

# A grounded theory approach to understand the process of decision making on fertility control methods in urban society of Mashhad, Iran

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## ABSTRACT

**Background:** More than 30% of pregnancies in Iran are unintended and most of them happen among the women who use various contraceptive methods. Results of Integrated Monitoring and Evaluation System (IMES) showed that the rate of innovative contraceptive use in Mashhad has been 41.5%-57% in different urban areas. This study was conducted to explore the process of making decision toward using family planning methods in women of reproductive age in urban society of Mashhad, Iran.

**Materials and Methods:** In this grounded theory study, semi-structured interviews were conducted with 45 purposefully selected participants including 28 women and 17 key informants including family health providers and managers, and participants' mothers and husbands, who lived in urban society of Mashhad, Iran, in 2011-2012. Participants' recruitment continued until data saturation occurred. Data were analyzed using Strauss and Corbin's mode of analysis through constant comparative method, applying levels of open, axial, and selective coding with MAXqda software. Study rigor was confirmed through prolonged engagement, member check, expert debriefing, and thick description of the data.

**Results:** The core category of "caring the comprehensive health of my family," which emerged from the data, described the process of couples' decision making toward using family planning methods in this study. Other developed categories which were presented into a theoretical scheme consisted of 1) shaping the ideas of fertility control, 2) developing cognition about the fertility control methods, 3) appraising available choices and choosing the most appropriate one, 4) managing the course of using methods, and 5) realizing the fertility intentions.

**Conclusion:** It is important that family planning providers understand the motivations, perceptions, and knowledge of women about contraceptive methods in their contextual situation, which illustrates their mode of interaction in the arenas of family planning decision making.

**Key words:** Decision making, fertility regulation, grounded theory, reproduction, women

## INTRODUCTION

Annually about 80 million people are added to the world population mainly due to the lack of access to effective methods of contraception for more than 200 million couples.<sup>[1]</sup> Annually, 20% of pregnancies are terminated by abortion that indicates the high prevalence of unwanted pregnancies.<sup>[2]</sup>

Based on the results of the Integrated Monitoring and Evaluation System in 2005, prevalence of unwanted

pregnancies was 30% while 10% of them occurred along with using innovative methods of contraception.<sup>[3]</sup> Local statistics have shown that the use of modern contraceptives in different areas of Mashhad, covered by the health centers, has been between 41.5% and 57% in 2005. Based on such information, 27.2% of fertile women who had five or more children are not currently using modern contraceptive methods.<sup>[4]</sup> These statistics show the likelihood of higher birth rate among families with higher fertility, which is the important target groups of the family planning programs. Inappropriate use of family planning methods that lead to failure or discontinuation is the major challenge of the family planning programs, which itself could be associated with reduced effectiveness of such services. However, choosing an appropriate method of preventing pregnancy makes the couples empowered to act based on their responsible decisions about childbearing which depends on their physical, mental, and economic potential and confidently going through their life goals.

Previous studies have reported that socioeconomic and psychological factors, values, personal preferences, and

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previous fertility experiences influence the decisions about contraceptive methods.<sup>[5-8]</sup> In the study of Beckman and Harvey, factors were involved in the effective use of family planning methods included user features, technique features, user attributes, patterns of contraceptive use and situational context.<sup>[9]</sup> Previous studies mainly focused on the study of contraceptive prevalence rate, the factors affecting their use, and also their side effects, whereas the issue of how and why couples make decision to control fertility has not been studied in depth. Understanding the experiences and perceptions of the couples and their decision-making processes regarding the selection of effective methods to regulate fertility could improve the efficacy of family planning counseling programs and help health policy makers in planning programs appropriate to current socio-cultural conditions. Available statistics have reported a rate of 85.4% of the urban population in the city of Mashhad<sup>[10]</sup> plus numerous health problems, including high fertility in the suburban areas of the Mashhad.<sup>[4]</sup> Considering the rapid population growth in Mashhad during the past 30 years, different social, economic, and cultural features of population due to immigration, low use of modern contraceptives in some areas and its consequences, and also lack of in-depth and comprehensive studies in this regard, this qualitative study was conducted to explore the decision-making process regarding the use of fertility control methods in the city of Mashhad, Iran, from January 2011 to September 2012.

