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Maternal experiences of their unborn child's spiritual care: Patterns of abstinence in Iran

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Abstract

Preparing for pregnancy and childbirth has significant association with spirituality. Review of the literature shows that the spirituality of the "unborn child" has not yet attracted much critical attention. This study was conducted with the aim of exploration of maternal behaviors associated with the spiritual health of the unborn child. A qualitative approach was used to investigate the research question. Twenty-seven in-depth unstructured interviews were conducted with 22 Iranian mothers in Tehran city (Iran) who were pregnant or had experienced pregnancy in 2012- 2013. Data analysis was carried out using a conventional content analysis approach. "Refusing to eat forbidden food", "Overcoming mental adversity", "Regulating one's social interactions", "Preventing the effects of harmful environments on the senses", "Avoidance of using insulting and abusive language", "Keeping one's mind and spirit free from evil traits" and "Not doing damaging behaviors" were important experiences that the mothers used for "Holistic Abstinence". The results provide new information about the subjective experiences of Iranian women on the patterns of abstinence for the midwives, research community, policy makers and planners of maternal and child health care services in order to contribute to holistic, culturally and religiously competent prenatal care for Muslim pregnant women throughout the world.

Keywords: *qualitative research, pregnancy, spirituality, unborn child, care*

Introduction

Health is a multidimensional reality. Spiritual health is a fundamental dimension of health and wellbeing in the community that integrates all other areas of health (Fisher, 2011). According to Holistic Obstetric Problem Evaluation (HOPE) theory, any of the physical, mental, social and spiritual dimensions of each person reflects the whole individual, and thus all of them are significant in turn (Jesse & Alligood, 2002). In prenatal health, the spiritual dimension of human health should be considered as relevant and important as the bio-psychosocial dimensions of health (Jesse & Reed, 2004).

Little current literature focuses on the spirituality and spiritual care in pregnancy and birth. Most of the existing studies explore pregnancy, labor and childbirth stories cross-culturally that can help health providers to give better care for mothers (Callister, Corbett, Reed, Tomao, & Thornton, 2010; Callister, Holt, & Kuhre, 2010; Callister & Khalaf, 2010; Callister, Semenic, & Foster, 1999; Callister & Vega, 1998; Jesse, Schoneboom, & Blanchard, 2007; Semenic, Callister, & Feldman, 2004). However, there is limited understanding of the spiritual care related to the unborn child (Hall, 2010). Indeed, prenatal care would be truly holistic if the spiritual nature of the unborn child is considered too (Hall, 2006).

Some of the physical, mental and emotional disorders present in childhood, adolescence and adulthood may have originated in foetal life (Barker, Osmond, Kajantie, & Eriksson, 2009; Blasco-Fontecilla et al., 2013; Davis & Sandman, 2012; Dunkel Schetter & Tanner, 2012; Johnson & Wolke, 2013; O'Donnell et al., 2013; Steenweg-de Graaff et al., 2013). However, in recognition of a holistic approach, where the body-mind-spirit are integrated, the soul of the unborn child is potentially susceptible to affect by the physical or emotional aspects of life in the

foetal period. The implications on the spiritual and moral future of human life have not yet attracted a lot of attention among researchers.

It seems that achieving the inner experiences of mothers as the primary providers of spiritual needs of the unborn child is the first step to enter this unknown frontier. Women's views and values in relation to the spiritual nature of their unborn child, and their behavior during pregnancy and birth are based on their religious beliefs, and social and cultural values (Hall, 2006; Kitzinger,1989).

In the philosophical sciences, the human embryo is respected as a symbol of the future life (Aksoy, 2007; Brugger, 2012; Ethics & Law, 2001). In the Holy Qur'an, and in Islam as the main religion in Iran, how to choose a husband (wife), the period before conception, time of conception, the foetal period, susceptibility of the unborn child from various environmental factors (food type, weather conditions and the mental status of parents and friends), and their impact on creation of the spiritual and ethical future of the unborn child are considered very important. According to the Islamic codes, pregnancy is one of the most important and valuable duties of mothers, which deserves much respect and great reward from the Allah. This is because mothers are viewed to have great responsibility in the formation of the physical and spiritual characteristics of humans. It has been quoted from Prophet Muhammad (PBUH): "Blessed is the one who is blessed in his/her mother's womb, and the deprived is the one who is deprived of the grace of God in his/her mother's womb" (Ketabchi, 2003; Majlesi, 2005; Makaremshirazi, 2008; SobhaniTabrizi, 1929). There is a study to show the Iranian pregnant women felt responsibility for the care of their unborn child by changing their attitudes, behaviours, and relationships (Shaho, 2010).

Spirituality is a complex philosophical concept, and its definition depends on the individual's worldview and culture (Yousefi, Abedi, Yarmohammadian, & Elliott, 2009). It is not only a subjective issue but a relative state of the inner experiences (Komatra, 2003). Researchers, looking for a systematic assessment of studies in the area of religion, or spirituality and health, have recommended a broader use of qualitative methods to assess subjective experiences such as spirituality and health (Freedman et al., 2002). Therefore, a qualitative study was conducted to explore how Iranian mothers care for themselves and their unborn child from a spiritual perspective so that based on its results, meaningful and reasonable care is given and proper training in prenatal care is provided.

