond the quality of life. Infertility can be a sign of the health status of the past, present, and future and provide a vision for improving the fertility age of men and women. Therefore, infertility beyond the simple concept of inability to carry a pregnancy is a public and social health issue (1). Infertility is medically defined as the inability to conceive after one year of unprotected intercourse (2).

Infertility and its treatment can have a significant impact on one's quality of life, and infertility problems can be one of the most distressing experiences of people's lives (3).

Indeed, infertility is considered as one of the stressors in life, which is comparable to divorce and death in the family (4). Infertility can affect many aspects of a person's life and his sense of identity. "The physical and psychological burden that the infertile couple is willing to carry and the financial costs that couples are willing to pay if they can suggest that infertility is among the most well-known diseases". A profoundly private and often hidden experience inherently links fertility to our social identity. Parenting is considered a developmental milestone in adulthood in most cultures (5).

Most of the problems related to this issue are how social and cultural pressures may affect the reproductive capacity of women. Mother's age is considered as the most important determinant factor, and much attention has been devoted to the age of maternal gestational age, while women are often criticized for "too long waiting". This feeling makes them wait until their career is well-defined for fear of discrimination at work due to pregnancy or postpartum care responsibilities. Similarly, financial concerns play an important role in this delay; couples want to feel secure in their employment and housing before giving birth to their child. Therefore, parents should be supported economically and socially through political actions. For example, efforts to combine work and family responsibilities can be very helpful (6).

Social determinants of health mean the conditions, in which individuals are born, grow, live, and work (7). According to the World Health Organization model on health determinants, written by Mackenbach and Baker in 2002, two groups of important definitions are structural determinants including gender, income, education, occupation and ethnicity, and intermediate determinants including material conditions (such as home and work), psychological and social factors (e.g. psychological and social stresses) and behavioral factors (i.e. smoking). Human rights support prioritization approaches to improve health and reduce inequality. Achieving this goal requires a special focus on the factors effecting social determinants of health as a major challenge of regional policies. These inequalities that affect the people's health are widespread, persistent, unconscious, and unfair, and should be confronted as a top priority at all governmental levels in the region

(8). Based on the World Health Organization report, upper-socioeconomic classes have a better and longer life and less suffer from diseases than the poor. This is true even for people living in the richest countries. This inequality in health is a major social injustice and reflects some of the strongest impacts on the health of the modern world. The health and longevity of people are heavily influenced by people's lifestyles and the conditions in which they live and work (9).

As previously mentioned, infertility, as a disease or condition requiring treatment can lead to significant problems. The consequences are often: depression, anxiety, emotional problems associated with sexual behavior, problems with the spouse, family, and friends, an increased sense of shame and guilt (10). The specific nature of infertility is currently seen in couples who are deprived of significant social support and are in an undesirable socioeconomic condition, while these people are strongly in need of social-political support for diagnosis, counseling, and treatment. Studies have shown that one of the most difficult aspects of negotiating for infertile women is getting involved in their social environment (11).

The social determinants of health are currently one of the most important issues in the field of infertility, but, due to the widespread need of infertile couples to use assisted reproductive therapies, no study has been conducted on the prevalence of infertility and the type of infertility in different social classes in Iran. Therefore, we decided to study the social determinants of health in couples referred to the infertility treatment center.

Methods

This descriptive cross-sectional study was carried out in an interval of 6 months from May to November 2018. The setting of the study was Tabriz Jahade Daneshgahi Infertility Treatment Center, which is one of the referral centers for infertility treatment in northwestern Iran. The participants in this study were infertile couples who failed to become pregnant without using contraceptive methods for over 1 year and whose infertility was detected by a gynecologist and referring to

Tabriz Jahade Daneshgahi (ACECR) Infertility Treatment Center. Infertile couples were enrolled in the study after obtaining informed consent. The sample size was calculated N=171, by using G-power software, considering the standard normal deviate for α equal to 1.96. Sampling was carried out as a whole to the extent of the sample size. To prevent the loss of participants, we continued the count of incomplete questionnaires by 205. The self-administered questionnaire with closed questions was provided to the participants using a Likert scale to collect data. The questionnaire included demographic data including age, sex, occupation, place of living, income, history of the cause and duration of infertility and social protection of individuals. Questions related to the social support section of a questionnaire developed by Wax, Phillips, Holly, Thompson, Williams, and Stewart, based on the Koob definition of social support (12). Based on Koob's definition, social protection refers to the amount of love, assistance, and attention of family members, friends and others they receive. The questionnaire had 23 questions and its validity and reliability were confirmed using Cronbach's alpha=0.74, and internal reliability coefficient=0.66 by Khebaz et al. (13). Questionnaires data were collected and entered the computer system.

