

QATAR UNIVERSITY

COLLEGE OF HEALTH SCIENCE

PREVALENCE AND DETERMINANTS OF BODY DISSATISFACTION AMONG

ARAB WOMEN AT POST-PARTUM IN QATAR

BY

ROUDA JASSIM ZAYED

A Thesis Submitted to the Faculty of

the College of Health Science

in Partial Fulfillment

of the Requirements

for the Degree of

Masters of Science

in Public Health

June 2017

© 2017 Rouda Jassim Zayed. All Rights Reserved.

COMMITTEE PAGE

The members of the Committee approve the Thesis of Rouda Jassim Zayed
defended on 08/06/2017.

Mohammed Fasihul Alam
Thesis/Dissertation Supervisor

Kendra Guilford
Committee Member

Fahad Hanna
Committee Member

Lukman Thalib
Committee Member

Approved:

Asma Al-Thani, Dean, College of Health Science

ABSTRACT

ZAYED, ROUDA, JASSIM, Masters of Science : June : 2017, Public Health

Title: Prevalence and Determinants of Body Dissatisfaction Among Arab Women at Post-partum in Qatar

Supervisor of Thesis: Mohammed Fasihul Alam.

Background: The image of the body is defined as the image of a person, his thoughts and feelings towards his body. Body Dissatisfaction is a problem of increasing and influential interest in women's lives after childbirth.

Objectives: The aim of this study was to assess the prevalence of body dissatisfaction among Arab women at post-partum in Qatar, identifying the underlying factors and exploring the relationship between them.

Methodology: This is a cross-sectional survey conducted from November 2016 to April 2017. The study included 400 participants in different regions in Qatar; these regions were northern, central and western. Data were collected from 12 health centers by using a self-administered questionnaire to identify potential contributors to body dissatisfaction among post-partum participants, and weight and height were taken by a certified nurse and recorded directly in the questionnaire.

Statistical Analysis Methods: Correlation coefficients were estimated to investigate possible associations between continuous variables. ANOVA used to assess differences between mean outcomes of two or more independent groups. Also, comparisons of frequencies among BMI groups were performed by Chi-square test. Finally, a multivariate binary logistic regression model was estimated to investigate the

important predictors of the body dissatisfaction and their significance was re-examined with univariate analyses.

Results: A total of 62 % of the women surveyed were dissatisfied with body image. Of these, the majority are overweight and obese. There was a significant correlational relationship between body dissatisfaction and Body Mass Index (BMI), general appearance, perception of body shape and unhealthy dieting method. Findings showed that despite having a normal body weight and appropriate body shape, post-partum women desire to have a much lighter and slimmer body, potentially in response to the strongly portrayed socio-cultural thin ideal body. Finally, the use of unhealthy dieting techniques to control weight was higher among overweight and obese women who are dissatisfied with their body.

Conclusion: Body dissatisfaction was widespread among Arab women at six months post-partum in Qatar. This study was the first of its kind as there had been no previous studies carried out to determine presence of body dissatisfaction among Arab women living in Qatar.

ACKNOWLEDGMENTS

I would like to Thank Allah who blessed me with the skill set, resources and opportunity to undertake this research. The present research work was carried out at College of Health Sciences, Qatar University and I am extremely grateful that I received an opportunity to work on this informative and useful research project. I would like to extend my sincere gratitude to my thesis supervisor Mr. Mohammed Fasihul Alam for his kind guidance and assistance throughout the dissertation. The dissertation has also been completed in the light of both Mr. Abdelhamid and Ms. Kendra for their vision and ideas.

The major portion of this study deals with surveying the Arab postpartum women regarding their perceptions about the body shape. The survey process would not have been completed without the extreme level of cooperation offered by the hospital authorities. I would like to thank the management of Al-Khor health center, Umsalal health center, Al-Garafa health, Al-Shamal health center, Al-Wakra health center, West Bay health center, Airport health center, Rawdat Al-Khail health center, Al-Rayyan health center, Mesameer health center, Abu Baker Al-Sidiq health center and Al-Sheehaniya health center. I am also thankful to the nurses for their cooperation during the process of conducting interviews in collecting data from the participants. Similarly, the nurses at these healthcare centers are appreciated for their role in data collection regarding the vital parameters monitoring. It can be honestly stated that the level of insight reached in this dissertation about the Arab women would never have been possible without the permission and cooperation provided by the healthcare centers.

Last but not the least; I am highly thankful to my family for the constant love and support. I would always be grateful to my parents for giving me the best life one can have. I am also deeply indebted by the support, motivation, and tolerance offered by my siblings throughout the dissertation.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	v
LIST OF TABLES.....	x
LIST OF FIGURES	xii
1.INTRODUCTION	1
2.DEFINITION OF TERMS	4
3.LITERATURE REVIEW	5
3.1 <i>Prevalence Of Body Dissatisfaction</i>	5
3.2 <i>Population At Risk For Body Dissatisfaction</i>	6
3.3 <i>Factors Associated With Body Image Dissatisfaction</i>	6
3.3.1 <i>Physical Risk Factor</i>	6
3.3.1.1 <i>Current Weight Status</i>	6
3.3.1.2 <i>Current Weight Trajectory</i>	8
3.3.2 <i>Individual And Cultural Risk Factors</i>	8
3.3.2.1 <i>Gender</i>	8
3.3.2.2 <i>Age</i>	9
3.3.2.3 <i>Race And Culture</i>	9
3.3.2.4 <i>Strong Investment In Appearance</i>	10
3.3.2.5 <i>Age Of Obesity Onset And Appearance Teasing</i>	11
3.3.3 <i>Social And Psychological Risk Factors</i>	12
3.4 <i>Body Dissatisfaction Health Impacts</i>	13
3.5 <i>Solving Body-Image Dissatisfaction Cases</i>	14
4.OBJECTIVES AND RESEARCH QUESTIONS	16
5.METHODS	17
5.1 <i>Study Design</i>	17
5.2 <i>Study Population</i>	18
5.3 <i>Sampling And Sample Size Determination</i>	19
5.4 <i>Data Collection</i>	20
5.4.1 <i>Methods</i>	20
5.4.2 <i>Measurement And Measurement Tools</i>	20
5.5 <i>Statistical Analysis Methods</i>	22
5.6 <i>Ethical Approval</i>	23
5.6.1 <i>Ethical Issues</i>	23

5.6.2	Confidentiality And Data Protection.....	24
6.	TIMELINE AND RESOURCES.....	25
	<i>Table 1: Timeline</i>	25
6.1	Timeline.....	25
6.2	Budget.....	25
7.	RESULT.....	27
	Tables and Figures.....	27
	<i>Figure 1: Demographic Characteristics of Study Population</i>	27
	<i>Table 2: The Prevalence of Underweight, Normal Weight, Overweight and Obesity According To Age Group</i>	28
	<i>Table 3: Mean Body Shape Dissatisfaction Score According To BMI Group</i>	29
	<i>Table 4: Mean Of Body Weight Dissatisfaction Score According To BMI Group</i>	30
	<i>Table 5: Mean Of General Appearance Score According To The BMI Group</i>	31
	<i>Table 6: General Attraction According To BMI Group</i>	32
	<i>Table 7: Acceptance of body weight according to BMI group</i>	33
	<i>Table 8: Perception of Weight According To BMI Group</i>	34
	<i>Table 9: Effect of Media According To BMI Group-1</i>	35
	<i>Table 10: Effect of Media According To BMI Group-2</i>	36
	<i>Table 11: Prevalence of Losing Weight According To BMI Group</i>	37
	<i>Table 12: Prevalence of Weight Management Methods Used According To BMI Group</i>	38
	<i>Table 13: Sources of Nutrition Information According To BMI Group</i>	39
	<i>Table 14: Percentage of Women Reporting Fasting or Following Drastic Diet for Weight Loss According To BMI Group</i>	40
	<i>Table 15: Physical Activity According To BMI Group</i>	41
	<i>Table 16: Correlation between Age, Body Weight Dissatisfaction Score, General Appearance Score, Body Shape Dissatisfaction Score and BMI</i>	42
	<i>Table 17: Logistic Regression</i>	43
8.	DISCUSSION.....	44
9.	CONCLUSION.....	54
10.	REFERENCES.....	57
11.	APPENDICES.....	68
	<i>Appendix A: English Body Dissatisfaction Questionnaire</i>	69

Appendix B: Arabic Body Dissatisfaction Questionnaire.....79

LIST OF TABLES

Table 1: Timeline.....	25
Table 2: The Prevalence of Underweight, Normal Weight, Overweight and Obesity According To Age Group.....	28
Table 3: Mean Body Shape Dissatisfaction Score According To BMI Group.....	29
Table 4: Mean Of Body Weight Dissatisfaction Score According To BMI Group.....	30
Table 5: Mean Of General Appearance Score According To The BMI Group.....	31
Table 6: General Attraction According To BMI Group.....	32
Table 7: Acceptance of body weight according to BMI group.....	33
Table 8: Perception of Weight According To BMI Group.....	34
Table 9: Effect of Media According To BMI Group-1.....	35
Table 10: Effect of Media According To BMI Group-2.....	36
Table 11: Prevalence of Losing Weight According To BMI Group.....	37
Table 12: Prevalence of Weight Management Methods Used According To BMI Group.....	38
Table 13: Sources of Nutrition Information According To BMI Grou.....	39
Table 14: Percentage of Women Reporting Fasting or Following Drastic Diet for Weight Loss According To BMI Group.....	40
Table 15: Physical Activity According To BMI Group.....	41
Table 16: Correlation between Age, Body Weight Dissatisfaction Score, General Appearance Score, Body Shape Dissatisfaction Score and BMI.....	42

Table 17: Logistic Regression	43
-------------------------------------	----

LIST OF FIGURES

Figure 1: Demographic Characteristics of Study Population.....27

1. INTRODUCTION

Every individual has a certain perception about his or her own body and with the perception comes to the satisfaction of self (Moore D S, 1978). People tend to feel dissatisfied when they compare themselves with the body appearance of others and find out that they are not matching with what is portrayed as an ideal body. Women are the more victim of this type of dissatisfaction over their male counterpart (Pingitore R et al, 1997) especially those who have undergone the post-partum stage of pregnancy. Pregnancy is a very important phase of any woman's life as she experiences physical, emotional, social and psychological changes during and after pregnancy. When considering the physical changes, most of the pregnant women worldwide experience a change in their body weight and shape. Women become more conscious about their body image and tend to adopt various means to get back to their original body prior to pregnancy. In the course of doing so, they pick up means which could have an impact on the health of self and the child. The period immediately after the child birth up to six weeks is considered as the post-partum phase. According to World Health organization (Information, Pike, MD, & Usa, 2013), the post-partum period is considered as the most critical period and at the same time; it is the most neglected period of child and mother's lives. The Post-Partum period is associated with numerous physical and psychological changes and around 13% of women in this phase develop postpartum depression (Zauderer C, 2009) and almost 80% of these cases go untreated or unnoticed (Flynn H A, 2005).