Methods

Design

Given the research question in this research, an in-depth qualitative approach based on naturalistic paradigm was adopted to provide a fresh and rich insight in to women's perspective of their unborn child's spiritual care in detail. (Polit & Beck, 2008)

This study was conducted by using conventional content analysis. This technique is appropriate to study the phenomena such as spirituality in which there is currently limited and scattered research. It further provides the basis for extraction of concepts and new perspectives from data (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005).

Participants

The participants were selected through purposeful sampling in Tehran city (Iran) from June 2012 to May 2013. They were pregnant or had experienced pregnancy, and they had the willingness

and ability to transfer their experiences, which is essential for qualitative studies (Holloway & Wheeler, 2010).

Data collection

Data were collected through interviews, which were continued until no new information was obtained, data saturation was achieved and themes emerged (Sandelowski,1995). Data collection was carried out using in-depth and unstructured interviews, which took place at home or any other location convenient according to the willingness of the participants.

Duration of the interviews was between 30 to 90 minutes. After each interview and initial analysis of the data the presence of ambiguities or the need to probe and obtain further in-depth data meant telephone interviews were carried out. Also, based on their willingness, 3 of the participants responded to further questions by e-mail. In total, 27 interviews were conducted with 22 participants. One of the participants reviewed a detailed diary during her pregnancy to answer some interview questions. Each interview began with broad and general questions such as "Please describe to me the first time you felt that you were pregnant." and "Talk about the changes in your daily life during the pregnancy". Then, based on the responses received and the data extracted, some more questions to focus the participants on spirituality and some probing questions were asked to encourage them and to achieve deeper information, such as" Please explain more about spiritual health of your unborn baby.", "During the pregnancy, what do/did you do for the spiritual health of your child?", "Tell me more about this.", and "Please give a real example so that I can understand it better." The interviews were conducted in Farsi language and the transcripts translated into English (back translation with reconciliation of discrepancies).

Data Analysis

In a qualitative content analysis method, the data are analyzed as they are collected. This method describes a systematic process of analyzing of the text (Mayring, 2000). It largely focuses on the field and subject, and emphasizes the differences and similarities between and within the extracted codes and categories. Manifest content of the text is shown in the categories, and latent content is shown in the themes (Graneheim & Lundman, 2004). In this study, all audio recordings were transcribed verbatum. After carefully reading of them several times, and immersion in the data obtained, open coding was conducted so that the 'meaning units' were extracted from the interviews; then they were given a code. After several initial interviews, classification of the codes began based on comparison of their differences and similarities. By adding interviews, categories were developed. To reduce the initial categories, after comparing them, they were merged, when possible. Finally, a name representing its contents was selected for each category (see the example of analysis process in Table 1).

Ethical issues

The study began after obtaining permission from the Ethics Committee of Tarbiat Modares University (Tehran, Iran). After selection of the participants and enough explanation about the importance, goals and methods of the research, as well as ensuring them of anonymity and confidentiality of the data, informed consent was written and signed by all participants to record the interviews.

Rigour

In this study, by conducting long-term interviews, meeting with the participants, repeated reading of the interviews, emergence of data, member checking (to verify the extracted codes and categories), and having the maximum variation in sampling (based on age, gestational age,

gravidity, number of children, different elapsed time of delivery, occupation, educational level and place of residence), we attempted to assist in the credibility and transferability of the data. Furthermore, accurate and detailed description was provided using a step-by-step method to the experienced nursing teachers of the research group (authors) with a detailed audit in order to ensure the dependability and confirmability of this study.

Findings

The mothers were between 24 to 47 years old, and 9 of them were pregnant between the first to the third trimester at the time of the interview. The number of pregnancies they had experienced varied from 1 to 4, and the elapsed time of the delivery in the range of 6 months to 22 years. The education range of the participants was from diploma to doctorate degree in humanities, medicine and engineering. They encompassed both housewives and employees. All of them were Muslims.

The main theme of women's experiences in the present research suggests adopting a holistic abstinence pattern in spiritual care of the unborn child. Data analysis of 27 interviews led to the emergence 14 sub-categories and 7 categories. Main categories and sub-categories are summarized in Figure 1.

1. Refusing to eat forbidden food

One of the main categories extracted in the present study in the conduct of pregnant mothers was around nutrition and the belief in its fundamental impact on the future of the unborn child, which was revealed in two main areas:

1.1 Rejecting the meals offered by individuals with negative mood

The mothers rejected meals offered by those who they did not believe to have a confirmed positive character; for example, they were thought to backbite (that one talks too much about another) or were jealous. The mothers believed that this would lead to transmission of the beliefs and behaviors of these individuals to their unborn child, and would have a significant impact on his/her religious and moral future:

"I want (my child) not to be jealous; therefore, I do not eat the meals made by jealous people… If my child defies a religious obligation later, it is because of the effect of the foods made by these people" (Participant 6, 24 years old, first pregnancy, 32 weeks).

