A Review of the Importance of Maternal-fetal Attachment According to the Islamic Recommendations

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ABSTRACT

Background & aim: Maternal-fetal attachment has an important effect on mother’s identity as well as maternal and fetal health. Moreover, this concept is considered as a crucial issue for the improvement of children emotional development. Regarding the Islamic recommendations on maternal-fetal attachment and its correlation with maternal affection, this study was conducted to review the importance of maternal-fetal attachment according to the Islamic recommendations.

Methods: This review was conducted on the religious texts, which covered the subject of interest and were published within 2000-2017. Various databases including Medline, PubMed, Google, IranMedex, SID, and Magiran as well as the websites of Muslim authorities (i.e., the section responding to religious questions) were searched. The searching was carried out using keywords as: "Islamic religious teachings", "pregnant women and Fatwa of the Islamic jurists", and "aspects of maternal fetal attachment in Islam".

Results: According to the results of the reviewed texts, the mutual readiness of mother and fetus leads to the improvement of their affection. The maternal factors affecting the maternal-neonatal attachment included personality traits, marriage, selection of partner, post-marriage issues, pregnancy, as well as physical and psychological characteristics. There were also some effective factors on the newborn’s innate readiness for the development of attachment, such as fetal appearance, family and social support, maternal nutrition during pregnancy, and neonatal mood.

Conclusion: According to the Holy Quran versus and hadiths, maternal-fetal attachment and its promotion are affected by both maternal and fetal factors. Moreover, following the factors affecting attachment will lead to their role functioning. Therefore, it is intensively recommended to incorporate a glance of Islamic instruction into the pregnancy education to improve the maternal-fetal attachment.

Introduction

Pregnancy, delivery, and childbirth are among the important events in women’s life. The majority of the women follow the natural pattern of physical and psychological development (1). The dramatic changes occurring in the pregnant women make them very sensitive to emotional stimuli and sometimes cause psychological problems during pregnancy and postpartum (2, 3).

In the 20th century, known as the child century, more attention was paid to children. According to Bowlby, warm, close, and constant maternal relationship is required for improved mental health in children.

The mutual maternal-child relationship is one of the important determining factors in children’s normality or abnormality through which the

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physical, emotional, and psychological needs of the mothers and children would be fulfilled (4). Attachment is the lasting emotional bond between the mother and child, which can be considered as a unique and amazing phenomenon (5). There is evidence of growing attachment between the mother and fetus during pregnancy, which is reflected in maternal behaviors.

Maternal affection (within pregnancy) can cause postpartum satisfaction (6, 7). Many researchers believe that the relationship between mother and child is established long before birth. Particularly, the last three months of pregnancy is the time the mother-child bond reaches its peak due to the fetal sensitivity (in the terms of emotional or physical aspect) to mother. Within this period, the fetus can hear and feel the mother’s belly touch or massage. These behaviors will support the flourishing of maternal-fetal bond before birth (8).

Pillitteri stated (according to Moradi et al.) that the bond between mother and child can cause a favorable attachment and promote the children’s cognitive, emotional, and social growth (9). The mother has an inevitable role in determining this bond. According to some studies, the maternal influence on determining the child’s attachment is to the extent that even the mother’s thinking about her attachment during pregnancy can predict the attachment behaviors in the infant during his/her first 12 months of life (10).

Attachment theory, originated in a study conducted by John Bowlby in psychology, was previously discussed and emphasized in legal doctrines and Islamic teachings. Several studies have been conducted on the effects of spiritual experience and its impact on human character and his performance in various fields (11-18). Moreover, some studies have demonstrated the impact of culture (e.g., race, ethnicity, and religion) on the incidence of diseases and their treatment (19-22).

The Iranian culture is based on Islam. The original Islamic sources contain numerous strategies for nutrition, stress, pregnancy, couple’s communication, sexual contact, as well as maternal-fetal and neonatal attachment (23). However, limited number of studies have been conducted in this domain. With this background in mind, the present study aimed to investigate the importance of maternal-fetal attachment according to the Islamic recommendations.