The impact of having body dissatisfaction among post-partum women could affect the mother and child relationship as depression has a strong impact on

interpersonal relationship and behavior as suggested in a study (Teasdale et al. 1980; Lewinsohn, Weinstein, & Alper, 1970). Post-Partum depression among women affects the cognitive and emotional development of infants from 3- 7 months old affecting their early childhood development (Lynne Murray & Peter J cooper, 1997). Post-Partum body dissatisfaction also has a serious impact on the overall well-being of new mothers as they can suffer from eating disorders; create an effect on their mental health, relationship with immediate family members and so on. Research in field indicates that feelings about a person's own body can affect several life making decisions, some even relating to survival (Kraus P L, 1999). Various factors have been found that affect the dissatisfaction of body image, but these factors differ among different regions and cultures. The prevalence and determinants of body dissatisfaction among Arab women particularly residing in Qatar are unknown. This study is the first of a kind in determining the prevalence and determinants of body dissatisfaction among both Qatari and non-Qatari Arab women.

The research attempts to analyze the predominance of body dissatisfaction amid the Qatar and non-Qatari Arab women going through their post-partum period. It is also aimed at investigating the factors that determine the body dissatisfaction and the relationship between these factors and the body dissatisfaction.

A questionnaire based survey is conducted on 400 women in the post-partum stage. The prevalence of body dissatisfaction is obtained through the ANOVA test, the determinants affecting the body dissatisfaction are analyzed through chi-square test and the relationship between body dissatisfaction and its determinants are analyzed using correlation and binary logistic regression.

The significance of the study: This study is perceived as impacting all women at post-partum, the family with a pregnant or post-partum member, Primary Health Care and health care professionals, and the researchers. The findings of the study may help health care providers to put in place appropriate prevention and intervention strategies for women with body dissatisfaction because it could provide information how body dissatisfactions affect every woman at post-partum in Qatar and how many women at post-partum suffering from body dissatisfaction after 6 months of giving birth. As a result, this study would be a basis for all researchers to conduct further research regarding body dissatisfaction factors for women at post-partum and its effects not just on individuals involved but to the society as a whole.

2. DEFINITIONS OF TERMS

Body Image: The understanding of body image and its growing popularity during the last three decades is discussed in some of the research. Almost 90% of studies on body image have been published since the year 1980. Body image is described as the portrayal of external appearance including the personality attitudes reflected through behavior, expression of feelings, thoughts and beliefs which have affected our lives (Thomas F Cash, 2004; Blashill & Wilhelm, 2014; Hartley, 1993).

Post- Partum: Post- Partum is defined as the period immediately after the birth of the child up to 6 weeks; usually the post-partum period can be broadly classified in three phases (i) the initial period which is a very small phase which lasts between 6 to 12 hours after child birth. (ii) sub-acute period which lasts anywhere between 2 to 6 weeks after delivery and the final period (iii) delayed postpartum period which lasts up to 6 months after child birth. Women undergoing these phases are termed as post-partum women (Romano, Cacciatore, Giordano, & La Rosa, 2010).

Body Dissatisfaction: Body dissatisfaction is well defined as a feeling of negativity expressed by an individual about his/ her own body. People generally tend to judge their body weight and shape according to their perception which creates a discrepancy between the perceived body and the ideal body (Grogan, 1999; Thompson, 1996).

3. LITERATURE REVIEW

There have been a considerable number of studies carried on the subject of body dissatisfaction and factors associated with them. Certain studies have also been carried out in the field of body dissatisfaction experienced by post-partum women; however, the study of body dissatisfaction among Arab Qatari and non-Qatari women has not been covered so far in any of the studies. The research and studies carried out by various authors which relates to this research are covered in this section.

3.1 Prevalence of body dissatisfaction

Body image dissatisfaction exists in many countries including both developed and developing countries. Almost 66.1% of adults in U.S are dissatisfied with their body image, out of these 66.1% adults, 31.8% are women and 13.4% adults are men (Kruger et al, 2008). More than 66.6% women are experiencing body dissatisfaction in Brazil and believed that they weighed more than the ideal weight (Santos Silva, et al. 2011). Another study done in south western Saudi Arabia found that only 23% of the participants showed an agreement between their ideal, perceived, and actual BI, while 44.1% are not satisfied and desired a thinner body shape than their perceived one (Khalaf et al., 2015). Also, a cross sectional study conducted on females between 17 and 32 years old from universities in five Arab countries: Bahrain, Egypt, Jordan, Oman and Syria; showed that approximately 65%–87% of Arab females at university preferred a thinner body size (Musaiger, 2014).

3.2 Population at risk due to body dissatisfaction

Most women who are undergoing the final phase of post-partum are quite likely to develop body dissatisfaction (Rallis et al. 2007; Drake et al. 1988; D. Moore 1978). One of the studies suggests that Turkish women gained weight during post –partum as they were used to consuming rich food and sweetened drinks during post –partum since it is believed to support breast milk production (Geckil, Sahin & Ege, 2009). Another study showed that women who were already overweight prior to their pregnancy had a higher chance of gaining excessive weight during post–partum phase and thus resulting in body dissatisfaction (L.O. Walker, 2007). Furthermore, Gulf countries such as the United Arab Emirates and Saudi Arabia showed that body dissatisfaction was highly prevalence among Female with rates of 75% and 83%, respectively (Schulte & Thomas, 2013).

3.3 Factors associated with body image dissatisfaction

3.3.1 Physical risk factors

There exists a complex relationship between the body weight and the image of the body. In order to understand this relationship other factors also need to be considered such as understanding the ideal body, body weight related pressures, and other social factors such as body comparisons, body shaming, fat talk, mocking at individuals for their excess weight and so on (Voelker et al., 2015) .

3.3.1.1 Current weight status

A few studies have also been made to understand the satisfaction about body image of individuals, it was found that women who were either underweight or had normal weight were most satisfied with their body image (Nikniaz et al., 2016). Another

study proved that women having a normal weight and the obese women were most likely to overestimate their body size (T. F. Cash, 1993). Contradicting this, the results obtained from another study suggest that middle-aged and older obese Danish Caucasian men and women underestimated their obesity in comparison to the normal and overweight people (Bjerggard et al., 2015). Some studies prove that as the obesity level rises among people, their body dissatisfaction level also increases. Hills & Willams, 1998 studied a sample of obese women having different body mass index or BMI starting from 30 to 40 and higher. In this study, they found that body dissatisfaction level was higher for people having higher BMI, yet another study which found that not all obese people were having body dissatisfaction, in fact, they were quite happy with their body image (Schwartz & Brownell, 2004). One of the research claims that having excess weight can affect the mood of a person through neurotransmitters and stress prevents people from eating an adequate amount of food which build up the cortisol release (Epel et al, 2000).

Weight gain during pregnancy is a normal phenomenon and women tend to gain somewhere between 25 to 35 lb of weight. This increase in body weight changes the body shape (Institute of Medicine (US) and National Research Council (US) Committee to Reexamine IOM Pregnancy Weight Guidelines, 2009). Studies also show that 89% women having a normal weight BMI before their pregnancy gained excess weight and their BMI level increased to match with that of the overweight or obese level. When these women get pregnant for the second time, their weight increases further, thus creating a weight gain cycle (Gilmore et al, 2015). The findings of another study which analyses the predictors of mother's post-partum body dissatisfaction over 9 months, suggests that mother's body dissatisfaction worsened with 1 to 9 months of post-partum period. The

body dissatisfaction was associated with factors such as eating disorder, increase in weight, decrease in mental health, fewer immediate family relationship and other social factors (Gjerdingen et al., 2009). Weight retention after pregnancy affects the satisfaction level of women and makes them dislike their bodies. Weight retention during post-partum phase is largely reflected in obese women and they had the risk of retaining the gained weight almost up to 1 year (Vesco et al., 2009).

3.3.1.2 Current weight trajectory

Many women follow a weight management program to bring down their weight they had gained at the time of pregnancy. Despite not having lost all the gained weight, women feel happier if they lose some weight. A woman losing weight during post-partum phase will tend to be happier about her body image compared to a woman who keeps gaining weight during this period (Foster , Wadden & Vogt, 1997).

Another study indicates that there were variations in the weight loss patterns of individuals who took up the weight loss program. Those with faster rates of weight loss were having health improvements (Kuk & Wharton , 2016)

3.3.2 Individual and cultural risk factors

3.3.2.1 Gender

One of the results stated that body image was applicable to only girls and women and only these people had concerns about their weight and shape (Cash, 2004), this matches with the suggestions of the study which states that some large men see themselves as strong rather than fat (Wardle & Johnson 2002). The research data reveals that men having a BMI of 25 to 28 were less dissatisfied with their body than women. Contradicting to this, another research suggests that body dissatisfaction was observed in

males too (Tiggemann, 2004). Most studies are based on the obesity of women and their body image since a large number of women opt to seek treatment to improve their body image (Schwartz & Brownell, 2004). Studies also point out that body dissatisfaction among women depends on their perception as some women pay attention to the body of other women having a better body shape and size (Glaurt, et al., 2010).

3.3.2.2 Age

Aging is directly associated with body image as it is observed that as the age of individual increases, the body image decreases. It is also found that for every 10 years of aging, people gain about 10 lb of weight and thus aging could lead to body dissatisfaction (Schwartz & Brownell, 2004). Even normal aging of women can be a factor infusing body dissatisfaction. Although women tend to camouflage their aging symptoms by restoring to diet, surgery, cosmetics and changes in lifestyles (Marshall et al, 2012) as women consider to gain status through a good appearance in most societies (Schwartz & Brownell, 2004). One of the studies suggests that age is an important determinant of body dissatisfaction and was directly related to body image deterioration. However, it completely depends on the individuals as to how they respond to this factor as women who are mature enough i.e., older in age had lower levels of body dissatisfaction due to aging (Stevens & Tiggemann, 1998). Further findings of the study show that younger women had higher rates of body dissatisfaction (Bedford & Johnson, 2006).