## MATERIALS AND METHODS

In this study, a qualitative research design was applied. The strategy of this inquiry was grounded theory. Grounded theory is a suitable methodology when the researcher is keen to know the basic psychosocial process which occurs over time and explains changes in a particular behavior.<sup>[11]</sup>

The Medical Research Ethics Committee of Mashhad University of Medical Sciences approved the study. To include participants from a variety of settings, they were selected from the health centers, homes, and workplaces. Sampling was started purposefully considering the maximum variation of participants and then continued based on theoretical sampling in which selecting each participant depended on previous interviews conducted.<sup>[12]</sup> Participants' recruitment continued until data saturation occurred. Fertile couples were Iranian, spoke Farsi, lived in urban district of Mashhad city during the past 5 years, and had made the decision to stay there permanently. Women who had experienced menopause were excluded from the study. Midwives, family health providers, and physicians worked at health system in Mashhad and were included if they had at least 5 years of experience in the relevant field. After identifying eligible participants, they were invited in person, face to face, or by phone call.

Participants read and signed an informed consent that permitted the researcher for audiotaping the interviews. All participants were assured about the anonymity and confidentiality of gathered data. They were also informed of being able to withdraw from the study at any time without prejudice to the contraceptive service they took.

They were given a patient information sheet to study and the chance to ask questions from the researcher before participating in the study. If they were interested to take part in the study, they were interviewed after making an appointment. The profile of the participants has been presented in Table 1.

### Table 1: The profile of the participants (N = 45 participants)

Data were collected applying semi-structured, in-depth interviews, field notes, and literature. The interviews were held at a private space in the health centers or participants' workplace or home. The place, time, and duration of interviews was agreed between the researchers and researched.

At the beginning of the interview, explanation about the anonymity and confidentiality of the personal data was given and it was emphasized that there was no obligation for participation in the study. Then the participants were asked to sign an informed consent form. Participants were then asked to describe why and how they started to think about fertility control and how was their experience regarding making decision on the use of contraceptive methods for the first and subsequent times. During the interview, they were asked to focus on more important issues. Probing questions were asked to obtain more deep information in this regard. The purpose of probing questions was to find out more details, meanings, and reasons.<sup>[13]</sup> After the interviews, the participants filled out a questionnaire about their demographics and fertility history.

Table 1: Description of participants (N = 27)

Variable	Mean±SD
Age	32.7±6.3
Age at first childbirth	22.3±3.8
Education	Percent (%)
Higher education	32.14
Upper secondary	46.43
Primary education and lower	21.43
History of residence	
Born in Mashhad	53.59
Migrants from other urban and rural areas of khorasan province	28.57
Migrants from other provinces	17.86

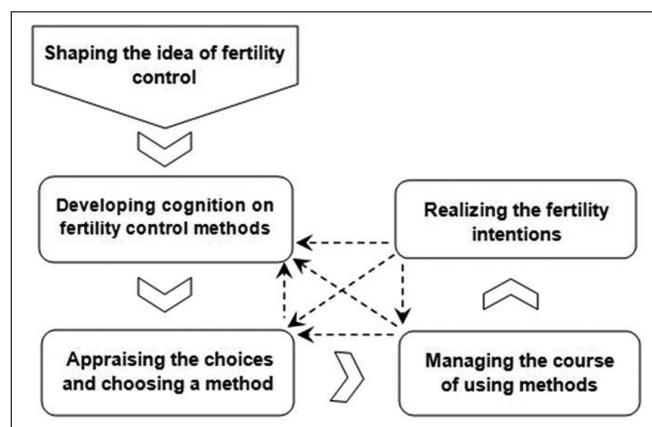
The interviews were conducted between April 2011 and August 2012 by the second author who is a midwife instructor and has got reasonable experience during her work in the family planning clinics.