Table 1. Demographic characteristics of participants

Variable	Category	N(%)
	Housewife	99(48.3)
	Employee	31(15.1)
	Hairstylist	4(2)
	Carpet weaver	2(1)
Occupation	University student	2(1)
	Salesperson	21(10.2)
	University teacher	4(2)
	Military recruitment	2(1)
	Retired employee	1(0.5)
	Worker	7(3.4)
	Lawyer	1(0.5)
	No answer	31(15)
Education	Illiterate	4(2)
	Under diploma	44(21.5)
	Diploma	67(32.7)
	Associate degree	6(2.9)
	Bachelor degree	54(26.3)
	Master degree	18(8.8)
	Doctoral	5(2.4)
	No answer	7(3.4)
Monthly income	<10 million Rials	74(36.1)
	10-30 million Rials	62(30.2)
	30-60 million Rials	9(4.4)
	>60 million Rials	3(1.5)
	No answer	57(27.8)
Living place	Big cities	108(52.7)
	Small cities	61(29.8)
	Villages	28(13.7)
	No answer	8(3.8)

The final analysis was done using descriptive statistics tests in SPSS for Windows, Version 16.0. Chicago, SPSS Inc. We used the mean and median and standard deviation for descriptive statistics and chi-square for trend test, and Yate's continuity correction test to compare between several independent groups.

Results

The total number of participants was 205, with a mean±SD age of 6.89±33.78 years. 142 of (69.3%) of the participants were female and 63 (30.7%) were male. The mean±SD age of females was 6.73±33.11 and the mean age of males was7.06 ±35.41 years. The youngest women were 18 years and the oldest were 48 years. The youngest men were 24 years and the oldest were 62 years. Information on demographic variables is presented in detail in Table 1.

The infertility history of participants in total and by the determinants of health is reported in Table 2.

Infertility is divided into two primary and secondary. Of the respondents of infertility questions who were 130, the primary infertility rate was 100 (76.9%) and secondary infertility was 30 (23.1%). In examining the cause of infertility, in which 169 people responded, 66 (39.1%) had male infertility, 48 (28.4%) had female infertility, 54 (32%) had both female and male, and one case (0.6%) with an unknown cause.

In examining the causes of infertility at different income levels, infertility due to male factor was more prevalent in most income groups. However, significant differences were observed only in the lowest income level and there was no significant difference in the higher levels.

Table 2. Comparison of the causes of infertility by monthly income

Variable	Infertility cause					
	Male factor	Female factor	Both	Unknown	No answer	*P*
	N (%)	N (%)	N (%)	N (%)	N (%)	
Income <10million Rials	23 (37.7)	21 (34.4)	15(24.6)	1 (1.6)	1 (1.6)	0.001
Income 10-30 million Rials	18 (34)	13 (24.5)	22(41.5)	0	0	0.34
Income 30-60 million Rials	3 (42.9)	2 (28.6)	1 (14.3)	0	1 (14.3)	0.86
Income >60million Rials	0	0	1(100%)	0	0	------

P value <0.05 is significant.
P value based on Yates's continuity correction.

Table 3. Comparison of the causes of infertility by educational level

Variable Education	Infertility cause				*P*
	Male factor	Female factor	Both	Unknown	
	N (%)	N (%)	N (%)	N (%)	
Illiterate	1(33.3)	1(33.3)	1(33.3)	0	1.00
Under diploma	14(36.8)	11(28.9)	13(34.2)	0	0.879
Diploma	23(41.1)	17(30.4)	16(28.6)	0	0.494
Associate degree	3(50.0)	2(33.3)	1(16.7)	0	0.877
Bachelor degree	16(36.4)	9(20.5)	18(40.9)	1(2.3)	0.001
Master degree	6(42.9)	4(28.6)	4(28.6)	0	0.842
Doctoral	1(33.3)	1(33.3)	1(33.3)	0	1.00

P value <0.05 is significant.
P value based on Yates's continuity correction.