3.3.2.3 Race and Culture

Generalization of body dissatisfaction among individuals of all countries would not be appropriate as there are several cultural and socio-economic differences. Body dissatisfaction was considered to be non-prevalent in Arab or Islamic countries as most

women are required to cover their bodies. One of the studies carried out in Iran (Nikniaz et al., 2016) reflected that women did not have much body dissatisfaction. Another study also pointed out the same fact that women who were covering their bodies most of the time were not concerned about their body image and hence were more satisfied with their bodies (Abdollahi & Mann, 2001). Women belonging to the black culture also did not express much of body dissatisfaction as it was natural for them to have a larger built particularly their hips and thighs and they would prefer to have such larger sizes (Kumanyika, 1987). When a comparison is made between an overweight African-American adolescent girls and overweight girls from other race or cultural group, it was noticed that the African American girls were having a positive attitude towards their body image and were less likely to be dissatisfied with their body (Granberg et al., 2009). Despite having the racial and ethnical differences, individuals do try and compare their body images with other people and become liable for body dissatisfaction when they cannot attain a particular body image that they idealize. This causes mental disturbances among dissatisfied people. It is noted that most women do experience body shape disappointment in their post-partum phase, the study of black women revealed that they did not consider the change in their body size or an increase in their body weight as a disappointment factor, attitude was given preference over the body shape (Morin et al., ; L. walker et al, 2004). The factors such as the importance of body shape, body size, and overall attractiveness have not been considered for the post-partum black women to determine their body dissatisfaction. (Patt et al.,2002).

3.3.2.4 Strong investment in appearance

The amount of time and money invested in appearance by individuals is an

indicator of people being conscious of their body image and people who are insecure or feel low about their body image are the ones who invest the most in improving their appearance (Schwartz & Brownell, 2004). A study conducted on the participants of a very low- calorie diet showed that those receiving the treatment were the ones who had invested strongly in their appearance and fitness. These were the same individuals who had disappointment with their body image (T. F Cash, 1993). Likewise, people who are incorporated within themselves can also be related to being dissatisfied with their body image. In one of the studies carried out on obese women not having an eating disorder but were trying for losing weight, it was found that being self-incorporated was related to having body dissatisfaction (Matz, et al., 2002)

3.3.2.5 Age of obesity onset and appearance teasing

Research finding had shown that there is an existence of teasing of individuals for their body weight and shape (Fairburn et al., 1998). People who are having a binge eating disorder were ones who face negative comments from family members about their body weight and body shape.

A study of women who were obese in their childhood showed that these women had the higher level of body dissatisfaction. The regularity of being teased about their weight and body size was linked to their body dissatisfaction (Grilo, et al, 1994).

On the contrary, another research involving women who were undergoing treatment indicated that experiencing teasing in their adulthood caused them to have a poor body image (Matz et al., 2002). The research also points out that women who overweight at the current age did face disgrace or slur sometime before in their earlier age and that resulted in having a negative image of their body. Women who were obese

did not experience body dissatisfaction due to the onset of obesity at their age. However, an onset of obesity at an earlier age does cause body dissatisfaction (Schwartz & Brownell, 2004).

Myers and Rosen (1994) have assessed the coping mechanism adopted by obese persons who had faced slur and were stigmatized in the earlier phase of life. The results showed that there was a significant relationship between stigmatization and the sternness of body dissatisfaction although they were receiving treatments for weight loss.

People who tried using various unsuitable means of the coping mechanism to deal with the stigmatization like becoming an introvert, avoiding communication or contact, adapting solitude and others also had greater negativity about body image. On the other hand, people who practiced optimistic coping methods, like facing the situation with confidence, being an extrovert and so on did have a high self-respect, yet they did experience body disappointment.

3.3.3 Social and psychological risk factors

Media plays a very critical role in influencing the perception of body image among individuals. The media is full of slim models and artists representing various characters in print, social and electronic form. The images people view gets to their mind and they desire to look similar to what they have been seeing. In particular, people who accessed social media frequently for viewing body images were more dissatisfied with their own body compared to those who did not sight these images (Fardoulay et al., 2017). Marshall et al., (2012) have rightly pointed out in their study that with an increase in availability of different means of mass media, people of all ages are blitzed with messages and images depicting slim body types as being beautiful and young. Many

misleading advertisements about quick fix solutions to lose weight are flooded with ultra-slim models. These are impacting the people's mind and drawing them towards having a slim and young body. Women who are in their late 40s and above are falling prey to such advertisements and are constantly experiencing pressure to maintain their body and beauty.

3.4 Body Dissatisfaction and Health impacts

Miller & Wolfe (2008) have shown in their study that all the factors connected to body dissatisfaction impact the quality of life particularly on the life of post-partum women. The changes in the perception of an individual's body image causes emotional and psychological squelches. Low self-esteem and depression are the results of having dissatisfaction about body image (Pimenta et al., 2009). Once individual comes to know that that they have gained weight or they are obese or overweight, the eating disorder will set in (Altabe & Thompson, 1992). Nutritional deficiencies among obese individual who are trying to lose weight are observed in many developed countries and is a serious health concern in many developing nations (Haghdoust et al, 2009).

Obesity poses a greater risk to the health of the individual as it causes serious health issues like hypertension, cardiovascular diseases, psychiatric issues (Gavin et al, 2005). Studies have assumed that the obesity may increase the depression level in individuals with body dissatisfaction as the underlying factor (Markowitz et al., Simon et al., 2008).

Diet limitations are observed in post-partum women as they fear of putting on excess weight during this stage (Stice & Whitenon, 2002). An over concern about body shape, weight and size make these women give up eating a majority of food which they

consider to be contributing to weight gain and in the due course, keep their body deprived of essential nutrients. Not just eating disorder, but other serious health implications are found to be associated among overweight women who are largely dissatisfied with their body (Haines & Neumark-Sztainer, 2006).

As reflected in the study (Abou-Saleh & Ghubash, 1997), Post-partum depression is an important health concern and is affecting the health of mother and child. This problem seems to be affecting about 13- 20% of women in the developed nations (Affonso et al, 2000; Cooper et al., Gavin et al., 2005).

These issues occur during the initial 30 days after the child birth and increasing the intensity by 6 months of post-delivery period. Over the last five years, an emphasis has been laid on the depression affecting the mothers and its impact on the health of the child. Depression among mothers hampers the early development of the child and the child's mental growth and development is affected substantially.

3. 5 Solving Body image dissatisfaction cases.

Like how every problem has a solution, so does the problem of body dissatisfaction have solution? Most of the people who are aware or those who feel that they are obese feel that the best way to improve their body image is by losing weight. A study conducted in this regard supports this information. When the body image dissatisfaction was assessed before the weight loss program and after the weight loss program, it was found that people who were earlier dissatisfied with their body, now showed improvements in their feeling about their body image after losing some body weight and at the same time this improvement in body image satisfaction declines once the individual gains back the weight lost by him or her during the program.

A differing study carried out (Bacon et al., 2002) about the impacts of a having a non- diet weight loss and a standard behavioral weight loss program, matching with another study which suggests body image can be improved without opting for weight loss among obese individuals by encouraging them to make healthy lifestyle changes and accept their bodies (Schwartz & Brownell, 2004).

More than regaining the body shape, the women after pregnancy should work towards regaining the self-confidence along with positive attitude towards life including infant bonding and intimate relationships. This can be achieved through self-care and caring for infant and family (Fahey& Shenassa, 2013). There is a requirement to have suitable public health programs to spread awareness about maintaining a healthy body (Nikniaz et al., 2016). Educating women about the different phases of pregnancy and post-partum period and corresponding physical and psychological changes that will follow and the methods to dealing with them will bring about the overall perception women have about their body and can eventually bring down the body dissatisfaction level and enrich the self-reverence among women and help them achieve body satisfaction (Gjerdingen et al., 2009).

4. OBJECTIVES AND RESEARCH QUESTIONS

The aim of this study was to investigate the prevalence and determinants of body dissatisfaction among Arab women at postpartum in Qatar. Specific objectives of the study were:

- i. To assess the prevalence of body dissatisfaction among Arab women at postpartum in Qatar.
- ii. To explore determinants of body dissatisfaction and to investigate the association between body dissatisfaction and various determinants of body dissatisfaction.

The study included following research questions:

- i. What is the prevalence of body dissatisfaction among Arab women at postpartum in Qatar?
- ii. What are the determinants of body dissatisfaction?
- iii. What is the relationship between body dissatisfaction and its various determinants?

5. METHODS

5.1 Study design

A cross-sectional study was conducted from November 2016 to April 2017 among 400 (sample size calculation is provided in section 5.3) Arab women attending primary health centers in Qatar at 6 months postnatal period. The Primary Health Care Corporation (PHCC) operates 33 primary health care centers based in three geographical regions; the Central, the Western, and the Northern. Twelve of these centers are located in the Western, eleven centers are located in Northern and the other ten centers are located in the Central part of the country. Participating women at postpartum were recruited from the above three regions in Qatar. One region included 134 participating women at postpartum and each of the other two regions included 133 women. To obtain the required sample size in each region, first, a stratified sampling method was used to select 33% of health centers proportionally from each region. Second, a non-probability convenience sampling technique was used to select 4 available health centers that are strategically and geographically representative in each region. These health centers are Al-Khor health center, Umsalal health center, Al-Garafa health center and Al-Shamal health center which were the representative sample for the Northern region. Al-Wakra health center, West Bay health center, Airport health center and Rawdat Al-Khail health center appeared to be the representative sample for the Central region. Al-Rayyan health center, Mesaimmer health center, Abu Baker Al-Sidiq health center and Al-Sheehaniya health center were the representative sample for the Western region.

Third, in each health center, around 33 to 34 women were selected, who attended “well baby and vaccination clinic “to vaccinate their infants at six months from the birth, to be enrolled in the study. Because of the appointment schedule in each health center is including all immunization schedules from 2 months to 6 years old; a consecutive sampling technique was used to select all the available women at postpartum who were meeting the criteria of inclusion and exclusion until the required sample size achieved. We recruited women at postpartum who agreed to give consent to take part in the study.

5.2 Study population:

In order to be included in the study, participants had to meet the following criteria:

- a. Arab Women at six months, but less than 7 months post-partum
- b. Aged 18 and above.
- c. Able to give consent.

Participants with the following criteria were excluded from the study:

- a. Women who are 7 months and above or 5 months and below at postpartum.
- b. Women who are less than 18 years old.
- c. Pregnant women.
- d. Women who refuse to give consent to take part in the study.

5.3 Sampling and sample size determination

There was a positive association between body weight dissatisfaction and depression independent of sex, age and BMI (Richard, Rohrmann, Lohse, & Eichholzer, 2016). Accordingly, based on the prevalence rate of 17.6% in the Postpartum depression study in Qatar (Bener, Burgut, Ghuloum, & Sheikh, 2012), we have worked out a sample size of 354 participating women for the study. We aimed to recruit 400 participants as precaution for missing information in the questionnaire. The following formula (Daniel, 1999) is applied for calculating the sample size in our study,

$$n = \frac{Z^2 P(1-P)}{D^2}$$

where n=sample size, Prevalence (P) =0.18, Precision (d) = 4 %(0.04), Z statistic (Z).

