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Experiences of Pregnant Mothers about Changes during Pregnancy: A literature Review

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ABSTRACT

The present paper aims to study different physical, mental, and emotional experiences that mothers are faced with during pregnancy, sometimes feel them and sometimes fail to understand them. The present research is a review article which discusses and challenges previous studies and experiences. In this review article, the relevant papers to this subjects published in the period 2000-2015 were searched on PubMed Scopus and Google Scholar. These experiences may include physiological experiences such as weight, skin symptoms, hormone secretion, etc. or psychological experiences such as depression, mental imagery, and marriage. To establish a positive image of the body during pregnancy, pregnant women are recommended to be provided with information and consultation about body changes during pregnancy and after delivery. Accordingly, in addition to helping women to better and easier accept changes in pregnancy, the formation of unrealistic expectations during pregnancy and after delivery and also creation of a negative image and its adverse effects on the health of mother and fetus will be prevented.

Keywords: Pregnancy; Pregnancy experiences; Changes during pregnancy

INTRODUCTION

Pregnancy is a normal physiological phenomenon and pregnant women are at risk for significant mental and physical changes[1]. Pregnancy and childbirth are two natural processes for women that are associated with fear[2], anxiety[3], and many physical and mental problems[4]. Mood changes during pregnancy, resulting from dual feelings of women toward pregnancy, are very common. Women in childbearing years are prone to anxiety and depression[5, 6]. Some factors such as family history of depression, anxiety, history of postpartum depression, experience of severe pain during pregnancy, and mild or severe premenstrual mood changes put women at risk for certain psychiatric problems[7]. However, what that plays a major role in providing the mental health of mothers during pregnancy is psychological adaptation of women with pregnancy that is as important as observance of physical hygiene in achieving a good and positive result of pregnancy[8]. Pregnancy is divided into three periods of three months, in each of which women experience particular problems [9].

The first three months:

In this period, mental changes include lack of confidence, a sense of duality and doubt, primary focus of the pregnant woman on herself, and fear, anxiety, and worry[10].

Lack of confidence:

Lack of confidence is one of the most important psychological responses of women during the first weeks of pregnancy. In this period, women are not confident about their pregnancy and spend a great deal of time on proving

it. Some women may be happy, while others may be afraid and look for symptoms to prove that they are not pregnant[11].

A sense of duality and doubt:

Almost all women have conflicting feelings and doubts about their pregnancy. Feeling of conflict about acceptance or rejection of pregnancy is varying. Even if the pregnancy is desirable and optional, the woman or her husband may have feelings of uncertainty about the appropriateness of its time and may state that they were not prepared enough for pregnancy at this time and they wish it would have happened later. There is also a common concern which results from the way pregnancy affects the relationship of women with their husbands and other children [12].

The primary focus of the pregnant woman on herself:

During the first three months, the initial focus is on the fetus, because it has not grown enough and still seems vague and unreal. The main focus of women in this period is on themselves. Physical changes and increase in hormone levels may cause emotional-mood swings and also quick shifts from satisfaction to irritability or from optimism to pessimism. However, temporary cessation of programs and habits of routine life could be one of the reasons for such fluctuations [13].

Fear, anxiety, and worry:

Fear, anxiety, and worry exist in first pregnancies due to physical changes and motherhood-related problems. Almost all pregnant women experience fear and anxiety during their pregnancy[14]. The most common fears include fear of the health, normal fetal status, and congenital disabilities and malformations of the child, fear of labor pain and inability to cope with problems after childbirth, fear of the effects of maternal behavior on pregnancy, fear of the child's future, fear of uncertainty and lack of knowledge on how to be good parents, fear of baby's gender, and fear of economic issues[15]. Among the above-mentioned factors, gender of the fetus and unwanted pregnancy, because of their cultural dimensions, have a great impact on creation of anxiety, worry, and stress during pregnancy and considered of important factors affecting the mental health of pregnant women [16, 17].