1.2 Self – control in eating Haraam meals

Using Haraam (religiously forbidden and disallowed) foods (Bahjat Foumani, 2007) and their direct, fundamental and potential effect on the moral future of the unborn child was an important concept that was clear in the statements of all participants. They employed this approach in the hope of having children with commitment religious beliefs and practices, with the power of distinguishing between good and bad (distinguishing between Halaal *(religiously allowed /lawful)* and Haraam, paying tribute to people' rights, fulfilling promises, being good and helpful about others), and prevention of institutionalization of improper behaviors (e.g. disrespecting for parents, lying, etc.) They also wished for a good consequence for the unborn child:

"I'm trying to be careful in the foods I eat and getting food from someone else. All I do is because when my child steps in this world, he/she knows what Haraam and Non-haraam are" (Participant 3, 29 years old, first pregnancy, 30 weeks).

Based on the religious origins of the mothers, they believed that many of the ethical problems of humans are rooted in Haraam sustenance:

"I was very much aware of more Halaal sustenance coming to our table. For example, any time we went out, I did not eat foods I did not know about. I was afraid that according to the things we heard of our beliefs, if a person consumes Haraam sustenance, he/she may do something illegal and against his/her religious belief. We must not plant bad seeds in our child's heart, as when he/she grows up, he/she will be free to do or not to do bad things but not for eating Haraam sustenance in his/her childhood; and we are not allowed to give him/her these things" (Participant 8, 32 years old, one history of pregnancy).

In many women, self-control in eating Haraam foods was more important as compared to the actions they were doing for the spiritual health of the unborn child:

"I try to do all to avoid bad qualities like backbiting, lies and things like that; especially when one is pregnant, she has to be careful about these things, because I believe these have effect on the child, but none is as important as Haraam sustenance" (Participant 17, 33 years old, second pregnancy, 10 weeks).

1. Overcoming mental adversity

In addition to changing their eating behaviours the women would attempt to have a positive emotional state.

2.1 Changing negative mood

The mothers attempted to undermine emotions such as sadness, grief and depression by doing some activities such as yoga, walking, watching favorite TV programs or movies, and listening to relaxing music. They believed the unborn child can understand the mother's mood and is affected by it:

"I tried to listen to Mozart music sometimes. I enjoyed dancing. I told myself sadness would make my child sad" (Participant 2, 28 years old, one history of pregnancy).

2.2 Tension removing

The women would also use self-help methods for stress and anxiety relief in order to prevent the psychological impact on the future life of the unborn child (being nervous and impatient, lack of relaxation and lack of mental instability in the future) Preserving calmness and patience were among the strategies used by the mothers and their husbands:

"Well, I have tried to be calm, and keep a good spirit as much as possible, because I was sure that stress could be transferred to the unborn child" (Participant12, 28 years old, one history of pregnancy).

The mothers even refused to be pregnant when they felt the psychological conditions are adverse because they had the belief that, from the very beginning of conception, the unborn child is affected by the mental and nervous statuses of the parents:

"*When I was sad, I had an argument with my husband, or I was nervous, I was saying to my husband I don't want to be pregnant in this situation... I think my child would also be restless and nervous" (*Participant17, 33 years old, second pregnancy, 10 weeks).

3. Regulating one's social interactions

3.1 Limited communication with those around with negative mood

Feelings of anger, disgust, resentment, sadness and abomination of socializing with people who have bad moral qualities (such as malice to annoy people, annoying ideas in their family, friends and acquaintances, and the belief on their effect on the unborn child) led the mothers to limit some of their communications:

"Because my family-in-law are very interested in boys; though nothing has happened, they say if your child is a girl, then leave her in the hospital and bring a boy instead(laughing). Because of this, I always say to my husband that this is not a good situation. I have never thought of such a thing before, but now my mind is busy thinking about it. This made me tell my husband that I will try not to go to his mother's house; because I do not want them make me upset; this way my child also will hate them for sure. I do not want my child be like this; why must disgust be formed in his heart or mind" (Participant 15, 28 years old, first pregnancy, 6 weeks).

3.2 Refraining to attend sinful places or ceremonies

Refraining from attending the places or ceremonies where the women may be tempted to behave differently or view or commit religiously sinful behaviors was believed as a strategy for refinement and avoidance of sin, aiming at promoting both the mother's and her future child's spiritual sense and success in performing the religiously recommended obligations:

*"When I am pregnant, I have this vision not to commit sins, not to put myself under sin, not to be in a place where people commit sins; all in all, I have to control myself a little bit… Not to put oneself under sin will help to improve spiritual aspect of human and be successful in doing religiously recommended actions and obligations. Because of myself and my child, I do all these"(*Participant 14, 40 years old, fourth pregnancy, 36 weeks).

4. Preventing the effects of harmful environments on the senses

This was one of the fundamental strategies that the mothers tried to follow.

4.1 Controlled interaction with non-mahrams

The mothers were not comfortable to have contact with non-mahram individuals because they were concerned that the pure entity of the unborn child would be damaged by this. Non-mahram describes a man or woman with whom a Muslim adult can marry. The Islamic ethic on gender relations prohibits an unrelated man and woman from touching each other (Bahjat Foumani, 2007). Under the stress-full conditions of the presence of a non-mahram, the mother will transmit this feeling to the unborn child, which led to them avoiding contact:

"I avoid having close interaction with non- mahram. The child has a holy and pure spirit and I think this will hurt him/her, and this is not in my hand" (Participant 10, 34 years old, second pregnancy, 19 weeks).