For the level of confidence of 95%, which is conventional, the Z- value is 1.96. Hence,

$$n = \frac{(1.96)^2 * 0.18 * 0.82}{(0.04)^2}$$

$$n = \frac{0.567}{0.0016}$$

$$n= 354.$$

5.4 Data collection

5.4.1 Methods

Data collection was taken from 27 February 2017 to 22 March 2017. Data was collected through a validated self-administered questionnaire with the help of qualified nurses. Qualified nurses were trained to interview the participants and to read out the questions for participants who may not be able to complete the questionnaires. All participants asked to self-fill the questionnaire at their usual “well baby and vaccination clinic” where they are registered for infant’s vaccination at 6 months from postnatal. The average completion time for answering the questionnaire was ranging between 10 and 15 minutes. At the end of the questionnaire, participants were asked to proceed to a private and confidential area where their weight and height were taken and recorded directly in the questionnaire. Research personnel were available to answer any questions and to check whether participants are eligible for this study. The completed questionnaires were deposited in a box in the front of the room to ensure confidentiality of responses.

5.4.2 Measurement and measurement tools

Nurses were trained to take anthropometric measurements. Subjects were weighed in light clothes and with no shoes using a scale at nearest 0.1 kg. Height was measured to nearest 0.1 cm using Seca portable stadiometer.

A structured questionnaire was used to collect the socio-demographic variables: age, Nationality (Qatari or non-Qatari), educational level (primary, secondary and university), monthly family income (less than 5000 QR, 5000 to 10000 QR, 10000 to 15000 QR and more than 15000 QR), employment status: not employed or employed

(currently working at a job, or on leave), life events: psychiatric history (history of depression by answering yes/no), maternal characteristics: mode of delivery (vaginal delivery or C-section, Lactation status: (fully, partially or non-breastfeeding) and body dissatisfaction measurement (Cash & Hicks, 1990), including body shape dissatisfaction score (Face, Hair, Lower torso, Mid torso, Upper torso, Muscle tone), body weight dissatisfaction score and general appearance score. Body dissatisfaction measurement was considered to be a valid and reliable instrument and it had been utilized in several studies. Participants with lower scores on the scale indicate a greater dissatisfaction with their body. The following scale was used to assess body Shape dissatisfaction, general appearance and weight dissatisfaction score.

1. Very dissatisfied
2. Mostly Dissatisfied
3. Neither satisfied nor dissatisfied
4. Mostly satisfied
5. Very satisfied

The questionnaire also included questions about the effect of media, food and diet, social and culture, and physical activity.

5.5 Statistical Analysis Methods

Data analysis included both descriptive and inferential statistics. Pearson Correlation was estimated to investigate possible associations between continuous variables (BMI, body shape dissatisfaction, weight dissatisfaction and general appearance). As appropriate, an ANOVA was conducted to assess differences in mean outcomes across two or more independent groups. Comparisons of frequencies among BMI groups and the significance of the association between categorical variables are performed by using a Chi-square test.

A multivariate binary logistic regression model was estimated to investigate the important predictors of the body dissatisfaction (satisfied or dissatisfied), and their significance was re-examined with univariate analyses. Adjusted odd ratios and 95% confidence interval was tabulated. The results are reported with a standard p-value (two tailed) to show the level of significance, along with relevant graphs and tables.

SPSS (22) version was used for statistical analysis.

5.6 Ethical approval

5.6.1 Ethical issues

The ethical issues were addressed as follows: this issue was addressed by categorically emphasizing the fact that it is an academic study, there was an assurance of individual protection and the data was used with any identifiers. Furthermore all findings were protected and not be used for any other purposes except for those indicated about the research. There might however be opportunities to make improvements to current working conditions and/or recruitment and retention practices which potentially would benefit individuals and the organization as a whole.

Written consent was sought from each individual. They were briefed about the study, its purposes, why they were being invited to volunteer to take part and what was expected of them. They were also be given assurances about the voluntary nature of the study and their right to not take part, or to withdraw at any stage if they did not wish to continue, without any effect on routine care.

This study was conducted in accordance with application rules and regulation at Qatar University/ Primary Health Care Corporation regarding ethical conduct of research. An application for ethical approval of Primary Health Care Corporation Institutional Review Board for conducting this research in Qatar had been submitted and approved.

5.6.2 Confidentiality and data protection

All study data were collected and stored in a secure and locked drawer. Data recorded or entered onto a spreadsheet on computer/investigator's laptop was password protected. All personal identifiers removed to ensure that individuals cannot be traced. To help the process, those involved in data entry were not be directly involved in data collection themselves. The use of individual code numbers for participants who also helped to protect them.

Personal assurance by emphasizing the fact that it is an independent academic study, there was an assurance of individual protection and the data were not used with any identifiers. Furthermore, all findings were protected and were not use for any other purposes except for those indicated by the research.

6. TIMELINE AND RESOURCES

6.1 *Timeline:*

A detailed representative of the strategy utilized throughout the duration of the study is portrayed in the below timeline.

Table 1: *Timeline*

Task	Months					
	Nov	Dec	Tan	Feb	Mar	Apr
Literature review	x	x	x	x	x	x
Tool review and addition of questions	x					
IRB application PHCC and QU	x					
Data collection				x	x	
Data entry and cleaning					x	
Data analysis of qualitative data					x	x
Writing up					x	x
Final thesis submission						x

6.2 *Budget*

The research study was a cross-sectional study conducted within the PUBH 695 Thesis course, with no allocated budget:

- Questionnaire and interview guide were printed by researcher.
- Researcher covered her own transportation cost to / from health centers.
- There was no compensation for participants.

- Software for data analysis was provided by Qatar University.

7. RESULTS

This chapter presents the descriptive of sample and study variables as well as varied statistical analysis that were used to address each of the study research questions.

Findings are presented below:

Figure 1 shows demographic characteristics of study population. 30% of study populations were aged 26-30 and 25% were aged 31-35 years, respectively. 52% of the participants were Qatari and 48% were non-Qatari Arab women. A total of 61% of participants had university degree followed by secondary degree (33%). 53% of participants had monthly family income greater than 15000 QR while only 3% had a family income of less than 5000 QR. Of the total, 56.5% of participants were employed compared to 44% were not employed.

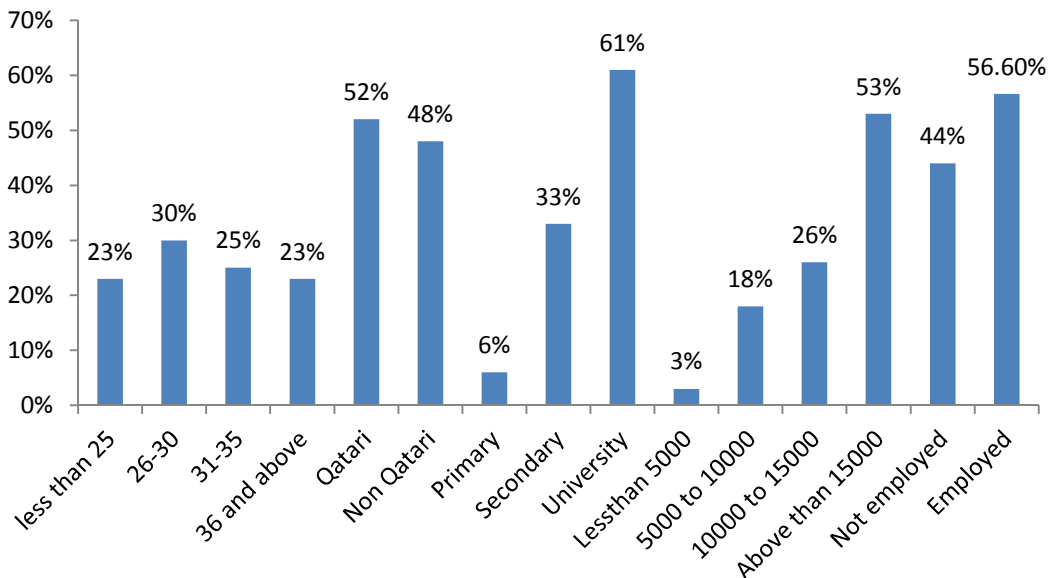


Figure 1. Demographic Characteristics of Study Population

Table 2 shows the distribution of prevalence of underweight, normal weight, overweight and obesity by age-groups. It was observed that the prevalence of underweight and normal weight, overweight and obesity was 36.3%, 43% and 20.8% respectively. We noted that the highest rate of underweight and normal weight was observed among youngest age group (49.5%). While the highest prevalence of overweight was observed among women aged 26-30 with (43.8%). Obesity was observed highly among oldest group with rates 31.6%. There was a statistically significant association between BMI group and age group ($\chi^2=24.5$, $P < .0001$).

Table 2: *The Prevalence of Underweight and Normal Weight, Overweight and Obesity by Age Groups*

BMI group	less than 25 years old	26-30 years old	31-35 years old	36 years old and above	Total
NW & UW	45(49.5%)	47(38.8%)	32(32.7)	21(23.3%)	145(36.3%)
OW	39(42.9%)	53(43.8%)	39(39.8%)	41(36.8%)	172(43%)
OB	7(7.7%)	21(17.4%)	27(27.6%)	28(31.6%)	83(20.8%)
Total	91(22.8%)	121(30.3%)	98(24.5%)	90(22.5%)	400(100.0%)

*UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 3 shows the mean body shape dissatisfaction score according to BMI group. Results displayed that obese and overweight women were the most dissatisfied groups with a mean score of 17.7 and 19.8, respectively compared to women with underweight and normal BMI. We noted that underweight and normal women were more satisfied with their BMI with a mean score of 22.3. It is observed from the analysis that the mean body shape dissatisfaction score tended to decrease as the BMI-level of women increases. The ANOVA results in Table 3 indicate that mean body dissatisfaction scores were significantly different across various BMI groups ($P < 0.0001$).

Table 3: *Mean Body Shape Dissatisfaction Score across BMI Groups: ANOVA*

BMI group	N	Mean	Std. Deviation	F	P-Value between Groups
UW & NW	145	22.3	4.54	29.9	< 0.0001
OW	172	19.8	4.12		
OB	83	17.8	4.56		
Total	400	20.3	4.67		

*UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 4 describes the mean of body weight dissatisfaction score according to BMI group. Results revealed that the lowest mean of body weight dissatisfaction score which is 2.02, was observed among obese women; whereas, the highest Mean of body weight satisfaction score was observed among underweight and normal weight women with the mean of 3.66. We noted that the Mean score for the body weight dissatisfaction tended to decrease as the BMI of women increase. Therefore, the results in table 4 reveal that the mean body weight dissatisfaction scores were significantly different across BMI groups ($P < 0.0001$).