Materials and Methods

Study design

This review study was conducted on the religious texts, which covered the subject of interest and published within 2000-2017. The texts included in the present study were obtained by searching some databases and search engines, such as Medline and Iran Medex, PubMed, SID, Magiran, and Google. The searching process was performed using the following keywords (in Persian and English): “importance of maternal-fetal attachment”, “importance of attachment in pregnancy”, “maternal factors influencing the fetus attachment”, “neonatal factors affecting the attachment”, “verses and traditions about the importance of maternal-fetal attachment”, “verses and traditions related to pregnancy and childbirth”, and “lactation reward in Islam”. The study design and the type of resources used in this study are illustrated in Figure 1.

![Figure 1. Number of the reviewed resources and study design](image)
Results
Attachment is a primary need, which provides the necessary biological preparations in both mother and infant (24). On the other hand, the mothers should have some psychological features beside the biological preparation to fulfill their active role in the attachment process. According to the reviewed resources, preparation is a required issue for the accomplishment of the attachment (25). Based on the Islamic point of view, there are two main factors, namely infant and maternal factors, affecting the infant's character and his/her upbringing process. The maternal factors include the mother’s personality features, marriage time factors, marriage partner selection, post-marriage factors, pregnancy, and finally physical and psychological features that are inherited before birth (Table 1).

A-Maternal factors
Spouse’s properties
Marriage dates back to man’s history on earth and is regarded as an important issue in all religions and schools. However, no school of thought or religion has cared about this issue as much as Islam. According to Islam, family foundation is the basis of family progress and development in all aspects of life; accordingly, the Islamic law contains some considerations in this regard.

A person’s character is the first important criterion in selecting the marriage partner. The investigation of the criteria for choosing the right partner (according to Islam) revealed the suitable personality criteria directly affecting the child attachment and maternal-fetal relationship (25). That is the reason the selection of a mate has been emphasized in Islam and several traditions. According to Prophet Muhammad (PBUH), individuals’ origin of happiness and misery must be sought in the mothers’ womb (26).

Most of the features that people, by their nature and custom, look for in women include soft-heartedness, non-violence, and compassion (according to Islam). The mentioned features prepare a woman to play her motherhood role well and form her desired affection with the infant. The prophet said, "Marry kind and childbearing women as your increasing offspring is my honor over other prophets" (27). Additionally, Imam Sadiq(AS) stated, “Those who love their children will be under God’s mercy” (28).

Mothers’ compassion, kindness, good humor, cheerfulness, and forgiveness can lead to some results. These features help the mothers not only avoid the negative emotions rooted in insecure attachment, but also care about their child who is seeking help, which finally results in the enhancement of their involvement in child care. They also improve the child’s adaptive behaviors providing the proper condition for his/her secure attachment (25–29). Mothers’ role is superior to men; accordingly, the long-term association between the mother and child (weather inside or outside the womb) can be a good reason for this bond. The uterine conditions, such as blood and other chemical aspects, can intensively influence the embryo.

Imam Khomeini says, “Mother’s influence on the child’s morale is higher than that of the father; therefore, the mothers are the source of all happiness” (30, 31). The mentioned characteristics also assist the mothers to raise their tolerance threshold, which enable them to care about the crying child with no appealing look (25). On the other hand, the mother’s anger and rejection hinder the child’s attachment; mutually, the child’s anger liability can reduce the child-mother attachment (32).

Mental health in pregnancy
The eager mothers may even face some challenges in early pregnancy, such as gradual

Table 1. Main factors affecting maternal-fetal attachment according to the Islamic recommendations

<table>
<thead>
<tr>
<th>Factors associated with mother</th>
<th>Factors associated with fetus and neonate</th>
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pregnancy complications, labor thinking and its related complications, inevitable mother’s duties, as well as concern about disease and birth defects. Regarding this, the husband’s sympathy and cooperation are required for a better pregnancy acceptance (31). The prophet Muhammad (PBUH) said, "The best among you is the man who treats well with his wife, and I’m more well-behaved to my wife than you all" (33).