4.2 Avoidance of watching sexually explicit images or videos

Watching sexually explicit images and scenes was also another avoidance behavior pattern in the participants. A participant mentioned the fear of the negative ethical effects on the future of the unborn child as a reason for their behavior:

"I think if I look at the images that I should not, this will affect the pure nature of my child, no matter if, a boy or a girl. For example, he/she will try to downplay the religious commitments like wearing Hijab, or other aspects like saying prayers, practicing religious obligations or recommended actions" (Participant 16, 25 years old, first pregnancy, 8 weeks).

4.3 Avoidance of listening to sexually explicit music

The pregnant women in the present study avoided listening to explicit music because they believed that this will effect on the desires and interests of the unborn child in future:

"I did not even listen to, for example, sexually explicit music, because I thought they will make my child be interested to these things in future" (Participant 14, 40 years old, fourth pregnancy, 36 weeks).

5. Prohibiting the use of insulting and abusive language

5.1 Stopping the use of offensive or annoying words

The mothers also were trying to make their living environment free from verbal pollution. Stopping the use of slandering, lying, gossips and insulting words were approaches they addressed:

*"... When I want to say something like, 'Oh, how I hate it! I will tell to myself my child will understand this (laughing), this will affect on the unborn child; he/she will backbite in the future. For example, if I say things like this, they turn into my daily behavior..." (*Participant 5, 39 years old, second pregnancy, 27 weeks).

5.2 Asking the people around not to use obscene words

In addition to controlling themselves, the mothers would invite their husband and people around to use good words and not to say profane words in order to avoid their negative effects on the unborn child:

"My husband was using obscene words a little, and I told him not to use them and give them up. I say when I have an unborn child in my womb, he/she can understand everything I say. It is

now a week that I myself feel that; there is someone watching me and sees everything..." (Participant 15, 28 years old, first pregnancy, 6 weeks).

6. Keeping one's mind and spirit free from evil traits

The mothers tried to send away any negative thoughts from their hearts and minds. In some mothers, this behavior was observed from the early days of their pregnancy:

"From these first weeks, I'm sure that whatever I do or what I have in my mind will affect my child…Now I have decided to give up this negative behavior of being sad for seeing if somebody is successful in doing something but I am not. Instead, I ask my lord to give the same to me and my husband. I try to leave this negative mood" (Participant 16, 25 years old, first pregnancy, 8 weeks).

From the mothers' point of view, characteristics like malice, curse, anger, jealousy, suspicion and hatred were evil characters, and they were trying to avoid them during the pregnancy:

"*This is human after all; sometimes, he/she is angry with someone, feels jealousy, hates someone, I say to myself that all of these are characters that the devil creates in human's soul. I have to avoid these. The more you have these inside, the closer the devil can be to you. So it can be closer to your child too" (*Participant 11, 30 years old, one history of pregnancy).

7. Not doing damaging behaviors

7.1 Refraining from doing actions damaging on a person

Refraining from aggressive behaviors and not helping others as well as highlighting moral virtues such as honesty, patience and forgiveness are some of the acts that the mothers had tried

to do because they were worried about upsetting others, which would potentially have a negative impact on their child's future too:

"If somebody asks me whether I can do something for him or not, first I say no but then I am telling to myself if I say no and he/she gets upset and I break his/her heart, this can have negative effect on my child and on his/her future" (Participant 9, 28 years old, experienced two pregnancies).

7.2 Refraining from doing actions damaging on the society

Mothers tried to behave morally when communicating with others; for example, they used to help others, had commitment to perform their professional responsibilities and behave kindly. The majority of mothers did not like behaviors such as having improper Hijab or wearing no Hijab due to its negative social impact; especially during the pregnancy, they were more sensitive about wearing it. Islam commands both sexes to dress modestly. The basic requirement for Muslim women is that hair, arms, and legs are covered, especially in the presence of adult male who is non-mahram (Bahjat Foumani, 2007). This behavior was such that some of them, despite the reality that there is no legal prohibition of male caregivers, they preferred female caregivers to examine their body in the hospital:

"I did not use the ultrasound everywhere; I did care about the sonographer, not wanted the man to see my body. Although it is not prohibited religiously, I did not like it. Unfortunately, you see there are many pregnant women in the hospital not dressed properly, so that their legs and arms have no cover or they have heavy make-up; I think a mother like that can affect her child" (Participant 20, 31 years old, one history of pregnancy).

Some of the mothers were wearing Hijab, more complete than before they were pregnant because they believed that the religious nature and mind of the unborn child forms under such circumstances, and he/she can have the ability to differentiate between good and evil:

*"Almost two years ago, my mind was calm, our problems got less, and I made my mind that if I want to have a baby, I myself must have strong spirit and soul first; therefore I choose to wear Hijab, because it affects myself, and my mind is busy with this, so it has effect on my child as well…" (*Participant 15, 28 years old, first pregnancy, 6 weeks).

The mothers in their relation with non-mahram people, during the pregnancy tried to refrain from provocative actions as they believed that this would be learned by unborn child:

"I had so much pent up to observe religious basics, especially talk to non-mahrams, in an appropriate way; I cared about the way I was talking to them, the way I was laughing... I regarded that myself, and also made them know that there is a boundary and we all have to observe it. I thought it was only enough that I have to care about everything as my child would learn from me" (Participant 21, 47 years old, one history of pregnancy).