Table 4: *Mean Of Body Weight Dissatisfaction Score across BMI Groups*

BMI group	N	Mean	Std. Deviation	F	P-value between Groups
UW & NW	145	3.66	1.10	58.6	< 0.0001
OW	172	2.96	1.09		
OB	83	2.02	1.12		
Total	400	3.02	1.25		

*UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 5 illustrates the general appearance score according to BMI group. The lowest score which indicated high dissatisfaction was observed among obese women with lowest mean score of general appearance (2.65); whereas, the highest score which indicated a high satisfaction was observed among underweight and normal weight women with the highest mean score of general appearance (3.92). Therefore, the results in table 5 reveals that the mean of general appearance scores were significantly different across BMI groups ($P < 0.0001$).

Table 5: *Mean Of General Appearance Score across BMI Groups.*

BMI group	N	Mean	Std. Deviation	F	P-value Between Groups
UW & NW	145	3.92	.95	41.1	< 0.0001
OW	172	3.47	.99		
OB	83	2.65	1.14		
Total	400	3.46	1.11		

*UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 6 shows general attraction according to BMI group. Results revealed that the most important factor affecting general attraction was good personality (43%), which was highest among women with underweight and normal weight, obese and overweight, respectively (46.2%, 43% and 40.1%). The lowest percentage factor was beauty (9.8%) which was reported among women with overweight, underweight and normal weight and obesity, at rates of 11.6%, 11% and 3.6%, respectively. There was no statistically significant association between factors affecting general attraction and BMI group ($\chi^2=11.2$, $P < 0.19$).

Table 6: *General Attraction According To BMI Group*

What do you think makes an individual attractive?	UW & NW	OW	OB	Total
Slim	29 (20%)	30(17.4%)	16(19.3%)	75(18.8%)
Beauty	16 (11%)	20(11.6%)	3(3.6%)	39(9.8%)
Outgoing	23 (15.9%)	30(17.4%)	13(15.7%)	66(16.5%)
Friendly	10 (6.9%)	23(13.4%)	15(18.1%)	48(12.0%)
Good personality	67(46.2%)	69(40.1%)	36(43.4%)	172(43.0%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 7 shows the acceptance of body weight according to BMI group. For those respondents who were ‘unhappy’ the highest percentage was with obese group (63%), compare to underweight and normal weight group (15.2%). Similarly, those are underweight and normal weight is more likely to be happier with rate of 47.6%. The chi-square test shows that there is a statistically significant association between acceptance of body weight and BMI groups ($\chi^2=85.9$, $P < 0.0001$).

Table 7: *Acceptance of body weight according to BMI group*

How happy are you with your present weight?	UW & NW	OW	OB	Total
Happy	69(47.6%)	25(14.5%)	8(9.6%)	102(25.5%)
Somewhat happy	54(37.2%)	84(48.8%)	23(27.7%)	161(40.3%)
Unhappy	22(15.2%)	63(36.6%)	52(62.7%)	137(34.3%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 8 demonstrates the perception of weight according to BMI group. 62.3% and 33.5% of women thought that they were overweight and normal weight respectively. We noted that 57.9% of underweight and normal weight women reported that they had normal weight and only 8.3% note they were underweight. While 73.3% of women with normal weight thought that they were overweight. 89.2% of obese women agreed that they were overweight, while 8.4% of them thought that they have normal weight. Also, among underweight and normal weight women 33.8% reported that they were overweight and 8.3% that they were underweight. Moreover, results showed that there was a statistically significant association between weight perception and BMI group ($\chi^2=85.7$, $P < 0.0001$).

Table 8: *Perception of Weight by BMI Groups*

Do you think you are?	UW & NW	OW	OB	Total
Underweight	12 (8.3%)	3 (1.7%)	2 (2.4%)	17 (4.3%)
Overweight	49 (33.8%)	126 (73.3%)	74 (89.2%)	249 (62.3%)
Normal weight	84 (57.9%)	43 (25.0%)	7 (8.4%)	134 (33.5%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 9 assesses the effect of media on all the BMI group. Results showed that 78.5% of women agreed that the media's representation of women is not accurate to women as themselves, which was highly observed among obese (85.5%), followed by underweight and normal weight and overweight women, respectively (77.9% and 75.6%). While, 21.5% of women agreed that the media's representation of women is accurate to women as themselves, which was highly observed among overweight (24.4%), followed by underweight and normal weight and obese women, respectively (22.1% and 14.5%). Therefore, results showed that there was no significant association between effect of media and BMI group ($\chi^2=3.33$, $P < 0.19$).

Table 9: *Effect of Media According To BMI Group*

Do you think the media's representation of women is accurate?	UW&NW	OW	OB	Total
Yes	32 (22.1%)	42(24.4%)	12(14.5%)	86(21.5%)
No	113(77.9%)	130(75.6%)	71(85.5%)	314(78.5%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 10 shows the effect of media according to BMI group. We noted that 45.3% of women were agreed that media represent females in their age encourages girls to have a healthy self-esteem and 54.8% disagreed with this aspect. Moreover, results showed that there was no significant association between effect of media and BMI group ($\chi^2=0.48$, $P < 0.79$).

Table 10: *Effect of Media According To BMI Group*

Does the way the media represent females in your age encourages girls to have a healthy self-esteem of them?	UW & NW	OW	OB	Total
Yes	63(43.4%)	78(45.3%)	40(48.2%)	181(45.2%)
No	82(56.6%)	94(54.7%)	43(51.8%)	219(54.8%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 11 shows the prevalence of gaining and losing weight according to BMI group. 82.3% of women tried to lose weight and was highly observed among obese (90.4%), followed by overweight, normal weight and underweight women, respectively (82.6% and 77.2%). However, 17.8% of women didn't try to lose weight. Results revealed that there was a significant association between the prevalence of losing weight and BMI group ($\chi^2=6.24$, $P < 0.04$).

Table 11: *Prevalence of Losing Weight According To BMI Group*

Have you tried to lose weight?	UW & NW	OW	OB	Total
yes	112 (77.2%)	142 (82.6%)	75 (90.4%)	329 (82.3%)
No	33 (22.8%)	30 (17.4%)	8 (9.6%)	71 (17.8%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 12 shows the prevalence of weight management methods used according to BMI group. Results demonstrated that in all the BMI groups, the most used method was changing food habits then doing excessive physical activity with rates of 66.8% and 25%, respectively. The prevalence of changing food habits was high among overweight women with rate of 68.6% and was used almost equally among women with underweight and normal weight, and obesity, at rates of 65.5% and 65.1%, respectively. There were no significant association between Prevalence of weight management methods used and BMI groups ($\chi^2=5.48$, $P < 0.24$).

Table 12: *Prevalence of Weight Management Methods Used According To BMI Group*

What is the weight management technique that you use through your diet?	UW & NW	OW	OB	Total
Food eating habits	95 (65.5%)	118(68.6%)	54 (65.1%)	267 (66.8%)
Pills	8(5.5%)	14 (8.1%)	11 (13.3%)	33 (8.3%)
Excessive physical activity	42 (29.0%)	40 (23.3%)	18 (21.7%)	100 (25.0%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 13 shows the sources of nutrition information according to BMI group. Results showed that 55.8% of women gets their nutrition information from internet, 25% from Friends and family, 15.8% from TV and 3.5% from magazine and newspapers. A low rate of obese women (1.2%) got the nutrition information from magazine and newspaper. Within all groups internet were the most sources used among women with underweight and normal weight, overweight and obesity, respectively (56.6%, 55.8% and 54.2%). There are no significant association between the sources of getting the information of perfect body-image and BMI groups ($\chi^2=2.99$, $P < 0.81$).

Table 13: *Sources of Nutrition Information According To BMI Group*

From where do you get the information of perfect body-image?	UW&NW	OW	OB	Total
TV	20(13.8%)	28(16.3%)	15(18.1%)	63(15.8%)
Magazines and newspapers (pictures)	5 (3.4%)	8 (4.7%)	1 (1.2%)	14(3.5%)
Internet	82 (56.6%)	96 (55.8%)	45 (54.2%)	223 (55.8%)
Friends and family	38 (26.2%)	40 (23.3%)	22 (26.5%)	100(25.0%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 14 shows the percentage of women reporting fasting or following drastic diet for weight loss according to BMI group. We observed that 44% of the women reported sometimes and 8.3% of women reported often. 35.9% of Underweight and normal weight women had never tried to lose weight. Also, 55.4% and 48.8% of obese and overweight women have sometimes tried to lose weight. There were significant associations between Percentage of participants reporting fasting or following drastic diet for weight loss and BMI groups ($\chi^2=21.3$, $P < 0.002$).

Table 14: *Percentage of Women Reporting Fasting or Following Drastic Diet for Weight Loss According To BMI Group*

I have tried to lose weight by fasting or going on crash diet:	UW & NW	OW	OB	Total
Never	52 (35.9%)	41 (23.8%)	13 (15.7%)	106 (26.5%)
Rarely	37 (25.5%)	34 (19.8%)	14 (16.9%)	85 (21.3%)
Sometimes	46 (31.7%)	84 (48.8%)	46 (55.4%)	176 (44.0%)
Often	10 (6.9%)	13 (7.6%)	10 (12.0%)	33 (8.3%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 15 demonstrates physical activity according to BMI group. Results showed that 70.3% of the total number of women agreed that they like doing exercises and 29.8% did not agree. From all the BMI groups, all of them liked to do exercise; underweight and normal weight 83.4%, overweight 64% and obesity 60.25%. There was a statistically significant association between physical activity and BMI groups ($\chi^2=19.3$, $P < 0.0001$).

Table 15: *Physical Activity According To BMI Group*

Do you like doing exercises:	UW&NW	OW	OB	Total
yes	121 (83.4%)	110 (64%)	50 (60.2%)	281 (70.3%)
No	24 (16.6%)	62 (36 %)	33 (39.8%)	119 (29.8%)

*BMI group: UW= underweight, NW= normal weight, OW= over weight, OB=obesity

Table 16 shows the correlation matrix at hand; illustrate all relationships between study's variables. There were a significant association between BMI and (Age, Body Weight dissatisfaction, general appearance and body shape dissatisfaction). There was no significant association between age and other factors; body weight dissatisfaction, general appearance and body shape dissatisfaction. However, there was a significant association between Age and BMI.