The second third months:

With the proper progress of the pregnancy period during the second three months, fetal movements can be felt by the mother[18]. This is an exciting and enjoyable experience for most women because they really experience pregnancy by feeling the movements of the fetus, hearing its heart beat, and increasing fantasies about the baby[19]. These feelings mostly cause a sense of happiness and satisfaction in women and their further compliance with the stresses of pregnancy[20]. In this period, women usually accept their pregnancy and their conflicting and negative feelings about this issue are reduced. With the increase in fantasies about the baby and pregnancy, anxieties and concerns of the first three months will reduce. However, due to the progress of pregnancy and occurrence of hormonal changes during this period, mood swings are manifested as depression and happiness[21].

The third three months:

With the further development of the fetus in final months, activity and motion of pregnant women get slower[22]. On the other hand, thinking about the time of delivery causes anxiety and sleep problems in pregnant women in last months[23]. As a result, the concerns which had fallen in the second three months increase again in this period. Fear of childbirth and fear of death are common in this period. Empathy with the pregnant woman by her husband can greatly reduce his fears and stresses[24]. If a pregnant woman has another child, the family is responsible for providing him/her with information on pregnancy and encouraging his/her participation in preparation the baby's items. Accordingly, the family may face fewer problems after the childbirth. There is a sense of pride associated with anxiety about childbirth in this period [25].

Method

The present paper aims to study different physical, mental, and emotional experiences that mothers are faced with during pregnancy, sometimes feel them some sometimes fail to understand them. The present research is a review article which discusses and challenges previous studies and experiences. In this review article, the relevant articles to this subjects published in the period 2000-2015 were searched on PubMed Scopus and Google Scholar. These experiences may include physiological experiences such as weight, skin symptoms, hormone secretion, etc. or psychological experiences such as depression, mental imagery, and marriage.

Review**Experience of pregnant women about body image:**

Significant changes in body image in many women during pregnancy can leave considerable effects on the health of mother and fetus. Given that more familiarity with women's experiences in this field will lead to a better understanding of their health status, the present paper aims to describe the experience of pregnant women of their

body image[26]. One of the important aspects of mental health is to have a normal body image. Mental image is a way through which one observes himself/herself and understands how others see him/her. Mental image regularly changes in the states of health, illnesses or injuries[27]. These changes not only are manifested in situations such as skin diseases, obesity, burns, and alopecia but also expected in response to the changes related to puberty, aging, pregnancy, and even menstruation [28]. Fundamental changes occur in body shape and weight during pregnancy, as these changes may start before a woman ensures that she is pregnant or not. Enlarged abdomen, painful and heavy breasts, nausea, vomiting, skin changes such as acne, spider veins on the face, and varicose veins on the body are some of these changes[29]. Women with a positive mental image of their bodies may keep the same image during their pregnancy. For example, if a woman accepts pregnancy with joy, even physical changes may be desirable for her. However, some women feel negative about themselves with increased abdominal size, because the body shape of a pregnant woman is different from the body shape of an ideal women (a lithe woman) in society [27]. Some studies have indicated that extent of satisfaction with the body image in early pregnancy (weeks 14 to 19) shows a significant decrease compared to pre-pregnancy period[30]. Having a negative body image during pregnancy can be worrying, because it may lead to behaviors such as dieting and starvation and thereby cause inadequate weight gain, preterm delivery, low birth weight, developmental delay in children, and even death of mother and fetus. Wingood *et al.* (2002) found that problems related the negative body image during pregnancy are not restricted to this period and these women may be less likely to use contraceptive methods in the future and will be at risk of obesity, low self-confidence, depression, unwanted pregnancy, and sexually transmitted diseases[31]. In studies conducted on the relationship of mental body image with mother-fetal relation and breastfeeding, Foster *et al.* (2003) reported that women who were more satisfied with their body shape had more tendency toward breastfeeding and those who selected breastfeeding showed higher levels of solidarity with their baby. Considering these items, expansion of behaviors that are associated with positive mental image during pregnancy and after delivery is of importance for researchers and health practitioners [32].