### Data analysis

All interviews were recorded electronically. They were fully transcribed verbatim for data analysis. After precisely reading each interview's transcript and its interim analysis, planning for conducting the next interview was made. Data analysis were carried out using Strauss and Corbin's mode of analysis through constant comparative method, performing three levels of open, axial, and selective coding.<sup>[13]</sup> MAXqda version 2 software package was used in order to handle and organize the data. Codes were categorized, and the relationship between categories and the leading core category was identified through the process. In addition, throughout the process, the memos were written and diagrams developed to facilitate the visualization of data for better conceptualization. Theoretical saturation was achieved after conducting 39 interviews and was confirmed after completing 6 more interviews with women. The rigor of study was verified through prolonged engagement in data gathering and member validation of codes.<sup>[14]</sup> Meanwhile, in order to verify the interpretations, the codes and emerging categories were discussed with the supervisors who had good expertise in conducting and supervising qualitative research.

## RESULTS

The model of "couple decision-making process on contraceptive use" is shown in Figure 1. "Comprehensive caring of my family health" was the core category that described the couple's decision-making process about the use of contraceptive methods. Couples often chose and used a method that, along with providing their fertility control purpose, ensured the best possible health benefits



**Figure 1:** Model of women's decision making on use of fertility control methods

for themselves, their wives, and their children. Although sometimes their method of choice was not the most effective method, it was the best choice considering their current condition. Five main categories were identified in the process of "comprehensive caring of my family health," including "shaping the idea of fertility control," "developing cognition about the fertility control methods," "appraising available choices and choosing the most appropriate one," "managing the course of using methods," and the consequence of such actions/interactions was "realizing the fertility intentions."

### Shaping the idea of fertility control

Understanding the probability of being fertile along with unwillingness to have a (another) child or decision for reproduction at the right time led to "shaping the idea of fertility control." The time of feeling the need for fertility control and thinking about it was different. For some it was at puberty, for some in premarital stage, and for a great number of them when they had less number of children. Most of the participants thought about the number of their children from the beginning of their marital life. Some people mentioned that before thinking, planning, and gaining initial readiness for pregnancy, their first pregnancy happened unexpectedly. Some participants expressed that before thinking about the birth of their first child or talking about it with their spouse and before making any plan, they got pregnant. One of them pointed to her experience of having two subsequent pregnancies before thinking seriously about family planning:

*"The issue was that we wanted to think about and plan a program. When we got married, my first pregnancy occurred unintentionally, you know, even before we go to our joint house ... for my second child, I was pregnant seven months after my first delivery, after coming back of my first menstrual period ... After his birth, I really decided thereafter not to get pregnant again."* (Female participant no. 1, 43 years, three children)

Some participants did not think about fertility control because of having no belief in it. One of the male participants who had seven children said:

*"I believe the fertility should not be prevented. We had no previous fertility control ... When our seventh child was born the condition was hard for my wife. Her age was risen ... She had a tubectomy."* (Male participant no. 43, 58 years, seven children)

On the other hand, in some participants, the thought about family planning control had developed from their earlier adolescence. A participant in this regard said:

*"When I was 11-12 years old, my sisters were working, and they put their children with me to care of them. It was*

*a hard job for me. So I decided to have just few children.*" (Female participant no. 10, 32 years, two children)

Prioritization of life goals and desires was one of the main strategies used by the couples. Most of them identified their life priorities and appropriate time for next fertility, and based on that postponed their fertility until due date.

The most important reason for postponing the fertility early after marriage was gaining more cognition about the spouse, being sure about the spouse's competency and about the stability of marital life. The other reasons included providing the necessary prerequisite for childbearing, the lack of facilities, and the need to personal promotion. Also, being concerned about the children's future, spouse's request for fertility prevention, perceived child numbers as being enough, fear of receiving blame from the relatives, advertisements of media, and health workers' advice were the important reasons for not wanting more children.

Some mothers who had another infant were concerned about his/her nutrition and growth. They were also concerned about their ability for caring the previous infant and its psychological hurt. They also worried about the next child's care and nutrition. The consequence of thinking about fertility control was sensitizing and curiosity for gaining cognition in this regard and developing cognition in order to having a program for fertility control. Some couples thought about the fertility after obtaining some knowledge about fertility control and its methods.