Table 16: *Correlation between Age, Body Weight Dissatisfaction Score, General Appearance Score, Body Shape Dissatisfaction Score and BMI*

Variables		Age	BWD- score	GA- score	BSD- score	BMI
Age	Pearson	1	-0.16	-0.13	-0.07	0.24
	Correlation p-values		0.002	0.011	0.18	< 0.0001
BWD score	Pearson	-0.16	1	0.61	0.67	-0.44
	Correlation p-values	0.002		<0.0001	< 0.0001	<0 .0001
GA score	Pearson	-0.13	0.61	1	0.67	-0.39
	Correlation p-values	0.01	< .0001		< 0.0001	< 0.0001
BSD score	Pearson	-0.07	0.67	0.67	1	-0.34
	Correlation p-values	.176	< 0.0001	<0 .0001		<0 .0001
BMI	Pearson	0.24	-0.44	-0.39	-0.34	1
	Correlation p-values	<0.0001	< 0.0001	< 0.0001	<0 .0001	

* BWD-score= Body Weight dissatisfaction score, GA-score=General Appearance, BSD_score= body shape dissatisfaction

Table 17 shows results from an estimated binary Logistic Regression between covariates and the body weight dissatisfaction score as the binary outcome, where 152 women were satisfied and 248 were women were dissatisfied. We noted that the Cox & Snell's R^2 is 38%, reflecting that 38% of the total variation in the dependent variable is explained by the predictors of the estimated logistic regression. The odds of being satisfied is 1.31 times higher for an increase in body shape dissatisfaction score. Similarly, the odds of being satisfied is 1.72 times higher for an increase in general appearance scoring. Finally, the odds of being satisfied is 0.85 times higher for a decrease in BMI status.

Table 17: *Logistic Regression*

Variables	OR	P-value	95%CI (Lower)	95%CI (Upper)
Age	0.99	0.75	0.94	1.04
BMI	0.85	< 0.0001	0.79	0.92
BSD score	1.31	<0 .0001	1.19	1.43
Lactation status	1.08	0.75	0.68	1.69
General Appearance	1.70	0.003	1.19	2.42
No. of children	0.86	0.13	0.72	1.04
Constant	0.03	.017		

*BSD_score= body shape dissatisfaction score

*OR= Odds Ratio

8. DISCUSSION:

The primary purpose of this study was to determine the presence of body dissatisfaction intuited by Arab women living in Qatar during their post-partum period. This research covered the study of 400 Arab women including both Qatari and Non-Qatari. Earlier research suggested that women at 6 months post-partum were most likely to suffer from body dissatisfaction (Rallis et al, 2007 & Drake et al, 1988). Yet another study proved that age is most likely the primary factor for body dissatisfaction and is equally observed among all women (Stevens & Tiggemann, 1998).

The results of this study revealed that 62% of women under study were dissatisfied with their body during the post-partum period, among them the majority of the women are those who were either overweight or obese based on their BMI. This result contradicts with the earlier study that indicates that body dissatisfaction was based on cultural differences among women population of different nations and women from Arab or Islamic countries were perceived to have body satisfaction since they were covering their bodies (Abdollahi & Mann, 2001).

This study covered women from different age groups, varied educational background, and the vast difference in family & economic status. The women were classified into four BMI groups namely, Underweight (UW) and Normal Weight (NW), Overweight (OW) and Obese (OB) based on their current Body Mass Index (BMI). The categorization of the women was done based on their BMI, however, an earlier study suggested that there was positive association between body weight dissatisfaction and depression independent of sex, age, and BMI (Richard, Rohrmann, Lohse, & Eichholzer, 2016).

The results showed that majority of women between the age group of 31- 35 and

36 years old and above were either overweight or obese. Most of the underweight and normal weight women belong to the age group of <25 years old. The study considered the two important factors for body dissatisfaction (i) dissatisfaction about one's own body based on the shape of the body and (ii) body dissatisfaction based on the body weight. The results displayed that women belonging to the BMI group of OW and OB having the mean score of 17.7 and 19.8 respectively were the most dissatisfied with the shape of their body while the women falling under UW & NW of BMI group were happier with the shape of their body. Hence it can be observed that 36.6 % of women from the OW group and 62.7% of the OB group were not satisfied with their body shape. Only 15.2% of women belonging UW & NW group of BMI were dissatisfied with the shape of their body. To understand the body dissatisfaction further, the second factor considered was the dissatisfaction perceived due to the body weight. Here, the results showed that among the various BMI group, the most minimal body weight disappointment score of 2.02 was seen among the OB group and the highest mean score for body weight dissatisfaction was among the UW & NW group with a mean score of 3.66. Therefore this result showed that the Mean score for body weight disappointment tends to diminish as the BMI of women increases. This result can be observed in the table no. 4 of chapter 7, which showed that the mean body weight disappointments were transverse to the different BMI group i.e.as the BMI increases, the disappointment with body weight decreases. These results confirmed the correlation between body dissatisfaction and BMI and were in line with Miller and Downey's (1999) meta- analysis (perceived weight, $r=-0.34$, $d=-0.72$; actual weight $r=0.12$, $d=-0.24$).

It is observed that many women have a misperception about their ideal body

weight and hence tend to have a negative body image; especially women who are having a normal BMI status tend to misinterpret their body shape and body weight and desire to have an ideal slim body, this was also stated in one of the earlier research (Thompson, 1996). Also, this finding correspond with other study that women preferred a thinner body size (Musaiger, 2014). In this study, 8.3 % of women in the Underweight and Normal BMI group, desired to have a body weight close to the body weights of women in the underweight BMI group. This showed that despite having a normal body weight and appropriate body shape women do tend to have a much lighter and slimmer body. However, some Studies in Arab countries have shown that, in some cultures, plump women are more acceptable than thin women (Musaiger & Shahbeek, 2013; Rguibi & Belahsen, 2006).

When considering the above two factors, it was observed that women who were classified as underweight in the BMI group were the least dissatisfied with their body shape and body weight. The majority of them were mostly satisfied with their body weight and body shape. This finding is in line with the analysis of National Health and Nutrition Examination Survey (NHANES) data which indicates that a majority of underweight women who are closer to having a body size which is considered to be “thin”, consider their body weight to be about “just right” which was reflected in a previous study (Chang & Christakis, 2003). It is evident with the results that women under the OB category of BMI group expressed greatest body weight dissatisfaction with almost 62.7% of them considering having an inappropriate body weight. However, in comparison to the women who belong to the Normal BMI group, the OB category women were better satisfied with their body shape as the Normal group women were the

most dissatisfied with their body shape. Many people tend to idealize a perfect body weight and shape according to their understanding and knowledge. Women during the post-partum stage were more concerned about their body weight and shape and are likely to compare their body weight and shapes with the other women around them. One such factor that leads to easy comparison was the external appearance of an individual. This study covered the general appearance as one of the contributing factors for body dissatisfaction. The results for this factor showed that when women were asked about how satisfied they felt about their overall physical appearance irrespective of their body weight and body shape, the women under the normal group agree to have a good physical appearance but the women in the obese group are most dissatisfied with the physical appearance. So, despite being dissatisfied about their body shape, when it comes to overall appearance, the women with normal BMI were satisfied with their body.

The appearance factor was closely connected with the attractiveness of an individual. The general attractiveness of women was considered as another factor to determine the body dissatisfaction among women going through the post-partum stage. In order to determine the attractiveness of women, personality aspects such as being slim, beauty, outgoing, friendly and good personality were considered in this study. The results reflected that the normal weight, overweight and obese women BMI group felt that having a good personality was the most important aspect of attractiveness with 43% of these women expressing that they prefer having a good personality over the other aspects. The beauty aspect was least considered among these categories of women with just 9.8% of all groups of women opting for it as the important factor for attractiveness. The study also reflects how happy the women from all BMI groups are with their current weight or

their acceptance of present body weight. The results on this factor showed that more than 36.6% of the overweight group and 63% of the obese group were unhappy with their current weight. The women in the underweight and normal weight group (47.6%) were most happy with their current weight, however, a smaller percent of women in this group were somewhat happy with their current weight and desired to have changed in their body weights. These results are in sync with another study which suggests that general African overweight females demonstrated a positive image than the other groups. This study covers the general population of females and not specifically the women going through a post-partum phase (Kumyanki, 1987). The study further revealed that most women in the underweight group and the Normal weight group had a misconception about their current weight. 57.9% of women who were in underweight and normal weight group think that they have a normal weight. Similarly, a larger number (33.8%) of women in the underweight and normal weight group think that they were overweight. Such misconception by women about their body weight status is influenced by various factors.

The first few factors discussed in this study were self-perceived by women about their body during the post-partum stage. However, there are other external factors too that had an influence on the perception and assertiveness of an individual regarding their body weight, shape, appearance, and attractiveness. The results of media's influence on post-partum women revealed that 78.5% of women from all BMI group were in consent that media's representation of women was not accurate and the obese group women in particular (85.5%) felt that media's representation of women was inaccurate. It is also observed that about 45.3% women surveyed media's representation of women in their

respective age category encouraged them to have healthy self-esteem whereas 54.8% women disagreed with this aspect. Understanding the fact that most women are liable to have increase in body weight during pregnancy and post-partum period, as they tried various means to lose weight. The results of this study reflected that 82.3% of all the women surveyed for this study has tried losing weight among all 90.45 of the women in the obese group have tried to lose weight. An almost equal proportion of underweight and normal weight and overweight women had also tried losing weight during this stage. It is interesting to note that a fair percentage of (77.5%) underweight and normal weight group women also tried losing weight. Overall 17.8% women from all BMI groups did not try losing weight.

In order to lose the excess weight gained due to pregnancy, women from all groups have tried losing weight using diverse techniques. The most common techniques adopted by these women were the change in food habits or diet, usage of weight control pills and physical activity. The study of these parameters and their usage by the women showed that 66.8% of all women were following a change in their food habits as a mean to manage their body weight. Changing in food habits was a common method followed almost equally among underweight and normal weight, overweight and obese group of women. The second most common method followed by women to lose weight is the excessive physical activity with nearly 25% of women opting for this method.

Since changing the food habits was the most preferred method for losing the body weight, obtaining adequate nutrition was equally important at the time of weight loss. Women were liable to consider that inappropriate food intake is the primary reason for their weight gain as one of the earlier studies also reflects the fact that consuming

traditional food and drinks contributed to weight gain (Geckil et al., 2009). Women relied on numerous sources to obtain information on diet and nutrition while losing weight. The main sources of information about nutrition for all groups of women in this study were Television (TV), Magazines and Newspapers, the Internet, and Family and Friends. The results showed that 55.8% of women got the information from the internet, 25% of them had information from their friends and family and closely followed by TV (15.8%). A small number of them opted to have information from print media like magazine or Newspaper. Among all underweight and normal weight, the overweight and the obese groups of women were the highest users of internet-based information on nutrition. Women also tried to lose weight by restoring to either fasting or crash diet methods. This study also covered the method of losing weight; the results showed that as many as 44% of women from various BMI group have tried fasting or crash diet sometimes during their post-partum stage. A majority of underweight and normal weight (35.9%) group women had never tried these two methods to lose weight. The results showed that there is a significant association between percentage of women reporting fasting or following drastic diet for weight loss and BMI groups. Hence in order to lose weight faster, women tend to eat less food which can have an impact on their overall health, these findings are in line with the previous study carried out by (A, B, Hagdoost et al. 2009).