Depression during pregnancy and after childbirth:

Depression is characterized by feelings of sadness, failure, frustration, excitement, stress, and indifference to anything and anyone. In fact, the patient expresses his discomfort by showing these symptoms[33]. Depression during pregnancy or after childbirth is a common problem among pregnant women which unfortunately is not diagnosed in most cases or diagnosed so late that no way remains for its treatment, causing postpartum “madness” to the mother[18]. Symptoms of depression during pregnancy and after childbirth are slightly different from the symptoms of common depression[8]. However, there are many shared symptoms between common depression and depression during pregnancy and after childbirth. These shared symptoms are one of the ways for quick and timely diagnosis of depression during pregnancy and after childbirth [34].

Skin problems during pregnancy:

Skin problems during pregnancy can be divided into three categories[35]:

- 1- Skin problems caused by physiological and hormonal changes occurring during pregnancy, such as skin cracks, skin patches (melasma), changes in the hair and nails, and vascular changes.
- 2- Skin problems that existed before pregnancy (e.g. eczema, psoriasis, fungal infections, and skin tumors) may undergo changes during this period.
- 3- There are also some diseases that occur exclusively in pregnant women and are specific to pregnancy such as pregnancy itching, pruritic urticarial papules and plaques of pregnancy (PUPPP), bile duct obstruction, and some other rare diseases. Among these diseases, PUPPP is the most prevalent one.

Most skin problems during pregnancy are relieved or totally eliminated after this period, so they only require treatment off temporary symptoms until childbirth. However, some of these conditions have their own specific treatments [36].

Weight gain during pregnancy:

Normal pregnancy is usually about 280 days which is calculated from the first day of the last menstrual[37]. The nine months' duration of pregnancy is divided into three parts of three, referred to as the first, second, and third three months[38]. This division is important in the sense that the mother or the fetus may be in exposure to risks and diseases in each of these three periods. Therefore, both the doctor and the pregnant women should be aware of the beginning of pregnancy in order to prevent risks as far as possible. Weight gain in a normal pregnancy is the result of a physiological process specially designed for growth of the fetus and mother. Moderate weight gain during pregnancy lowers infant mortality rate, increases average birth weight, and reduces the prevalence of low birth weight. Weight gain during pregnancy is different for every woman; young mother and those who experience their first pregnancy usually have more weight gain than older mothers [39].

Overweight of pregnant women according to new standards:

Body mass index (BMI) is defined as the body mass divided by the square of the body height. If a woman has a BMI of 19.8, 19.8-26 or 26-29 at the beginning of pregnancy, she is recommended to have weight gain by 12.5-18, 11.5-16, and 7.5-11 kg, respectively[39]. For obese pregnant women with a BMI above 26, a weight gain of 6 kg is suitable. This pregnancy weight gain equally accounts for mother and fetus (and pregnancy supplements). The weight gain during pregnancy in terms of volume organs and fluids accounts for 50% of total weight gain. Part of this weight gain is stored as energy in fat tissue which is used for providing part of the increased needs resulting from rapid cell division in the third three months. Because of widespread prenatal supplements in this period, getting more food from the mother is not possible and this excessive weight gain is spent on milk production and secretion after childbirth[40]. Part of it must be provided through mother feeding and 150-250 kcal from the reserves is consumed for milk production and secretion. With the secretion of milk which contains 8 kcal energy per 8 cc resulting from macronutrients such as proteins and fats, ingredients of breast milk are considered the most valuable food compounds. Researchers state that for every one kilogram which is added to mother's weight during pregnancy, 7 g is added to the fetus weight[39]. Accordingly, the mothers whose weight gain during pregnancy is more than 24 kg will bear babies who are heavier than other babies (whose other have a weight gain of 8-10 kg during pregnancy) by 150 g, on average. For example, the possibility of bearing a baby with a weight of more than 4 kg is two times more in mothers whose weight gain during pregnancy was more than 24 kg. The important point is that chubby babies will be probably obese individuals during their life, affecting their health and longevity. In addition, these babies will be more susceptible to diseases such as asthma, cancer, and Ethiopia [41].