I

n different levels of education, the male factor as a cause of infertility in each level was more prevalent, which showed a significant difference only at the level of the bachelor's degree.

The number of years of infertility was in the range of 1 year to 26 years. The average year of infertility was estimated to be 6 years. Smoking and drug use were not high among participants, so that of the 199 people who answered the question, 175 (87.9%) people did not smoke at all, 16 (8%) were smoking, and 8 (4%) used to smoke but quite a while ago. 194 people responded to the question of drug use, of which 189 (97.9%) had never used, 3 (1.5%) were using drug and 1 person (0.5%) quit the drug.

The following table shows questions related to social factors and satisfaction with benefiting from social situations and facilities.

The results in Table 5 were obtained by examining the degree of satisfaction with existing opportunities and facilities in a society based on the income of the participants.

As shown in Table 5, all those with the lowest degree of satisfaction with social facilities and statuses belong to the lowest income group of the community, whereas the degree was moderate to high for the middle-income group.

The following questions relate to the social support of participants.

Table 4. The degree of satisfaction with social situations and facilities

Question	Very much N (%)	Much N (%)	Fair N (%)	Little N (%)	Very little N (%)	No response	P
1. Do you agree that you are legally equal with other people in the society?	60(29.3)	52(25.4)	39(19)	23(11.2)	22(10.7)	9(4.4)	.001
2. Do you have access to community facilities like others?	13(6.4)	41(20)	79(38.5)	37(18)	32(15.6)	3(1.5)	.001
3. How much can you trust others?	8(3.9)	23(11.2)	96(46.8)	49(23.9)	27(13.2)	2(1)	.001
4. Are you sure you will have a clear future for yourself and your family?	43(21)	75(36.6)	55(26.8)	18(8.8)	9(4.4)	5(2.4%)	.001
5. How satisfied are you with interacting with friends and relatives?	30(14.6)	79(38.5)	63(30.7)	22(10.7)	8(3.9)	3(1.5)	.001
6. How satisfied are you with your family life?	102(49.8)	57(27.8)	30(14.6)	14(6.8)	1(0.5)	1(0.5)	.001
7. How satisfied are you with your income and salary?	11(5.4)	19(9.3)	83(40.5)	44(21.5)	37(18)	11(5.4)	.001
8. How satisfied are you with your career?	17(8.3)	31(15.1)	77(37.6)	33(16.1)	29(14.1)	18(8.8)	.001
9. How satisfied are you with your accommodation and your place of living?	36(17.6)	56(27.3)	71(34.6)	23(11.2)	15(7.3)	4(2)	.001
10. Do you see yourself deserving social status higher than the current situation?	65(31.7)	65(31.7)	49(23.9)	10(4.9)	12(5.9)	4(2)	.001

P value based on Chi-square for trend Test.
P value <0.05 is significant.

Table 5: The degree of satisfaction with the social situations and facilities by income groups.

| Income groups | Satisfaction level of social facilities | | | | |
	Very low to low N (%)	Low to moderate N (%)	Moderate to high N (%)	High to very high N (%)	P
Monthly income less than one million	3(100)	27(69.2)	21(31.3)	3(30)	0.001
Monthly income from one million to three million	0	11(28.2)	40(59.7)	4(40)	0.001
Monthly income from three million to six million	0	0	5(7.5)	2(20)	0.001
Monthly income more six million	0	1(2.6)	1(1.5)	1(10)	0.001
Total	3(100)	39(100)	67(100)	10(100%)	

P value based on Chi-square for trend Test.
P value <0.05 is significant.

Social support is defined as the perception or actual reception of tangible and emotional resources and is one of the most important predictors of diseases and mortality and morbidity due to diseases (12).

Social support consists of social determinants associated with psychological resources, helping people cope with stressful living conditions and daily problems. Social support mainly consists of three types of instrumental, informational and emotional supports. The instrumental type includes material resources of life, such as money and income. Information support includes things that make an individual cope with difficulties and emotional support includes love and mutual understanding.

