

**ORIGINAL PAPER****Contributing Factors Affecting Body Satisfaction among Pregnant Women with an Emphasis on Self-Esteem and Depression****Kambiz Bahaadinbeigy, MD, PhD**

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Body image is one of the important aspects of mental health, which could be result to health consequences. Multiple factors are contributed in body image disturbances. Pregnancy due to hormonal changes and body changes disturb body image, self-esteem and also increase depression susceptibility. Body dissatisfaction can lead to attempts to improve the image and many of these compensatory attempts such as weight loss that are followed by serious consequences for the health of mothers and children.

**Aim:** The aim of the current study is the evaluation of body satisfaction and its relationship with certain indicators of mental health such as depression, and self-esteem in pregnant women.

**Methodology:** In this cross-sectional study of 255 pregnant women referred to health centers were studied by using of standard questionnaires regarding body satisfaction, the Beck Depression Inventory) the self-esteem Rosenberg questionnaire. Results were analyzed using SPSS-16 software.

**Results:** The mean age of participants was  $29.13 \pm 6.39$ . About half of those reported dissatisfaction with their bodies. Approximately 30% of individuals with different degrees of depression were noted. The relationship between depression and low self-esteem with body image was significant and negative.

**Conclusion:** Planning to improve the mental health of girls and young women from adolescence is recommended to prevent health problems in the future.

**Key words:** body satisfaction, depression, self-esteem, pregnant women, Kerman

**Introduction**

Body image is a self-image that every person has about size and shape of his/her own body and feelings about it. Body image is a multidimensional phenomenon that includes

cognitive, perceptual and behavioral aspects. Body image is a psychological construct and a central concept for health psychologists (Grogan, 2006). Body image and person's physical appearance are considered as one of important aspect of identity

and self-esteem. In fact, the positive image about body, cause to feel valued.

Several factors such as socio-cultural values, social comparison, emphasizing the negative experiences in interaction with peers may exacerbate these concerns and contribute to its continuity (Jomeen & Martin, 2005)

When cultural factors in society, especially for women, emphasis on Ideal body image, gradually concerns about body image issues and body dissatisfaction are provided. The continuation of this dissatisfaction leads to depression, social anxiety and low self-esteem (Jomeen & Martin 2005; Kamysheva & Skouteris, 2008). Dissatisfaction with body image and negative self-concept may be result to efforts for changes in body. Individuals for obtaining the ideal body use of different methods that could be harmful such as severe dieting, heavy exercise, invasive surgeries and use of drug or substance for slimming or increase of muscle (Stice et al., 2000).

Some people that are motivated to make changes in body for achieving ideal body , due to a lack of success in the acquisition could be anxious or depressed. This leads to social isolation, guilt and dissatisfaction with themselves and they endanger public health. Body dissatisfaction and body appearance disturbances could be result to eating disorders (Neumark-Sztainer et al., 2003). There are many psychological variables in relation with body image, such as Self-concept, self-esteem, general health, particularly depression and lifestyle. Although other psychosocial factors that can influence the individual sense of self, they should not have missed including Pressure from others for obtaining an ideal body , or impact of a particular advertising media as factors for personal and social success (Jackson & Chen , 2008; Gunewardene, Huon & Zheng, 2001; Jones, 2001; Mellor, 2003)

Pregnancy is a special period that in short time (about 40 weeks) body will undergo many changes, so it could be a good time to examine body image and the contributing factors. In addition, possibility of depression during pregnancy can affect a person's confidence and

therefore there is a contributing factor for body dissatisfaction (Duncombe, 2008; Fuller-Tyszkiewicz et al., 2012). The most important risk of body image dissatisfaction during pregnancy include factors that impact directly or indirectly the health of the mother and child such as depression, use of unhealthy methods for weight loss that leads to insufficient weight, preterm delivery, low birth weight, delayed development in children, and in some cases, death of the mother and fetus (Duncombe, 2008; Lark, 2009; Fuller-Tyszkiewicz et al., 2012). Studies show negative body image problems during this period, not only limited to pregnancy ,but also ,these women ,in future have used lower contraceptive methods, and higher exposure o risk factors such as obesity, low self esteem, depression, unintended pregnancy and sexually transmitted diseases (Skouteris et al., 2005).

Results of a qualitative survey revealed that stability of unfavorable change in appearance after delivery was great concerns in pregnant women (Duncombe et al., 2008; Dietro, 2003). There is a few research in Iran, about body image and related factors (Garousi, Zahedi & Nezap, 2014), especially in pregnancy. Therefore, this study was designed to identify factors affecting body image for women with an emphasis on depression, self-esteem and perceived social pressure.

### Method

This study was carried out in central Kerman, the largest provinces in Iran. In this cross-sectional study based on previous studies (Duncombe, 2008; Lark, 2009; Fuller-Tyszkiewicz et al., 2012), 256 pregnant women via convenience sampling were selected. After explaining about the study and informed consent the pregnant women were interviewed. Participants were assured regarding confidentiality of their information.