Discussion

Based on the experiences of the participants in this study, "Refusing to eat forbidden food", "Overcoming mental adversity", "Regulating one's social interactions", "Preventing the effects of harmful environments on the senses", "Avoidance of using insulting and abusive language, "Keeping one's mind and spirit free from evil traits" and "Not doing damaging behaviors" are the main strategies that the mothers used to reduce their maternal concerns in securing a good spiritual and ethical future for the unborn child. This fact that a mothers' vision of the soul of the

unborn child has an effect on their decisions and their performance in abstinence care was something interesting evident in our findings.

"Refusing to eat forbidden food" was one important aspect of the mothers' behaviors in this study. The results suggest that during pregnancy care, a mother tries not to eat Haraam foods and avoids eating the foods made by those where she does not like their personalities; she is concerned that the consumption of these foods will cause religious and moral problems in the future of her child.

In this context, investigating the beliefs, attitudes and dietary behaviors of pregnant women on the island of Bali in Indonesia showed that the mothers believed that certain foods should not be consumed by pregnant women; there was also a strong opinion about traditional herbal remedies (Wulandari & Klinken Whelan, 2011). The use of harmful known substances such as alcohol and binge drinking in American pregnant women with the aim of preventing their foetal effects was reduced between 2006 and 2010 (Centers for Disease Control and Prevention(CDC), 2012; Verbeke & De Bourdeaudhuij, 2007). Ojofeitimi, Elegbe, and Babafemi (1982) showed that two-thirds of illiterate and low-income pregnant women in Nigeria restricted using milk, cowpea seeds and Bournvita due to fear of having a large baby, dystocia or cesarean. Keeping away from the problems associated with pregnancy, such as miscarriage, abortion, stillbirth, neonatal death and maternal deficiencies, were the reasons of most Chinese mothers' commitment to traditional limitations in pregnancy for this culture (Lau, 2012).

These findings differ from the results of the study by Huybregts, Roberfroid, Kolsteren, and Van Camp (2009) as they sought to examine changes in the eating habits of pregnant women as compared to non-pregnant women in the rural areas of Burkina Faso in 2009. They found that

the women in this region do not significantly restrict their diet during the pregnancy and, there is no consistent pattern of dietary avoidance. Many of the foods listed as "denied" or "forbidden" are due to the prevention of physical discomfort during pregnancy. Small changes in dietary patterns before, during pregnancy, and up to 6 months after delivery are also evident in other studies (Crozier, Robinson, Godfrey, Cooper, & Inskip, 2009; Cuco et al., 2005).

Although there are conflicting results in these studies they have a common theme; the mother focuses on efforts to provide the child's physical health through dietary restraint. In none of these studies has the child's spiritual health been targeted. Certainly, the cultural and religious background of the Iranian community and the pregnant mothers' vision of care of the soul of the unborn child are important in adopting such restrictions. As it is evidenced in the results of a qualitative study by Dykes, Lhussier, Bangash, Zaman, and Lowe (2012), cultural and structural factors have a strong impact on women's nutritional practices. Since research shows that midwives are reliable sources for nutrition information for pregnant women (M. Garnweidner, Sverre Pettersen, & Mosdøl, 2013), this group of health providers can have an important role in highlighting the need for the spiritual health of unborn child that will aid mothers make decisions during pregnancy.

In the pattern of "Overcoming mental adversity", the mother's response to the psychological stresses and negative moods is that she tries to avoid or control them somehow; what makes her be concerned is the emergence of psychological imbalances in the unborn child in future. Psychosocial stresses are common in pregnancy (Woods, Melville, Guo, Fan, & Gavin, 2010). Furber, Garrod, Maloney, Lovell, and McGowan (2009) showed that the widespread range of low to moderate mental stresses in pregnant women resulted from their past life experiences, the experience of delivery, and recent pregnancy concerns, and the mother's use of positive or

negative adjustment elements to control them. At low and high levels of anxiety associated with pregnancy, exposure to physical and sexual violence, and high job pressures, some mothers continue to smoke and are not able to give it up during pregnancy (Goedhart, van der Wal, Cuijpers, & Bonsel, 2009). It seems that the importance of the mental future of unborn child from the mother's point of view, and awareness of the benefits or risks of each behavior for the mental and physical health of the unborn child create necessary motivation to leave a specific behavior or to do it, and may lead to differences in maternal behavior in other cultures as compared to Iranian women.

"Regulating one's social interactions" is another pattern that the mother follows; here she tries to restrict her communication with the individuals whom she does not like, or in any way, their personalities create negative feelings in her. The few studies conducted on social interactions during pregnancy emphasize the necessity and usefulness of communication; however, the abstinence patterns in this regard have not yet been studied. Smith (1999) sought to examine the experiences of primiparous women, and found that pregnancy can highlight a symbiotic relationship, and understanding of self and others. It can also help in the psychological preparation for motherhood. Increase of communication with people important to the woman can be psychologically beneficial. Close partnership with the family members prepares women for the new role of motherhood.

It seems that the present study is a new look at the social stresses in pregnancy resulting from the mother's concerns in relation to the spiritual development of the unborn child. Discovering the causes of mothers' concerns in pregnancy and the resulting reactive behaviors according to their cultural and social context, and providing appropriate solutions can prevent their adverse effects on both mother and unborn child.