In terms of questions related to social determinants and social support, the following findings were obtained.

In general, questions related to the social support of individuals, based on the income level of individuals, did not differ significantly among different income groups. One hundred percent of those with low to moderate social support belonged to lower-income groups, individuals with a moderate to high income had a lot of social support.

Table 6. Level of social support receiving of the participants

Question	Very much N (%)	Much N (%)	Fair N (%)	Low N (%)	Very low N (%)	No response N (%)	P
1. My friends respect me.	67(32.7%)	96(46.8%)	31(15.1%)	2(1%)	0(0%)	9(4.4%)	0.001
2. My family is very careful about me.	66(32.2%)	75(36.6%)	39(19%)	7(3.4%)	6(2.9%)	12(5.9%)	0.001
3. Others do not care about me.	10(4.9%)	17 (8.3%)	32(15.6%)	65(31.7%)	64(31.2%)	17(8.3%)	0.001
4. My family respects me a lot	83(40.5%)	65(31.7%)	32(15.6%)	4(2%)	5(2.4%)	16(7.8%)	0.001
5. I am very favored.	43(21%)	81(39.5%)	59(28.8%)	10(4.9%)	1(0.5%)	11(5.4%)	0.001
6. I can rely on my friends	17(8.3%)	34(16.6%)	76(37.1%)	42(20.5%)	25(12.2%)	11(5.4%)	0.001
7. I'm admired by my family.	53(25.9%)	82(40%)	50(24.4%)	7(3.4%)	1(0.5%)	12(5.9%)	0.001
8. Others care about me.	30(14.6%)	83(40.5%)	62(30.2%)	8(3.9%)	4(2%)	18(8.8%)	0.001
9. My family loves me.	84(41%)	64(31.2%)	31(15.1%)	9(4.4%)	4(2%)	13(6.3%)	0.001
10. My friends do not pay attention to my success and happiness.	16(7.9%)	24(11.7%)	70(34.1%)	55(26.8%)	34(16.6%)	14(6.8%)	0.001
11. My family members rely on me.	20(9.8%)	61(29.8%)	57(27.8%)	36(17.6%)	14(6.8%)	17(8.3%)	0.001
12. I have a lot of confidence.	37(18%)	88(42.9%)	54(26.3%)	8 (3.9%)	1(0.5%)	17(8.3%)	0.001
13. I cannot depend on my family support and help.	6(2.9%)	28(13.7%)	72(35.1%)	46(22.4%)	35(17.1%)	18(8.8%)	0.001
14. People admire me.	14(6.8%)	73(35.6%)	82(40%)	20(9.8%)	4(2%)	12(5.9%)	0.001
15. I feel like loving my friends.	18(8.8%)	61(29.8%)	79(38.5%)	20(9.8%)	18(8.8%)	9(4.4%)	0.001
16. My friends are very considerate.	14(6.8%)	55(26.8%)	74(36.1%)	31(15.1%)	15(7.3%)	16(7.8%)	0.001
17. Others value me.	31(15.1%)	89(43.4%)	62(30.2%)	6(2.9%)	3(1.5%)	14(6.8%)	0.001
18. My family really respects me.	81(39.5%)	77(37.6%)	28(13.7%)	4(2%)	3(1.5%)	12(5.9%)	0.001
19. My relationship with my friends is so important to me.	28(13.7%)	68(33.2%)	51(24.9%)	30(14.6%)	13(6.3%)	15(7.3%)	0.001
20. I am interested in loving others.	12(5.9%)	38(18.5%)	62(30.2%)	50(24.4%)	25(12.2%)	18(8.8%)	0.001
21. If I die, few people will miss me.	16(7.8%)	33(16.1%)	52(25.4%)	39(19%)	49(23.9%)	16(7.8%)	0.001
22. I feel like I'm not intimate with my family members.	6(2.9%)	10(4.9%)	33(16.1%)	54(26.3%)	86(42%)	16(7.8%)	0.001
23. My friends and I are friends in need.	33(16.1%)	49(23.9%)	71(34.6%)	23(11.2%)	17(8.3%)	12(5.9%)	0.001

P value based on Chi-square for trend Test.
P value <0.05 is significant.