### Research tools

Survey questionnaire consisted of several parts:

#### 1. Demographic

Height - weight - age, parity, education level of the person along with her husband, her job, and according to one's own economic situation. Use of

media such as Western TV, internet, fashion magazines, according to a statement with the options "Yes" and "No" are measured.

2. Methods used to improve the appearance of individuals, including diet - heavy exercise - the use of drugs for thinness or muscle enhancing use of butt ax, cosmetic surgery.

### 3. Body Esteem Scale –AA

A 23- item questionnaire with 5-point Likert score from "never" ( 0 ) to "always" ( 5 ) that show the opinions and views respondents about the overall their appearance. Validity and reliability ( $\alpha = .88$ ) of its Persian Version has been accepted (Garrusi, Garousi & Baneshi, 2013)

### 4. Perceived Social Pressure Scale (PSPS)

This 10-item questionnaire with 5-point Likert score from "never" with a score of 0 to "always" with a score of 5, was considered acquaintances about their appearance and body. Validity and reliability of it has confirmed in Iranian population (Garrusi, Garousi & Baneshi, 2013).

### 5. Short form of the Beck Depression Inventory

In 13-item short-form, there are questions that, one individual must choose the statement that better presents her feelings. Each question is based on a four-degree Likert scale of zero to three is answered. Maximum score is 39 and cut offs are include: 0-4 no depression, 5-7 mild, 8-15 moderate and above 16 severe. Validity and reliability of it has confirmed in Iran population (Ghassemzadeh et al., 2005).

### Rosenberg Self-Esteem Scale

A self-reported questionnaire including 10 multiple-choice questions (from completely agree "four score" to completely disagree "score 1". Acceptable reliability and validity of the Persian version has been reported (Zanjani & Goodarzi, 2007).

Data Analysis was done Using SPSS-16 software and central and dispersion indices. For study of impact of various factors on the relationship between body satisfaction, Pearson and Spearman correlation coefficient and linear regression were used.

### Results

The mean age of participants was  $29.13 \pm 6.39$ . About 82.5% (211 people) were living in the city, less than 1% were illiterate and a 44.4 percent (113 cases) had an academic degree and a 65.6 percent ( $n = 168$ ) were housewives. About 64.9 % had their first pregnancy and nearly, 86% of them had a planned pregnancy. About 43.4% of women use Western TV, 30.5 % of Internet and 13.3% of them used the fashion magazines. Other demographic characteristics of individuals can be seen in Table 1.

Nearly, 23% of women have used the diet to improve their appearance. Exceed 1/3 of the women had varying degrees of depression. Details are shown in Table 2. About half of the women reported dissatisfaction with their bodies and 75% had varying degrees of low self-esteem. There was a positive relation between job and body satisfaction. While the relationship between body satisfaction and other factors such as depression, self-esteem, perceived social pressure by the person planned pregnancy and using of Western TV was negative. In other words, depression, low self-esteem, increases pressure from the social environment and relatives, unwanted pregnancies and the use of Western TV could be resulted to a lower body satisfaction

In regression model for effects of variables on body satisfaction low body esteem, perceived social pressure and depression in pregnant women have a negative contributing effect on body satisfaction (Table 3).

Table 1-Characteristics of participants

		N	%
<b>Birth place</b>	<b>City</b>	<b>211</b>	<b>82.5</b>
	<b>Village</b>	<b>45</b>	<b>17.5</b>
<b>Individual's education</b>	<b>Illiterate or primary</b>	<b>2</b>	<b>0.7</b>
	<b>High school</b>	<b>47</b>	<b>18</b>
	<b>Diploma</b>	<b>94</b>	<b>36.8</b>
	<b>University</b>	<b>113</b>	<b>44.4</b>
<b>Spouse Education</b>	<b>Illiterate or primary</b>	<b>3</b>	<b>1</b>
	<b>High school</b>	<b>0</b>	<b>0</b>
	<b>Diploma</b>	<b>101</b>	<b>39.5</b>
	<b>University</b>	<b>152</b>	<b>59.4</b>
<b>Individual's job</b>	<b>Employee</b>	<b>36</b>	<b>14.7</b>
	<b>Non-state job</b>	<b>42</b>	<b>16.6</b>
	<b>housekeeper</b>	<b>168</b>	<b>65.6</b>
	<b>University student</b>	<b>10</b>	<b>3</b>
<b>Spouse job</b>	<b>Unemployed</b>	<b>4</b>	<b>1.6</b>
	<b>Employee</b>	<b>74</b>	<b>29</b>
	<b>Non-state job</b>	<b>172</b>	<b>67.3</b>
	<b>University student</b>	<b>6</b>	<b>2</b>
<b>Economic status</b>	<b>Low</b>	<b>21</b>	<b>8.2</b>
	<b>Medium</b>	<b>160</b>	<b>62.5</b>
	<b>Good or excellent</b>	<b>75</b>	<b>29.2</b>

**Table 2. Categorization of depression**

Depression category	N	%
No depression	158	61.7
Mild depression	39	15.2
Moderate depression	47	18.4
Severe depression	11	4.3

**Table 3. Regression analysis of factors that influence body dissatisfaction**

	$\beta$	Standard Error	P
Body esteem scale	-.414	.142	.000
Perceived social pressure	-.263	.109	.000
Depression	-.179	.127	.001

### Conclusion

The present study investigated the relationship between depression and self-esteem and body image of women in Kerman. Body satisfaction is the one of important aspect of mental health and pregnancy is a general challenge in psychological adaptations. Rapid changes may be forced to re-evaluation of body image during pregnancy and contribute with this adaptation.