Mothers' efforts to avoid sexually explicit music to listen to, and sexually explicit images to watch, and to avoid close interaction with non-mahram people were reflected in "Preventing the effects of harmful environments on the senses" during pregnancy. Tsianakas and Liamputtong (2002) interviewing 15 Muslim pregnant women, who had already lived in Australia, found that the gender of caregiver is important to mothers, and this is one of the factors of dissatisfaction of women in prenatal care. They clearly stated that they needed a female doctor for their care. Although the maternal behavior in relation to non-mahram people in Australian pregnant women is in line with the sense of protection pattern in this study; however, the Australian mothers did not mention any thing about adopting this behavior for foetal reasons.

Unfortunately, in searching the literature available, other abstinence patterns like, "Avoidance of using insulting and abusive language, "Keeping one's mind and spirit free from evil traits" and "Not doing damaging behaviors" have not received any attention by other researchers.

As was evident in the interviews with the mothers in this study, the cultural and religious background of the Iranian community had an effect on their dietary, as well as psychological, social, and moral patterns. In agreement with this finding, Carolan and Cassar (2010) found that accepting and valuing pregnant mothers to prenatal cares are influenced by their cultural beliefs.

In Iran, as an Islamic society, pregnancy is considered as a gift from God. Mothers believe that they have been qualified enough to have a baby. In fact, they honor it and, in order to thank this gift, they try to follow a less stress lifestyle and provide a sin-free environment for the growth and development of the unborn child. This motherhood responsibility is not only not hard and stressful but also relaxing and reassuring.

Massey et al. (2012) showed that mothers' positive self-concept as a good service provider for the health of the unborn child leads to create motivation in them to stop using drugs and beginning prenatal care in some states of the United States of America. It seems that this maternal preparedness for the optimal care of the unborn child is a sufficient reason to conduct extensive research to explore the different aspects of maternal behaviors and their spiritual and ethical consequences on the unborn child's future, and to inform the mothers about them to take precaution measures in the form of prenatal care packages.

Limitation

In qualitative studies, the findings largely depend on the social and cultural context of the data; however, the sampling with maximum variation of pregnant and non-pregnant women, and diversity in gestational age, gravidity, number of children, and different elapsed time of delivery are of the strengths of this study.

Conclusion:

It is obvious that today's unborn children are the constructions of humans and humanity in the future, and fulfilling of their needs during the susceptible and vulnerable period of pregnancy is the priority of human's spiritual health programs. The results of this study provide new information regarding the subjective experiences of Iranian pregnant women on the patterns of abstinence for the community researchers, policymakers, planners, and the providers of maternal and child health care services throughout the world who care for Muslim pregnant women in order to value and acknowledge the cultural, religious and spiritual dimensions of the pregnancy.

Implications for nursing education and research

We conducted this research to obtain information about the patterns of care for pregnant women that have an affect on the soul of the unborn child. Based on the findings of this study as an exemplar of how religious beliefs penetrate all aspects of maternal life, we can provide a holistic prenatal supportive care for mother and unborn child according to her religious, spiritual and cultural sensitivities. The results of this study can also provide part of educational content of care, and maybe used in the training of reproductive health and midwifery teachers and students to provide more comprehensive prenatal care. On the other hand, extensive research may be required for identifying the relative risk factors or the inhibitive agents to these behaviors, various interventions can be designed based on appropriate patterns, and their effectiveness can be measured by using clinical trial researches. Finally, appropriate practices can be achieved in health promotion in the prenatal period and, in turn, over the life.

However, this could be an introduction to examining the maternal abstinence behaviors on the foetal spirit and their long-term physical, emotional and moral effects on different periods of life from infancy to old age.

The results of this study can give a broader view of the various aspects of maternal and foetal health to practitioners of the Ministry of Health to link up well the research results into policy and meet the mothers' needs and values. Policy making and implementation of the policies based on holistic prenatal care brings improved overall health of infants, mothers and the next generation.

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Detailed Response to Reviewers

Dear Editor

Thanks a lot for your response.

I did try to revise the article as follows (Table 1, 2).

Thank you in advance for your attention and I am waiting for your comments.

Sincerely

Author

Table1. Comments from Associated Editor and response to them.

Comments from Associated Editor	Response to Comments from Associated Editor
The APA needs work (authors need to be in alphabetical order in citation, the table should not be at the beginning of the manuscript, data are pleural...).	The manuscript was revised according to APA style and was marked (Bright Green highlight).
I believe this study does not only inform Iranian healthcare (as stated) but all health care providers throughout the world who care for Muslim pregnant women- this should be stated... make the findings (not results) more international	"Results" were re-labeled "Findings" and was marked (Underline) in "Findings" section. The sentences that make the findings (not results) more international were added to "conclusion" section in abstracts and full text, and were marked (Underline).
I also feel it is confusing when in the table the authors describe the participants as parents of infants- and the quote does not reflect this was their experiences/views DURING PREGNANCY and not during the infancy of the child. The title/study is about experiences of the UNBORN child- so while the interviews may have occurred after the baby was born (and the mother is reflecting on the pregnancy) the quotes used must clearly identify the experience as during PREGNANCY.	I revised the quotes in Table1 to reflect the maternal experiences during PREGNANCY and were marked (Underline).