According to researchers, a woman had normal weight before pregnancy should have a weight gain of 11-16 kg during their pregnancy. In addition, women who were underweight and overweight before pregnancy should have weight gain less and more than this amount (11-16 kg), so that the baby will be threaded with no danger[42].

Physical and emotional changes of mothers during pregnancy:**Non-physical changes:**

It should be noted that changes of pregnancy period are not restricted to physical and weight changes of mothers and involve different aspects of a women to become a mother.

Sense off motherhood: Through psychological changes, many women during their pregnancy try to prepare the environment and other factors for the birth and growth of their new child. They may spend their time on cleaning and change of home decoration until they feel that the house is ready for welcoming the new member. This feeling gets stronger in mothers as it gets closer to the time of delivery. Lack of focus is another problem that women may deal with during pregnancy. Because of nausea, dizziness, weakness, lethargy, and fatigue, especially in the third three months, mothers generally have less ability to concentrate in the morning, and the even may experience temporary amnesia which due to hormonal changes [43].

Mood swings, resulting from physical and hormonal changes, are also considered natural. Mothers during pregnancy, especially in the first months, may be happy one minute and then have the desire to cry another moment. They may even get angry at their husband for no apparent reason. These moods intensify in the first and the third three months of pregnancy but are milder in the second third months. Additionally, about 10% of women suffer from depression during pregnancy. If this depression disturbs their eating and sleeping habits and causes them to experience uncomfortable states more than two months, the cases must be discussed with a doctor [44].

Changes in the texture of the hair and nails also occur during pregnancy. These changes may cause slower or faster growth of hair and nails. In addition, because of reduced hair loss during pregnancy, hair gets bushy but hair loss gets intensified after one or two months from the beginning of breastfeeding. In some people, excess hair growth increases during pregnancy but again reduces after delivery. Nails also get stronger and firmer during pregnancy but become more brittle and weaker after childbirth. Therefore, it is better to get nails cut regularly and keep them short and not to apply chemicals on them[45]

Swelling of the feet: During pregnancy, women may not be able to wear some of the shoes they were previously used. This is not worrying, because the volume of fluids in the body increases. Part of this increase occurs beneath the skin and causes swelling, particularly in the last months of pregnancy. Pregnant women are recommended to use soft and loose shoes in this period [46].

Flexibility: Since the body of pregnant women secretes a hormone named relaxin that causes the preparation and softening of necessary joints, especially in the area of the hip joint, the body may lose its natural stability and strength in this period. Hence, pregnant women should be more careful when walking, because they may easily lose

their balance and fall due to sliding or slipping. In addition, pregnant women are recommended to strengthen their knee by contracting and expanding their joints when sitting [47].

Digestive problems are among the issues that many pregnant women may face during their pregnancy. During this period, women may suffer from bloating and constipation more than other times. Pregnancy compression: Visibility of blood vessels of the skin due to the pressure that comes to them is something natural. Especially, vessels of the legs expand due to the pressure imposed on and become visible [48].

CONCLUSION

According to the findings of these studies, pregnant women have concerns about experiencing overweight. In this regard, they need to receive counseling on weight gain, proper nutrition during pregnancy, and overweight in commensurate with BMI in the beginning of pregnancy. Therefore, by providing counseling services in health centers, effective steps can be taken towards the health of pregnant women and fetuses. In addition, encouraging mothers by health personnel in relation to feeding with breast milk can be helpful in postpartum weight loss and achieving the optimal physical form after childbirth [49]. Finally, the present study showed that there are several changes and issues influencing pregnant women which can be dealt with by prior preparedness and having knowledge about these changes and issues.

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