The study of physical activity among these women showed that a large percentage of women (70.3%) like doing physical activity to lose weight and 29.8% did not like doing physical activity or exercise. All of the women in the underweight and normal group like doing some kind of physical activity (83.4%) more than the overweight group (64%) followed by OB group (60%). The Correlation matrix along with the data analysis

represents a relationship between the factors under study. The results revealed that majority of women experience body dissatisfaction during post-partum phase (6 months after delivery) , since there was a variation in the body weight and body shape of the women going through a post-partum phase, they can be classified based on their body Mass Index or BMI. The results proved that there is a noteworthy relationship amongst BMI and factors such as age, body weight dissatisfaction, appearance, attractiveness, body shape dissatisfaction. There was no critical relationship between age and body weight or body shape dissatisfaction or external appearance. However, there was a notable relationship between Age and BMI. The correlation matrix concludes by representing connections between all factors considered for this study.

The Cox & Snell's R^2 has a total variation of 38% in the dependent variable as explained by the logistic model. Considering the odd ratio, increases in body shape dissatisfaction score will increase the satisfaction level by 31% and an increase in general appearance score will increase the satisfaction level by 70%. However, decrease in BMI status will increase the satisfaction level by 51%. Furthermore, the logistic regression results showed that 152 women were satisfied with their body parameters such as weight and shape while 248 women were dissatisfied with their body parameters.

Since 88.3% of participants who were partially breastfeeding in the study, the association between lactation status and body dissatisfaction was not investigated because there was no significant association between lactation status and body dissatisfaction ($\chi^2=6.92$, $P < 0.55$).

The strength for this study are that (i) The findings from this study covered Arab

women in Qatar with good sample size. (ii) It provides accurate information about the factors associated with body dissatisfaction and its positive association with the BMI groups. (iii) The methodology adopted for this research has resulted in obtaining accurate result about the determinants of body dissatisfaction observed among women during their postpartum phase. (iv) Weight and height measurements were taken by the nurse and not by self-report. (v) Our findings showed similar results to the previous investigations about body dissatisfaction studies that were explained in the discussion part.

The results and conclusions obtained from this research would prove to be beneficial to medical attendants particularly those who are dealing with post-partum patients in understanding the determinants and factor associated with body dissatisfaction. The medical attendants can pick up early signs of body dissatisfaction and provide a suitable treatment as well. Also, this research would be helpful to nutritionists and dietician who deal with women suffering from overweight and Obesity during post-partum. Women in general who are planning for motherhood can also be benefitted from this study as they can expect the changes in body weight and shape during the post-partum phase as experienced by the women in this study. This research would also be beneficial to psychiatrists who deal with women patients who experience stress or depression during their post-partum phase.

Although the majority of parameters associated with body dissatisfaction among women going through post-partum phase have been covered in this study, yet there are few limitations to this study. (i) Psychological factors such as stress, but depression were not covered as a part of the study to determine if they have any association with body dissatisfaction. (ii) The women sample surveyed in the study covers only Arab Qatari and

non-Qatari women living in Qatar, the non-Arab women are not included as a part of this study. (iii) The data were derived solely from self-report measures of body dissatisfaction, food, and diet. Previous research has shown that women display a relatively small response bias when reporting their body weight dissatisfaction (Cash, Counts, Hangen, & Huffine, 1989). (iv) No causality can be assigned between Body dissatisfaction, BMI, and Age due to the type of the study. (vii) Because participants came to the “Well Baby and Vaccination clinic” to vaccinate their infants and not for themselves as appointment with physician, so it wasn’t possible to capture their mental health status.

This research can be further extended to study the implications of body dissatisfaction on the overall psychological effect on women going through the post-partum phase. It can also be extended further to study stress management among women and men due to body dissatisfaction.

9. CONCLUSION:

This research was conducted to establish the prevalence of body dissatisfaction and the factors that lead to this type of dissatisfaction among Qatari and non-Qatari Arab women who are in their postpartum stage and residing in the state of Qatar. Around 400 women visiting health centers located in three geographically distributed regions in Qatar were considered for this study. The findings of the study have been discussed in the results chapter, however ephemeral results of the study are discussed here to help draw the conclusion and provide recommendations for future research.

This study is the first of its kind as there have been no previous studies carried out to determine the presence of body dissatisfaction among Arab women living in Qatar. Some of previous studies suggested that women residing in an Arab or Islamic country many not be experiencing body dissatisfaction. The results obtained in this study contradict to this fact and proved that there is a prevalence of body dissatisfaction among post-partum Arab women living in Qatar.

The results obtained from the study showing 62% of women going through the post-partum stage were dissatisfied with their body. Among them, obese women were the ones who had the highest level of dissatisfaction. The primary factors leading to body dissatisfaction were dissatisfaction due to body weight, body shape, and general appearance. The results showed that there is a significant association between the body weight dissatisfaction, body shape dissatisfaction, and general appearance and there was no significant association in age and these factors.

The study provides the scope of identifying and resolving female related health issues specifically the body dissatisfaction experienced during the post-partum stage and

provides a wide way to look for the basic reasons for such dissatisfaction which may include endless causes and consequences.

9.1 Implications for Practice:

For the clinical guidelines purposes, the findings of this study would be helpful and useful for all health care professionals for the development of screening, health promotion, prevention, and treatment programs for women at post-partum who were at risk of developing a sense of negative body image after giving birth. All healthcare professionals should be appropriately trained in dealing with this issue. For nutritional intervention, achieving an ideal body weight should not be the primary goal. More specifically, this study would be useful for nurses who always have contact with post-partum patients to have a wider understanding and awareness of the relationship between culturally influenced negative body image perceptions and the association of its outcome and to gain a variety of skills for the early detection and treatment of this problem. It would help to identify the psychological state of mind for overweight and obese women at post-partum. Also, this study would give awareness to dieticians on body dissatisfaction prevention among women at post-partum specifically in Qatar by providing a proper diet for all pre-pregnant, pregnant, and post-pregnant women. Lastly, the result could be a wake-up call to provide a strong encouragement of maintaining a healthy lifestyle, being physically active, and having strict rules that the women at post-partum must do a designated follow-up visits at 6 months post-partum. This would help them to become aware of the fact that Pre-pregnancy body image would take time and cope up with being dissatisfied with their body image at 6 months post birth. All in all, emphasis should be placed on providing follow-up clinic for post-partum women after

two months from giving birth. This clinic should include education on developmental changes that occur with postnatal period, dangerous effect of unhealthy dieting practices, learning of self-acceptance, life skills and healthy coping mechanisms, encourage to eat a balanced, healthy diet, with emphasis on enjoyment and variety, not restriction (Fey-Yensan NF, McCormick L, English C., 2002). Achieving an “ideal weight” should not be the primary goal of nutritional intervention; instead, encouragement of healthy lifestyle behaviors (e.g., regular physical activity, a balanced diet, adequate sleep) should be the focus of client-centered counseling.

When appropriate, the findings would be submitted for publication to a high-impact peer-reviewed medical journal and would be presented at international scientific conferences/congresses.

9.2 Recommendations for Future Research:

The study could also target women at post-partum in Al-Bahrain and Kuwait and to have a complete comparison and contrast of the analysis and finding among these populations. A future study could also utilize in mixed methods approach, it would be beneficial to possibly obtain a more detailed perspective from women participants themselves, in this view qualitative may be helpful in the future strategies such as in deep interview and focus group session.

10. REFERENCES

- A,M, B, S., Haghdoost, et al. (2009). “The prevalence of obesity in Iran in recent Decade; A Systematic Review and meta-Analysis study”. *Research gate* , volume 38, issue 3, Page 1- 11.
- Abdolaahi, P & Mann, T(2001). “ Eating disorder symptoms and body image concerns in Iran : Comparison between Iranian women in Iran and in America”. *The international Journal of eating disorder*, volume 30, issue 3 , page 259-268.
- Abou-Saleh , M.T, & Ghubash, R(1997), “ The prevalence of early post-partum psychiatric morbidity in Dubai: a transcultural perspective”. *Acta Psychiatrica Scandinavica* , volume 95, issue 5, page 428-432.
- Affonso et al. (2000), “ An International study exploring levels of postpartum depressive symptomatology”. *Journal of Psychosomatic research*, volume 49, issue 3 , page 207-216. [https://doi.org/10.1016/S022-3999\(00\)00176-8](https://doi.org/10.1016/S022-3999(00)00176-8)
- Allaz, A.F et al.,(1998). “ Body weight preoccupation in middle –age and ageing women: A general population survey”. *The International Journal of Eating disorder*, volume 23, issue 3, page 287-294.
- Altabe, M& Thompson J.K (1992). “Size estimation versus figural ratings of body image disturbance: Relation to body dissatisfaction and eating dysfunction”. *International Journal of eating Disorders*, volume 11, issue 4, page 397-402. [https://doi.org/10.1002/1098-108X\(199205\)11:4<397::AID-EAT2260110414>3.0.CO;2-6](https://doi.org/10.1002/1098-108X(199205)11:4<397::AID-EAT2260110414>3.0.CO;2-6)
- Bacon. L et al (2002). “Evaluating a non- diet wellness intervention for improvement of metabolic fitness, psychological well-being and eating and activity behaviors”.