Table2. Comments from Reviewer 2 and response to them

Comments from Reviewer 2	Response to Comments from Reviewer 2
Some of English phraseology is awkward throughout the paper and would benefit from more editing.	The article was edited in terms of English words.
The background /introduction implies that some physical anomalies or chronic health problems are related to the spiritual attention during fetal development. This is a real stretch and possible over-interpretation of some of the references and may deflect many readers. Suggestion: Frame the paper in a cultural context as how women of Iran culture and Muslim religion perceive being pregnant. In the discussion, then discuss importance of spirituality across cultures and religions and this study as an exemplar of how religious beliefs penetrate all aspects of life and then connect to holistic nursing which seeks to consider this broader perspective, beyond the physical in understanding our patients.	Introduction explains there are researches that are shown the origin of some physical disease(eg. Chronic disease), mental and emotional problems (eg. anxiety, inattention, social and communication difficulties, suicide and violent behaviors, inattention and aggression) may be in relation to foetal life. However the soul of the unborn child is potentially susceptible to affect by the physical or emotional aspects of life in the foetal period. The implications on the spiritual and moral future of human life have not yet attracted a lot of attention among researchers. To resolve this ambiguity, I revised this section of "introduction" and was marked (Underline). The new study about the experiences of Iranian pregnant women was added in "introduction" and was marked (Underline). Shaho R. Kurdish women's experiences and perceptions of their first pregnancy. British Journal of Midwifery. 2010;18(10):650-7. Explanation about importance of spirituality across cultures and religions is throughout the "Discussion" section. As well as importance of religious and cultural beliefs of mothers in holistic care was added to "Implications for nursing education and research" section and was marked (Underline).
Methods: it is good to have a research question or aim either at the end of the introduction or beginning of methods. Then a brief, but clear description of the study design: ethnography, descriptive interpretive, etc., with appropriate references. Most of the methodological references are on content analysis, which is fine; however, there should be a reference to the design of the overall study.	The aim of the study is at the end of" introduction" and was marked (Underline). A brief description of the study design and a reference to the design of the overall study were added IN "Method" section and were marked (Underline).

Table2. Comments from Reviewer 2 and response to them (continued).

Comments from Reviewer 2	Response to Comments from Reviewer 2
Participants: "they were aware of the phenomenon of spiritual care of the unborn child" how did you know this? How were they selected, recruited, How does that relate to the study design? Is there a description of the participants: age, education, marital status gravida, religion, etc . (Could be in a table or in the text). I see you have some descriptors along with the quotes which is an interesting element.	The sentence "they were aware of the phenomenon of spiritual care of unborn child" was deleted from "Method" section. There are explanation of the way of participant's selection and recruition with a qualitative reference and were marked (Underline) in "Method" section. There is a description of the participants in the beginning of the results section and was marked (Underline) in "Findings" section.
The questions you asked were extremely broad; how did you focus them on spirituality. Based on the general questions, it would seem that they might have a variety of types of experiences during pregnancy. Some more data on the types of questions to focus the interviews would be helpful	Some more data on the types of questions to focus the interviews on spirituality was added and was marked (Underline) in "Method" section.
Rigor: an audit to the research group is mentioned. It is not clear who he research group is….is this the authors of the study or an external group? Any efforts related to bias control	The interviews and results of the analyses were audited by two of the nursing expert authors of this study. This explanation was added and was marked (Underline) in "Method" section.
Results (Might re-label Findings) Might give a brief introduction to the underlying theme of holistic abstinence and the sub-themes in the beginning paragraph, citing Figure 1 This would set the stage for the underlying theme of abstinence (might include a definition) Perhaps some explanations of word like " Haraam aliments", "Haraam foods" would be helpful for international readers.	"Results" were re-labeled "Findings" and was marked (Underline) in "Findings" section. There is a brief introduction to the underlying theme of holistic abstinence and the sub-themes in the beginning paragraph of discussion and was marked (Underline) in "Discussion" section. some explanations of word like " Haraam aliments", "Haraam foods" were added for international readers and were marked (Underline) in "Figure 1".
Discussion: It is not clear, in the reference to Hall, how these findings related to Hall's study.. Pg 19 is a run-on paragraph and would read better if broken up into specific areas of discussion. It might be better than going though each sub theme and expanding to the general literature, which gets extremely broad, to focus on the specific cultural/religious view of spirituality in relation to pregnancy and a more general discussion of applying these religious view in patterns of avoidance of potential dangers during pregnancy. Understanding this culture/religion on pregnancy has clinical implications for providers.	Hall's study was deleted from "Discussion" section. Paragraph of "Regulating one's social interactions" was broken in to two paragraph and was marked (Underline) in "Discussion" section. It seems that throughout the manuscript focuses on the specific cultural/religious view of spirituality in relation to pregnancy. Since this study is qualitative, of course, our data also affected the participants' beliefs and cultures. I think the application of the results are explained in "Discussion", "conclusion" and "Implications for nursing education and research sections".