**Role of heredity and environment in mothers**

Mothers have two sorts of roles and impacts regarding the children. Considering the influence of heredity and environment, God in Surah Nuh (Verses 26 and 27) said (34), "And Noah (supplicated) said, 'My lord, do not leave a single unbeliever upon the earth.

Surely, if you leave him/her, he/she will mislead your worshipers." Accordingly, Prophet Mohammad (PBUH) said, "Be careful about the generation and ethnicity in which you put your child (the wife you choose) because family foundation and heredity intensively affect children" (35). In addition, the Prophet said, "Avoid the fool women since their companionship is the exact disaster, and they just spoil their children." (36)

These characteristics of mother will accompany the child within pregnancy and lactation period. The mother can influence their children through lactation due to the blood and hereditary association between these pairs. During pregnancy, mother's thinking, behavior, sorrow, and joy can affect the infant. Imam Ali said (AS), "Choose the best nannies (nurse) for breastfeeding your child as you do well in selecting your marriage partner." (37)

**Mothers’ attitude toward pregnancy**

Women's attitude toward pregnancy is a matter of fundamental importance. The signs of improper attitude (rejecting pregnancy) include negative belief about motherhood roles, mood fluctuations, neglecting fetal movements, and lack of readiness for his/her birth (38). These feelings may affect the fetus and cause an abnormal mood in the child. The present narratives increase the positive thinking about pregnancy. The importance of motherhood role and mystical reward of tolerating pregnancy hardships can give spiritual color to pregnancy.

The Holy Quran speaks of the mother, as if it is talking about a high official status. When the Quran discuss respecting the parents, honoring the mothers’ dignity is mentioned separately. God in Surah Isra (Verse 23) said, "Your Lord decreed you to serve no one except him and be kind to your parents" (39). Accordingly, regarding the importance of mother’s hugging her infant, God says,"On that day, you will see every one that suckles shall forsake her suckling, and every carrier shall miscarry, and..." (40, 42).

Today, rooming-in is under debate, and the issue of separating the child from her mother after birth and keeping them together in the same room has received attention. Close mother-infant contact, body touching, smelling, looking, and thinking about the infant lead to the secretion of prolactin and oxytocin. According to Imam Ja’far al-Sadiq (AS), a pregnant mother is rewarded as a person fighting for God’s sake, and even the breastfeeding mothers dying during breastfeeding are regarded as a martyr (41).

**Basics of conception**

Attention to God is recommended at the time of conception. Moreover, the issues like the importance of time, place, parents’ mental status at mating, and their diet are highlighted. Accordingly, there are several narratives in this regard (43, 44).

**B-Fetal and neonatal factors**

*When is the baby’s attachment pattern formed?*

Many theorists have assumed that maternal-fetal and neonatal attachment originates from the early months of the life (45). Attachment is formed before birth and pregnancy (46). The infants are able to both recognize and respond to the ordinary emotions (e.g., love and hate) the same as subtle emotions. Therefore, this psychological attachment (between mother and child) is initiated during pregnancy.

The neonates are ready to perceive and respond to both sensory and environmental stimuli; moreover, this ability increases by time (47). Maternal-fetal interaction during pregnancy is essential for the development of permanent emotional bonds for the rest of life (48). According to the reviewed texts, the necessity of the infants’ inherent readiness is under discussion. Imam Sadiq said (AS), "When a baby
is born, he/she whatever, "consistency" and "competent" He it is, to bring" (49). However, there are factors influencing the inherent readiness and moods of the infants, which are discussed below.