### **Developing cognition about the fertility control methods**

The phenomenon of developing cognition means to develop awareness of the contraceptive methods and finding out the sources to access these methods. The cognition acquired by the participants might be wide or limited. In case of having experience of an unintended pregnancy, people seriously sought knowledge about the modern methods with higher efficiency. For example, one of the participants stated:

*"When I got married I had heard only the names of pills ... I thought I should not go towards it.... After I got pregnant unintentionally, I tried to find a reliable method of family planning. I spoke with many people, my sister, my colleagues... until I got familiar with all methods."* (Female participant no. 1, 43 years, three children)

Most of the women had more significant role in seeking family planning knowledge. The main reason for such belief was that information and services are mainly delivered in family planning units of health centers and such services are mainly delivered by female health workers. One of participants stated:

*"I talked in this regard with others and tried to get necessary information specially from health care providers ... My husband, no, he said I am too busy, in fact he didn't like to speak in this relation with his colleagues."* (Female participant no. 3, 29 years, one child)

Some participants stated that their spouses have also sought information about family planning methods from professional health units in their workplaces. A few participants stated that because of occurrence of some suspicious signs and symptoms or seeing the persons who face failure or have severe side effects, they have tried to gain more information about their current method or to find more effective and safer contraceptive methods. Some of the participants received some information about other methods with lower side effects or more efficacy and made an effort to get more information about it, and compared the new method with their current one. The participants who had a social network with some information on family planning exchanged such information and expanded their cognition. The same sex parents; second- and third-degree relatives of the same sex, especially who were in the same age group or had similar experiences; the friends; colleagues; and health workers were the network members between whom the contraceptive information was exchanged. In this study, participants were usually more sensitive to the experiences of others and listened to them. Women with higher education mostly stated that they had obtained such information through experienced and informed friends, colleagues, and relatives, or those who were working in the medical and health profession. A woman said:

*"My cousin, she is midwife and works in a village in north of country; I contact her when I need to information in this regard, as she can guide me well."* (Female participant no. 6, 32 years, two children)

While unemployed and lesser educated women mainly pointed to their interaction with limited number of people with similar educational and social classes, people with higher education reported the use of internet resources and print materials more than the other participants. The outcome of this trial resulted in identifying one or more methods of contraception. The obtained knowledge about such methods might be right or wrong. They also compared the information obtained from different sources. Following this step, the participants entered the stage of comparing the methods and choosing the most appropriate one.

### **Appraising available choices and choosing the most appropriate one**

Feeling the need for choosing a new method or changing the previous one, and need for obtaining knowledge about the family planning methods encouraged couples to compare



the methods and choose the more suitable one with less side effects, considering their existing circumstances. The beliefs about the methods developed in previous steps influenced the contraceptive choices. Generally, they considered the possibility of failure and subsequent risk of pregnancy, consequence of future pregnancies, complications of the method for themselves and their spouse, and also the method's side effects. One of the participants described the way that she chose the IUD:

*"Using pills, I had been very sensitive and nervous.... I asked the midwife to introduce me another method ... considering my condition, I was not able to use the hormones. Other methods were also very unsure. So I said that it's better to try the IUD."* (Participant no. 21, 39 years, four children)

Strong tendency to prevent the pregnancy, being keen to choose a new method, and gaining more information about it and its characteristics encouraged individuals to evaluate and compare the methods more extensively. The spouse's opinion and having authority to make decision was an important confounding factor. In most cases, women negotiate with their spouse in choosing the appropriate option.