Researches showed that body image satisfaction during early pregnancy (weeks 14 to 19) decreased

significantly compared to pre-pregnancy (Loth et al., 2011; Althuisen et al., 2009).

About half of the women surveyed in this study were not satisfied with their body image that can cause problems for them. On the one hand, this may lead to depression and low self-esteem, or compensatory activities for achieving ideal body result to serious damage in mother and child .Depression is a mental disorder with varying degrees of anhedonia , despair, loneliness, failure that could be affect individual's ability , behavior,

thought and emotion. Pregnancy as one of the important situation in life is associated with hormonal changes can increase incidence, prevalence and recurrence of depression (Loth et al., 2011; Althuisen et al., 2009; Goodwin, Astbury & McMeeken, 2000; Wolff et al., 2008). Studies show that the prevalence of depressive symptoms and major depressive disorder are about 8% to 51% of pregnancies, respectively (Johanson et al., 2000; Dayan et al., 2002).

In a recent study, about one-third of women had varying degrees of depression. Review of community prevalence of depression in Iranian pregnant women has been reported between 46-25% (Modabernia et al., 2009). In this study, pregnant women with depression had greater body dissatisfaction. These results were confirmed findings of earlier studies regarding significant relationship between body image and depressive symptoms in pregnant women (Skouteris et al., 2005). Depression is the most important predictor of body dissatisfaction during pregnancy (Pazandeh et al., 1999; Skouteris et al., 2005). When women look at the negative image of their bodies, are more prone to depression and there was greater body dissatisfaction in depressed pregnant women vice versa (Pazandeh et al., 1999; Johanson et al., 2000; Goodwin, Astbury & McMeeken, 2000; Skouteris et al., 2005).

Self-esteem is overall emotional evaluation, attitude, judgment and beliefs toward of his or her own worth. Self-esteem predicted about values refers to in different fields of life. Self-esteem regarding body includes body shape and abilities. Therefore, it is not surprising that persons with low self esteem have been lower body satisfaction. When women's self-esteem is high, they have a positive view of their physical appearance (Paarlberg et al., 1995; Goodwin, Astbury & McMeeken, 2000). The results of this study indicate that approximately 75% of pregnant women have low self-esteem. Although there was negative relationship between body satisfaction and self-esteem, in the regression model, the effect of self-esteem on body satisfaction was not confirmed. This could be due to the greater influence of other factors that affect body

satisfaction, therefore, the overlap has occurred (Goodwin, Astbury & McMeeken, 2000).

There was a significant relationship between pressure from relatives for weight loss and body satisfaction in pregnant women. These results were coordinated with the findings of the few Iranian studies that explore the effects of family, friends and peer group on body dissatisfaction (Garrusi, Garrusi & Baneshi, 2013). In our society, peer groups and friends have a significant impact on body satisfaction levels and body change activities, therefore when family members tease pregnant women for weight and physique or when pregnant women from friends, family, and the media, are under pressure to lose weight and achieve ideal body would be result to loss of body satisfaction and body esteem (Paarlberg et al., 1995; Vincent & McCabe, 2000; Xie et al., 2006). The results of his study showed that the body image of pregnant women in regard to other demographic factors such as height, age, education, spouse's education, parity, economic status, they had no significant difference. Individual's job, wanted pregnancy and use of Western TV had significant relation with body satisfaction. It seemed that body image was influenced greater by psycho-social variables rather than by individual factors.

The lack of demographic influences on body satisfaction could be attributed to the stronger influence of other factors such as the high prevalence of depression that was found in this study (Pazandeh et al., 1999; Xie et al., 2006).

Among the factors that influenced body satisfaction, media is considered impact as one of the most important factor.

### Conclusion

In this study, was seen that unplanned pregnancy, could be result to depression and reduced self-esteem that will also increase the feeling of lack of control over their bodies. (Duncombe, 2008; Fuller-Tyszkiewicz et al. 2012). Comparing of results of limited studies on body satisfaction and body image in pregnant women in Iran with the results of other studies may be difficult. Therefore the fundamental studies regarding body

satisfaction and contributing factors in Iran is advised. In addition identify and treat of depression in pregnancy for the potential damages in mother and child may be necessary.

Emphasis on mental health among adolescents, especially girls can increase their confidence, that direct and indirect effects on health and society can be seen in all sections.

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