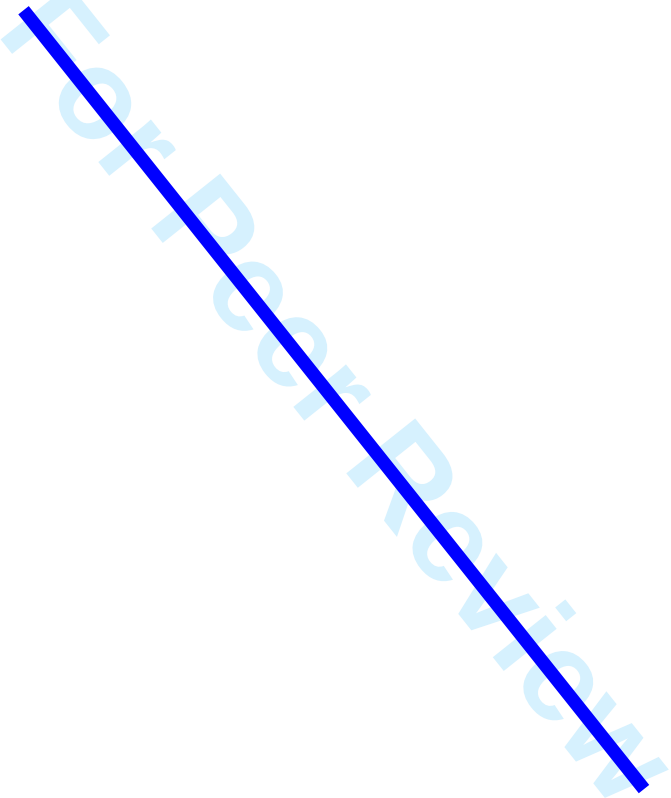
For Peer Review

Table 1. Example of analysis process

Meaning Unit	Code	Category	Theme
30-week pregnant mother: *"From the beginning of pregnancy, I tried not to watch sexually explicit images and videos, because if I watch them, they can have a bad influence on the unborn child."*	Refusing to watch sexually explicit images or videos /believe in its effect on the unborn child	Preventing the effects of harmful environments on the senses	**Holistic Abstinence**
Mother of a 6-month old infant: *"When I was pregnant, I tried not to lie, not backbite... I felt that my child understands and sees all these."*	Stopping the use of lying and backbiting/believe in the fetus's understanding and being influenced by all these	Avoidance of using insulting and abusive language	
Mother of a 19-month old infant: *"I remember when I was pregnant, If my husband was saying obscene words to someone, I would be very complainant of him. I told him our child notices all these, and will repeat the same in future."*	Inviting the husband to avoid of using obscene words/believing that it has effect on child in future in adopting the same behavior.		
Mother of a 10-month old infant: *"Once during my pregnancy, someone hurt me, but when I cursed him/her back, I felt more hurt deep inside myself; my body and soul felt contractions and spasms. This would have effect on the unborn definitely, he/she would be hurt also, it was like ....."*	Trying to send away the curse and malign others/the sense of its negative impact on both the mother and unborn child	Keeping one's mind and spirit free from evil traits	
36-week pregnant mother: *"I say if I have provocative behaviors, my unborn child will most probably be affected; It is well known that training depends on mother (with emphasis)..."*	Refraining from provocative behaviors /believe in its impact on repeating this behavior by the unborn child in future	Not doing damaging behaviors	

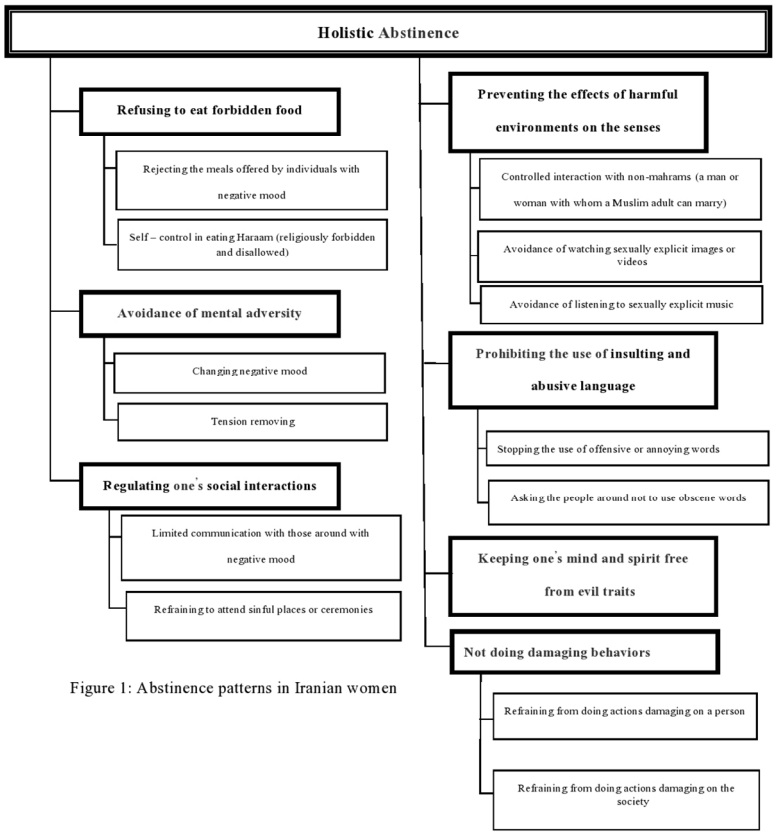

Figure 1: Abstinence patterns in Iranian women

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