Table 7. Level of social support by income groups

Income groups	Low to moderate N(%)	Moderate to high N(%)	High to very high N(%)	P
Monthly income less than one million	8(80%)	34(40.5%)	7(43.8%)	0.445
Monthly income 1-3 million	2(20%)	42(50%)	7(43.8%)	
Monthly income 3-6 million	0(0%)	6(7.1%)	1(6.2%)	
Monthly income more 6 million	0(0%)	2(2.4%)	1(6.2%)	
Total	10(100%)	84(100%)	16(100%)	

P value based on Chi-square for trend Test.
P value <0.05 is significant.

Discussion

In our study, the number of infertile people who came to receive fertility treatments with an income level of below the moderate was 66.3%. And in the lowest income levels, male infertility was significantly different from other causes, which can be said that poverty and low socioeconomic level were more effective in male infertility.

In recent years, changes in fertility behaviors have had a significant impact on global population growth. Some of these changes include the availability of contraceptive methods, but most of these changes that occurred at the social level are independent of known health determinants. Couples now tend to have less than two children in the European countries and postpone their pregnancy to the coming years. Recent decreases in male fertility rates have been suggested by some papers based on the analysis of sperm quality; however, contradictory evidence has been obtained indicating the waiting time for having a child has been reduced. An important economic factor is the income of young men links to their parents' income and identifies their ability to support their own families. The low-income level has been associated with reduced fertility rates (14).

Regarding the effect of low socioeconomic status on male infertility in other countries, in our study, we also examined the general issues and the differentiation of the socioeconomic level of people, such as income and education levels and found out that infertility rates as primary infertility and infertility in men more than other causes have led to infertility at various levels of income and education. The low economic level has been raised more than other non-medical causes in the couples' infertility.

The inner desire of women to have a child is one of the social and cultural factors of societies and has given priority to psychological and biological analysis in recent years. This is not just about having a child, it is a kind of deviant behavior, and married women with no child are outcast and stigmatized by the community. In recent years, a large number of empirical studies have been conducted to find out the reasons why women tend to have a child. Some of them have been conducted on women who want to use assisted reproductive techniques, and single women who are willing to carry a pregnancy with donor sperms, and it has been found that women expect to grow happiness and strengthen the sense of security and identity by giving birth a child (14).

In our study, smoking was not high among participants, only 8% were smoking, and 4% used to smoke, but quite a while ago. Participants in a study with infertility were probably aware of the effects of cigarette smoking on the success rate of infertility treatment and therefore quit smoking.

In terms of smoking, there is good evidence that smoking has an impact on declining the fertility of women and increasing the risk of ectopic pregnancy and spontaneous abortions. Smoking seems to reduce fertility and accelerate menopause by 1-4 years. Smoking also has a negative impact on the results of ART, so that, the number of IVFs needed to achieve the desired outcome in smokers is twice that of non-smokers. There is also weak evidence about the effect of smoking on the reduction of sperm performance in smokers than non-smokers, which have also been dose-dependent, however, the impact of cigarette smoking on male fertility decline has not yet been proven (15).

In our study, the percentage of people who had a low level of satisfaction with social facilities had the lowest income. It was also revealed in this study that most infertile people did not have a desirable income level and the cost of infertility treatment made them even poorer. As can be seen, only a few people belonging to higher income levels have a higher university education and higher socioeconomic status.

And their infertility may be due to a delay in pregnancy to continue university education. In total, less than 15 percent of respondents were satisfied with their income, and more than 60 percent of the people considered themselves worthy of a higher position than their current status.

In a study conducted to assess the satisfaction of living and marital satisfaction on couples undergoing infertility treatment, it has been shown that infertile women had lower levels of life satisfaction than their spouses, and some of these couples were suffering from depression with marked clinical symptoms. Infertile women also experienced severe stress during infertility treatment. Therefore, in this study, the identification and treatment of psychological problems are effective in improving the process of infertility treatment (16). In another study, infertility was introduced as one of the most important stressors in life, affected about 10 percent of American couples. Infertile couples experience depression, frustration, and marital strain. Given the fact that American society more emphasizes the mother's role, this causes women to be affected by infertility more than men. This theory has been confirmed by studying 185 infertile couples and 90 fertile couples and showed that women were more stressed than their husbands in terms of infertility and felt more responsible and more involved with infertility treatment methods. In comparison, men were more tolerant about home stress and played a smaller role at home. These problems were not seen in fertile couples. Furthermore, in both fertile and infertile couples, women felt less satisfied with marital life, feeling depressed and lacking more self-esteem than their spouses (17).