In many cases, the men transferred the responsibility and the authority of making decision about the methods of family planning to their wives. In such cases, men typically were not interested to use male contraceptive methods such as condoms and vasectomy. In most cases, the women chose their family planning method and then negotiated with their spouse. Most of the women were interested to obtain the agreement of their spouse before trying to receive and use the method, and did accordingly. Some participants expressed that because of the opposite view of their husbands with their selected method, they did not inform them in this regard. Some participants stated that prior to their first or second child, they did not choose the hormonal methods for the reason of fear of infertility. Many couples, especially in their early marital life, preferred the methods such as condom because of it having less systemic effects, being natural and non-invasive, and being free of hormones and chemicals despite its low efficacy. They weighed the methods' side effects against the danger of unplanned and unwanted pregnancies and feared of their long-term effects. Having a previous positive personal experience with a method facilitated its reconsideration at a future time. Negative experiences about using a method usually led to its removal from the following options. In spite of experiencing pregnancy or complications associated with the use of a method, some women considered to use it again. One of the participants, who had problems in previous use of IUD, attributed the inconvenience to low skills of health staff. She stated:

*"At the first time that I used IUD, I had frequently spotting and bleeding. I had to tolerate it for about one year and half ... but she (health staff) told me I will change your IUD ... but I didn't want IUD. After a period of time I decided to put another IUD again ... now I have it for six years and have no problem."* (Female participant no. 28, 36 years, two children)

The participants who suffered from a chronic disease such as diabetes firstly assessed the effect of the chosen method on their disease and then decided to use it or not. Lack of previous access to the method was associated with the possibility of its deletion from the next choices. Some of the participants were reluctant to use of tubal ligation and IUD based on their religious beliefs. The estimated risk of pregnancy was an important factor in choosing the type of selected method. Some of the women who perceived that their chance of pregnancy was low decided not to use a contraceptive method or chose a less effective one. A woman aged 43 years, who perceived her ability for fertility as low, stated in this regard:

*"I think that I'm infertile. My mom and my other relatives gave birth to their last child in 30 years of age, and then had no chance to have another baby."* (Participant no. 1, 43 years, three children)

According to the participants, method's attributes such as effectiveness, side effects, and interference with sexual activity played an important role in the selection process. Concern about deletion of the contraceptive methods from free health care services had led to decision about permanent methods in participants who completed their fertility. One of the family planning counselors pointed to a recent increase in vasectomy volunteers just before the deletion of free family planning services from state health centers in accordance with governmental fertility policies. At this stage, couples prioritized methods based on their personal situation and compared the positive and negative effects of it based on their own individual condition, and then decided to use it. They may use the method and enter into the next stage of the process. On the other hand, some of them tried to find out more information about a method after its selection.

### **Managing the course of using methods**

The phenomenon of management of receiving and safely applying the method included the actions for having access to the method, its application, and challenging with its complications. Most of the participants pointed to the easy access to such methods considering the vast free distribution of them in the state and private health centers, although some cases experienced some problems. One of the issues was related to the couples who are in Aghd (engagement) period during which the couples are legally in marriage

contract, but they have not started their marital life formally and each of them is living with their parents. Most of the participants mentioned that in this period, their parents expect them not to have sexual relationship. Another situation was that the woman had the intention to use pill or IUD without husband's agreement.

Factors that played a role in the evaluation and selection process were also prominent in this step. Some participants encountered some side effects during the actual use of a method, while some of the complications that women were concerned about in previous steps did not appear again.

The management of receiving the methods was performed by women. A few of the participants mentioned that their husbands received condom from their workplace's health unit. They also knew the other places from where they could receive chosen contraceptives. Some persons chose a method of their own choice and then referred to health center to receive it, but encountered health workers' suggestion to change the selected method; however, they refused to do accordingly. This issue also was pointed out by some health care workers:

*"We usually introduce them different methods, but most of the times they do what they decided in their mind."* (Participant no. 9, family health provider, 34 years)

The other problem that appeared during receiving a method was the lack of its distribution when it was needed. Considering the recent Iranian government's policy for population increment, most of the participants were concerned about the possible contraceptive shortage and less access to family planning services in the future. A woman reported that she had received the birth control pills from health center, but not yet started using them. Most women who used the pill or a condom had an ongoing concern to get pregnant. In spite of obtaining some information about the use of pills, they might use it correctly or incorrectly. Some participants noted that they had experienced no significant problems while using their contraceptive method. A few women who used IUD did not perform some follow-up visits and none of them checked the IUD string. For example, a woman said that she forgot the existence of the IUD. Instead, one of the participants said:

*"Always I have spotting with the IUD, even if I pick up three kilogram my spotting starts. I have a lot of work and spotting produces constant trouble. I endure all these hardships in order to not to get pregnant."* (Female participant no. 1, 43 years, three children)

In spite of being at higher risk for severe complications such as embolism and infarction, a few women continued to use the selected method. The cause of such action was their decision for having a confident contraception and being satisfied from pills' advantages. One of the participants, despite having risk factors for using oral contraceptives, regularly used combined oral contraceptives for 20 years and had the intention to continue its consumption. She stated:

*"My blood pressure is too high, ... Doctor said that I should not take the pill, but my blood pressure is controlled with medication. If I get pregnant again, you know with a baby, my life will be a real tragedy."* (Female participant no. 5, 46 years, two children)

While using a contraceptive method, most of the women evaluated their bodies in terms of the side effects they knew. In most cases, the consequence of such action was the ideal prevention of pregnancy that was the main aim of the couples in the journey of fertility regulation. Some participants considered a limited and defined time for preventing the pregnancy, and after passing the due time, they decided to get pregnant or to start another contraceptive method.

### **Realizing the fertility control intentions**

The most reported reason for ending the use of a contraceptives method was "the desire for pregnancy." Most of the participants stated that they ceased contraceptives when they felt it is the right time for having another child. Most of the participants mentioned reasons such as the sense of being alone, spouse request, need to increase the warmth and happiness in the family. In many cases, the fertility control goal was not optimally achieved. Unintended pregnancy and encountering unbearable complications were the other reasons mentioned for yielding a method. Some women reported that they have repeatedly changed the methods and experienced a series of problems with each new method they used. Nine cases of unintended pregnancies occurred with concomitant use of contraceptive methods. Two pregnancies occurred simultaneously with using the pills. One woman mentioned that in order to reduce complications, she reduced the pills' intake. One woman mentioned that she did not realize when the IUD left her body, and because of that she got pregnant. One woman noted that during amenorrhea due to prolonged use of injectable progestin, with 2-month delay at the next injection, she got pregnant. Five of the women reported that they became pregnant while using the condom. Five participants mentioned that after ending the unwanted concomitant pregnancy with contraceptive use, they changed their contraceptive method. Three participants who got pregnant continued their method after the ending of pregnancy. Each of the midwives who participated in this study mentioned a few experiences that despite not

wanting more children, their clients did not use an efficient contraceptive method, and after becoming pregnant they tried for abortion.

Contextual conditions in which the process of decision making on fertility control happened included education, couples' fertility programs, access to information, the ability and the authority given by the husband, individual preferences, religious beliefs, and couples' age and health conditions. Intervening conditions included the number of previous children, the spouse's consent to the use of a method, dealing with intolerable side effects, characteristics of the method, being disposed to information, and reduced access to some of the methods.

## DISCUSSION

The process of couple decision making on contraceptive use was started by "shaping the ideas of fertility control." This led to the creation of incentives to "developing cognition about the fertility control methods." Couples might go through the "appraising available choices and choosing the most appropriate one" in this process. This stage in which getting cognition and choosing a method was performed might be short or long. They then entered the step of "managing the course of using methods." At this stage, they explored the sources that they can access to contraceptives. Following the shaping of idea about the fertility regulation, the process became dynamic and progressed toward other stages. Some of the conditions found in this study that affected the various stages of decision making on contraceptive choice, for instance, the epidemiological factors and personal characteristics, have been demonstrated in previous studies.<sup>[5-7]</sup> Most of the previous studies with regard to fertility issue are quantitative. Such studies paid more attention to the issues such as the rate of family planning methods' use and their affecting factors. Thus, the effects of different factors have been probably examined and reported in previous studies. But the present study investigated the aspect of how the couples are motivated for fertility regulation and how do they manage this process. Also, this study explains how the couples interact with social network members and family planning providers. Our findings showed that such interactions are unique for each participant. The phenomenon of interaction with social network and its role in obtaining information and cognition has not been paid appropriate attention in previous research in this study setting. The role of fertility-related social network in couples' decision making on the birth of the first child was also investigated by the researchers and has been reported in another paper.<sup>[14]</sup> Based on our findings, women's authority in decision making was an important concept that should be noted in family planning intervention and counseling programs. The results