**Infant appearance**

Infant appearance is one of the factors influencing maternal attachment. Such characteristics as gender, weight, shape, color, and presence or absence of abnormality are the factors affecting the relationship between the mother and newborn. When a mother interacts with her healthy child as he/she laughs, looks, smiles, and makes sounds, she would show increased responses (50). Accordingly, when the child is not ready (mentally and physically) to evoke his/her mother for mutual interaction, or cannot respond well to the environmental and maternal stimulation, the mother cannot form an emotional bond (25).

**Family and social support**

Family and social support is one of the important factors that intensively impress the mother-child attachment, maternal moods (e.g., maternal anxiety and depression), mother's mental states, as well as social and environmental factors (e.g., stress and lack of social support). Balbie has emphasized the paternal role as an emotional support for his wife. The violence between the couples can deteriorate the fathers' supportive and protective role and function (51). Some researchers also believe that maternal anxiety and depression during pregnancy can disturb the fetal attachment and reduce the mothers' abilities in role functioning (52).

**Nutrition during pregnancy**

Islam has emphasized the importance of maternal nutrition during pregnancy. Maternal nutrition affects the fetal growth since the fetus directly feeds from the mother's body. According to a hadith from Imam Sadeq (AS), the embryo's food is provided by his mother's food and drink (49).

**Neonate's mood in attachment process**

Some infants cry a lot; therefore, they need more attention in comparison to their peers. Researchers have implied the infant's mood as the most important factor in child's attachment (53). When the mother cannot calm the child down (because of child's physical impairment or distemper), her self-esteem and competence will be impressed negatively. In this regard, the female feels that she may not be the ideal mother for her child. The persistence of infant's distemper would negatively affect the child-mother attachment.

Our holy Prophet required the pregnant women to eat more dates to have an "easy baby" with more patience, who is less prone to irritability. This trait in the infant would facilitate a better attachment process (25). If the infant has a congenital defect or defects, attachment can be more difficult to establish because families must pass a hard stage, and they may feel guilty in this regard (54).

So, in this condition may be child is not ready (mentally and physically) for maternal interaction, or cannot respond well to the environmental and maternal stimulations and besides the mother cannot form an emotional bond; therefore, she does not meet her needs, and a negative internal model will emerge in the infant.

The infants do not consider themselves as worthy and valuable; moreover, they even do not rely on their nurses as safe references. Consequently, if they receive a negative, insufficient, and unstable care, they may feel insecure (55). Maternal-fetal attachment is the basis of future affections. Therefore, the lack of formation of maternal-fetal attachment during pregnancy can alarm us about an undesired person's attachment and communications in the future life (56). In the Quran verses and hadiths, accepting the mother's breast (or rejecting her breast) by Prophet Moses can indicate the infants' ability to recognize his/her mother's smell. In this regard, one of the primary abilities of the neonates is the identification of their mothers (57).

One of the limitations of this study was the lack of sufficient studies focusing on maternal-fetal attachment according to the Islamic recommendations, which removed the possibility of generalizing and comparing the results with those of the other papers. Furthermore, there was not enough studies on the recommendations of Islam in medical research. The future studies are suggested to integrate the recommendations...
of this research into educational programs and workshops and investigate their effects on teaching and learning of pregnant women during pregnancy, labor, and postpartum stages.

Conclusion
Emotional reactions suggest a complex process called mother-infant attachment that plays a fundamental role in the infants’ growth and development. According to the Islamic perspectives, we must consider the importance of personality traits (e.g., kindness and soft-heartedness), healthy family history, maternal heredity and environment, woman’s attitude about her role functioning as a mother and wife, maternal physical and mental relaxation, and finally conception conditions in the development of maternal-fetal attachment. Moreover, fetal and neonatal factors, including physical appearance, family support, maternal nutrition during pregnancy, and the infants’ mood, can intensively impress the newborns’ innate readiness for the establishment of such attachment. The mentioned features lead to a better role functioning in the attachment process. Therefore, it is suggested to include the Islamic educational programs in the prenatal care to improve maternal-fetal attachment.

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Conflicts of interest
The authors declare no conflicts of interest.

References