Examining psychosocial and demographic factors predicting stress related to infertility showed a positive relationship with the treatment cost and the frequency of infertility treatments both in men and women. Stress also had a reverse relationship with the assurance of having a child. Efforts to find infertility treatments, the importance of children, participation in doctors' responsiveness and social support had a lot of stress in women. Income, frequency of visits by doctors and individual responsibility were more stress-related in men. Based on a theory, differences in psychosocial factors and types of infertility treatment were related to the amount of stress experienced. Except for specific cases, demographic factors, such as age and years of marriage were not related to stress. The study suggests that the therapists' efforts to increase control over the treatment of infertile couples and increased social support can optimistically reduce stress (18).

Social support is an important determinant of adaptation to infertility in women, and its impact on stress and methods of coping with infertility stress have been proven in several studies. Women face the possibility of not being able to become mothers as long as they postpone the decision for carrying a pregnancy. The experience of infertility for women is very stressful and in couples suffering from infertility, women are more likely to find ways to deal with this problem, even if it is due to infertility of their spouse. Since it is fundamental to one's physical and psychological well-being, social support can be a critical component of how a woman adjusts to the unexpected stress of infertility, especially since most women reveal their infertility to others, and in higher proportions than men. Social support is defined as the perception that one has an available confidant, or experiences caring attitudes displayed by a specific source, and is commonly sought for and provided by partners, family, and friends. Getting social support from these resources can reduce the impact of a large number of life stressors, including myocardial infarction and cancers (19). The impact of social support moderator on infertility (primary or secondary) and duration of infertility has been studied in a study on 109 infertile women in which it has been shown that

social support reduced stress and made the individual feel good. In this study, the duration of infertility and the waiting time for having a child was effective in mental measures. There was also a strong relationship between mental support resources and adjustment to bad conditions. The analysis showed that social support and emotional attachment, which are sources of stress relief, were related to the quality of marital life and mental health. This study concludes that social support and the adjustment ability to existing conditions in infertility, which is a kind of imposing additional stress, are important factors (20). In our study, depending on the cultural status and the belief in family unity in the country, the level of social support was high among the participants, and those who had higher levels of income had more social support and more unity with family and friends. For example, in the first question, the second part of the questionnaire (my friends respect me.) 79.5% chose a high and very high option, which shows that infertile people have a network of supportive friends who can help when needed. In the fourth question, the second part of the questionnaire (my family respects me a lot) 72.5% of the participants chose high and very high options that reflects the conventional culture in society, friendly family and the support of family members in the region. However, in some questions, such as the 6th question, the second part of the questionnaire, (I can rely on my friends) only 24.9% percent of the respondents chose high and very high options, which are somewhat contemplative, because despite the popularity and emotional attachment to friends and family, most participants do not feel like getting help from friends at the time of need, and this is a predisposing factor for stress and more pressure on infertile couples. In question thirteen, the second part of the questionnaire (I cannot rely on the support and assistance of my family.), about 16.8% of the participants chose a high and very high options, which

indicates that couples prefer to resolve the problems with the help of family members due to the emotional attachment to their families as well as high trust in family help and financial support. This suggests that Iranian people are more reliant on their families and do not find the friends trustworthy enough to rely on their friends' network when they need to solve the problems with friends' participation.

Social factors influencing health have greatly influenced the incidence and cause of couples' infertility who want to have a child and have a background for an individual's health problems. The most important factor affecting the incidence of infertility is poverty and its impact on reducing male fertility is important. The existing policies in the country are only at the stage of diagnosis and treatment of infertility, which is very limited and insignificant. Micro and macro measures must be considered for prevention of infertility incidence in couples, diagnostic treatment facilities, psychosocial support and insurance coverage for early detection and treatment of couples' infertility and social-economic support be done after childbirth in formerly infertile families, which, of course, requires macroeconomic policy.

Conflict of interest
Authors declare no conflict of interests.

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