of a study performed by Kohan *et al.* demonstrated women's control over fertility plan as a main category.<sup>[15]</sup> The findings of our study showed the individual and complex nature of contraceptive decision making. It also showed that these decisions happen in a context of personal attributes as well as external intervening conditions. Personal experiences, gained experiences from others, and verbal interactions with social network on family planning methods had a special meaning for participants. They assessed what they had seen and learned, and used the results of their assessment in their fertility decision making. They also compared the methods based on their characteristics and conditions, and considered the methods' positive and negative effects for themselves and their families and made a decision based on that. The step of appraising available choices was highlighted in the voices of all participants. While some of them had done this appraising superficially, others performed it fundamentally. The concepts found in this study were similar to some existent concepts in health care models that have been applied in family planning issues. Model proposed by Mattesson as self-defense noted four successive stages in the decision making on family planning, including the evaluation of personal risk of pregnancy, seeking options, using the options, and coping with a wide range of related issues.<sup>[16]</sup> The main socio-psychological process in family decision making in Mattesson's study was self-defense, while the findings of our study showed that decision making is not always in the direction of self-defense. In several occasions, women tolerated the side effects of such methods of contraception considering the importance of fertility regulation for family health and welfare. Furthermore, this study demonstrated that this process does not always happen consecutively. The decision made at each stage of process is dynamic and may enter one of the other stages. Our results are somehow similar to the findings of Noone, in which being informed, weighing the choices, and ramification of a course were the three basic steps of the process of contraceptive method selection.<sup>[17]</sup> Our study showed that the phenomena of shaping the ideas, thinking about fertility regulation, and feeling the need for using family planning methods sometimes were constructed after the birth of one or more children which was followed by seeking some information about the methods. This may be related to the specific culture of our community. In Iran, the public access to wide information on family planning is not available before marriage and even some newly married couples may have limited access to such information. The consequence of unmet family planning needs in newly married couples and the lack of access to such services may lead to unwanted pregnancies and severe complications. For many of the participants, the experience of dealing with families with different numbers of children, and its consequences helped in shaping the thoughts on family planning and created the motivation to seek the knowledge in this regard. The results of this study are somehow similar to the findings of Chung-Park *et*



al. who found that women's decision on using contraceptives was influenced by goals, family values, perceived support system, knowledge, and method's effectiveness.<sup>[18]</sup> Concepts emerged from our study also were consistent with implications of the "Theory of Planned Behavior" developed by Ajzen and Fichbin. In their theory, three components of the personal attitudes, beliefs and needs, the opinion of key referents and perceived behavioral control were the main determinants of behavioral intention.<sup>[19]</sup> Similar to Ajzen's theory, the impact of attitudes and beliefs and also the influence of social networks on women's decision making in using contraceptive methods was obvious in our study.

Like other research studies, we also faced limitations. One of the limitations of this study was that the couples were asked about their experience on family planning method use from the beginning of their marital life. In some participants, these events were related to a relatively long time of around 30 years. Although most of the women mentioned that they are able to remember those events and do not forget them, passage of time might have affected their memory, and as a consequence, the accuracy of the data sought in this study. Another limitation was that the majority of women who participated in this study used at least one method of family planning, and so their experiences cannot be extended as the process of contraceptive decision making in all women.

## CONCLUSION

The findings of this study showed the importance of providing precise family planning counseling to the women referred to health centers. The midwives, health staff, and reproductive health care providers should assess the couples' positive and negative perceptions and experiences about family planning methods. They also should be aware of the opinions of their social network and the extent of its influence. They should enable couples to make informed decision and provide them freedom to decide. Family planning counselors, along with avoidance of delivering imposition comments, should identify and correct couples' mistakes in understanding family planning methods and provide them the actual required information to be a base for their appropriate decision making and proper use of family planning methods. Furthermore, community-based family planning services should be delivered to the community through public education.

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## Disclosure statement

No competing financial interests exist.

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