International Journal of Obesity and Related Metabolic Disorders: Journal of the International Association for the study of Obesity, volume 26, issue 6, page 854-865. <http://doi.org/10.1038/sj.ijo.0802012>

Bedford J & Johnson, C.S(2006) . “Societal influences on body Image Dissatisfaction in Younger and Older Women”. *Journal of women and aging*, volume 18, issue 1, page 41-55. http://doi.org/10.1300/J074v18n01_04

Bener A, et al(2012) . “A study of post-partum depression in a fat developing country: prevalence and related factors”. *The international Journal of psychiatry in medicine*, volume 43, issue 4, page 325-337. <https://doi.org/10.2190/PM.43.4.c>

Bjerggard M et al.(2015) . “Association of self –perceived body image with body mass index and type 2 diabetes-The Addition pro-study”. *Preventive Medicine*, volume 75, page 64-69. <https://doi.org/10.1016/j.ypmed.2015.03.018>

Blashill A J & Wilhelm S (2014). “Body image distortions, weight and depression in adolescent boys: Longitudinal trajectories into adulthood”. *Psychology of Men & Masculinity*, volume 15, issue 4, page 445-451. <https://doi.org/10.1037/a0034618>

Cash T F(1993). “ Body image attitudes among obese enrollees in a commercial weight-loss program”. *Perceptual and Motor skills* , volume 77(3.2) , 1099-1033. <https://doi.org/10.2466/pms.1993.77.3f.1099>

Cash, T. F. (2004). Body image: past, present, and future. *Body Image*, 1(1), 1–5. [https://doi.org/10.1016/S1740-1445\(03\)00011-1](https://doi.org/10.1016/S1740-1445(03)00011-1)

Cash, T. F., Counts, B., Hangen, J., & Huffine, C. E. (2016). How Much Do You Weigh?: Determinants of Validity of Self-Reported Body Weight. *Perceptual and Motor Skills*. <https://doi.org/10.2466/pms.1989.69.1.248>

- Cash, T F & Hicks K L (1990) . “Being fat versus thinking fat: Relationships with body image, eating behaviors and well-being”. *Cognitive Therapy and Research*, volume 14, issue 3, page 327-341. <https://doi.org/10.1007/BF01184000>
- Chang V W& Christakis N A(2003). “Self-perception of weight appropriateness in the United States”. *American Journal of preventive Medicine*, Volume 24, issue 4, page 332-339.
- Cooper P J et al. (1999) “ Post-Partum depression and the mother-infant relationship in South African peri-urban settlement”. *The British journal of Psychiatry: The journal of Medical Science*, volume 175, page 554-558.
- Daniel W W(1999) . “Biostatistics: A foundation for the analysis in the health sciences, 7th edition”. *New york: Wiley*.
- Drake M L et al. (1988). “ Spouses’ body image changes during and after pregnancy: A replication in Canada”. *Image – The Journal of Nursing Scholarship* , volume 20, issue 2, page 88-92.
- Epel ES et al. (2000). “ Stress and Body shape: stress- induced cortisol secretion is consistently greater among women with central fat”. *Psychosomatic Medicine*, volume 62 , issue 5, page 623-632.
- Fahey J O & Shenassa E (2013). Understanding and meeting the needs of women in the post-partum period: The Perinatal Maternal Health Promotion Model”. *Journal of Midwifery & Women’s Health*, Volume 58, issue 6, page 613- 621. <https://doi.org/10.1111/jmwh.12139>.
- Fairbun C G et al. (1998). “ Risk factors for binge eating disorder: A community- based , case –control study”. *Archives of General Psychiatry*, volume 55, issue 5, page

425-432.

Fardouly J et al. (2017). “The impact of appearance comparisons made through social media, traditional media, and in person in women’s everyday lives”. *Body image*, volume 20, page 31-39. <https://doi.org/10.1016/j.bodyim.2016.11.002>

Festinger L(2016). “A theory of social Comparison Processes”. *Human relations*.
<https://doi.org/10.1177/00187267500700202>

Fey-Yensan NF, McCormick L, English C. (2002). “Body image and weight preoccupation in older women”. *Healthy Weight Journal*, volume 16, issue 5, page 68.

Flynn H A(2005). “Epidemiology and Phenomenology of postpartum Mood Disorders”. *Psychiatric Annals*, Volume 35, issue 7, page 544-551.
<http://doi.org/10.3928/0048-5713-20050701-12>.

Foster GD et al. (1997). “Body image in obese women before , during, and after weight loss treatment”. *Health Psychology: Official Journal of Division of Health Psychology, American Psychological Association*, volume 16, issue 3, page 226-229

Gavin N I et al. (2005). “ Perinatal depression : A systematic review of prevalence and incidence.” *Obstetrics and Gynecology*, volume 106(5.1) , page 1071-1083.
<https://doi.org/10.1097/01.AOG.0000183597.31630.db>

Geckil E et al. (2009). “ Traditional postpartum practices of women and infants and factors influencing such practices in South Eastern Turkey”. *Midwifery*, volume 25, issue 1, page 62-71. <https://doi.org/10.1016/j.midw.2006.12.007>

- Gilmore L A et al. (2015). Pregnancy as a window to future health: Excessive gestational weight gain and obesity”. *Seminars in Perinatology*, volume 39, issue 4, page 296-303. <https://doi.org/10.1053/j.semperi.2015.05.009>
- Gjerdingen D et al. (2009). “Predictors of Mother’s Postpartum Body Dissatisfaction”. *Women & Health*, volume 49, issue 6, page 491-504.
- Glauert R et al(2010). “Body dissatisfaction and attentional bias to thin bodies”. *The International Journal of eating Disorders*, volume 43, issue 1, page 42- 49.
<https://doi.org/10.1002/eat.20663>
- Granberg E M , Simons L G & Simons R L(2009). “Body Size and social Self-image among Adolescent African Girls: The Moderating influence of family Racial Socialization”. *Youth & Society*, volume 41, issue 2, 256-277.
<https://doi.org/10.1177/0044118x09338505>
- Grilco C M et al. (1994) . “ teasing body image and self-esteem in a clinical sample of obese women”. *Addictive Behaviors*, volume 19, issue 4, page 443-450
- Grogan S(2006). “ Body image and health: Contemporary perspectives” . *Journal of Health Psychology*, volume 11, issue 4, page 523-530.
<https://doi.org/10.1177/1359105306065013>
- Grogan, S. (1999). *Body image : understanding body dissatisfaction in men, women, and children*. London ; New York : Routledge. Retrieved from
<http://trove.nla.gov.au/work/8117241>
- Haines J & Neumark-Sztainer.D(2006). “ Prevention of obesity and eating disorders: a Consideration of Shared risk factors”. *Health Education Research*, Volume 21, issue 6, page 770-782. <https://doi.org/10/1093/her/cyl094>.

- Hartley, P. (1993). Body images. Development, deviance and change. Edited by Thomas Cash, Thomas Pruzinsky, Pat Hartley. The Guilford Press: New York. (1990) pp. 361, £35.65. *European Eating Disorders Review*, 1(1), 64–66.
- Hill AJ & Williams J (1998). “Psychological health in a non-clinical sample of obese women”. *International Journal of Obesity and Related metabolic Disorders: Journal of the International Association for the study of Obesity*, Volume 22, issue 6, page 578-583.
- Information, N. C. for B., Pike, U. S. N. L. of M. 8600 R., MD, B., & Usa, 20894. (2013). WHO Recommendations on Postnatal Care of the Mother and Newborn. World Health Organization. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK190086/>.
- Institute of Medicine (US) and National Research Council (US) Committee to Reexamine IOM Pregnancy Weight Guidelines. (2009). *Weight Gain During Pregnancy: Reexamining the Guidelines*. (K. M. Rasmussen & A. L. Yaktine, Eds.). Washington (DC): National Academies Press (US). Retrieved from [http://www.ncbi.nlm.nih.gov/books/NBK32813/Jenkin W & Tiggemann M\(1997\).](http://www.ncbi.nlm.nih.gov/books/NBK32813/Jenkin W & Tiggemann M(1997).) “Psychological effects of weight retained after pregnancy”. *Women & Health*, Volume 25, issue 1, page 89-98. [https:// doi.org/10.1300/J013v25n01_06](https://doi.org/10.1300/J013v25n01_06)
- Khalaf, A., Westergren, A., Berggren, V., Ekblom, & rjan, & Al-Hazzaa, H. M. (2015). Perceived and Ideal Body Image in Young Women in South Western Saudi Arabia. *Journal of Obesity*, 2015. <https://doi.org/10.1155/2015/697163>
- Kraus P L (1999). “ Body image, decision making and breast cancer treatment”. *Cancer Nursing*, volume 22, issue 6, page 421-427-429.

Kruger J et al. (2008), “ Body Size Satisfaction and physical Activity Levels among Men and Women”. *Obesity*, Volume 16, issue 8, page 1976-1979.

<http://doi.org/10.1038/oby.2008.311>

Kuk J L & Wharton S (2016). “Differences in weight change trajectory patterns in a publicly funded adult weight management center”. *Obesity Science & Practice*, volume 2, issue 2, Page 215-223. <https://doi.org/10/1002/osp4.35>

Kumanyika S (1987). “Obesity in black women”. *Epidemiologic Reviews*, volume 9, page 31-50.

Lewinsohn, P. M., Breckenridge, J. S., Antonuccio, D. O., & Teri, L. (1985). A Behavioral Group Therapy Approach to the Treatment of Depression, 303–329.

https://doi.org/10.1007/978-1-4684-4958-7_11

Markowitz S et al. (2008). “Understanding the relation between Obesity and Depression: Causal Mechanisms and implications for treatment”. *Clinical Psychology: Science and Practice*, Volume 15, issue 1, Page 1-20.

<https://doi.org/10.1111/j.1468-2850.2008.00106.X>

Marshall C et al. (2012) . “Body dissatisfaction among middle-aged and older women”. *Canadian Journal of Dietetic Practice and Research: A Publication of Dietitians of Canada= Revue canadienne De La Pratique et de La recherch  En Dietetique : Une Publication Des Dietetistes Du Canada*, Volume 73, issue e, pages e241-e247. <https://doi.org/10.3148/73.2.2012.e241>

Matz PE et al. (2002). “Correlates of body image dissatisfaction among overweight women seeking weight loss”. *Journal of consulting and clinical Psychology*, Volume 70, issue 4, Pages 1040-1044.

- Miller S L & Wolfe R R (2008). “The danger of weight loss in the elderly”. *The Journal of Nutrition Health & aging*, volume 12, issue 7, pages 487-491.
- Miller C T & Downey K T (1999). “A Meta-Analysis of Heavyweight and Self-Esteem. Personality and Social Psychology review, Volume 3, issue 1, pages 68-84.
https://doi.org/10.1207/s15327957pspr0301_4.
- Moore D S (1978). “The body image in pregnancy”. *Journal of Nurse –Midwifery*, volume 22, issue 4, pages 17- 27.
- Morin K H et al. (2002). “ Attitudes and perceptions of body image in postpartum African American women. Does weight make a difference? MCN. *The American Journal of Maternal Child Nursing*, Volume 27, issue 1, pages 20-25.
- Musaiger, A. O. (2014). Body size preferences among young women in five Arab countries: a cross-cultural study. *International Journal of Adolescent Medicine and Health*, 26(3), 417–421. <https://doi.org/10.1515/ijamh-2013-0317>
- Musaiger, A. O., & Shahbeek, N. E. (2013). The effect of education and obesity on attitudes towards fads related to weight reduction among Arab women in Qatar. *Nutrition & Food Science*. <https://doi.org/10.1108/00346650110392352>
- Myers A & Rosen J C (1999). “ Obesity Stigmatization and coping : Relation to mental Health symptoms, body image and self-esteem”. *International Journal of Obesity and Related Metabolic Disorders: Journal of the International Association for the study of Obesity*, volume 23, issue 3, pages 221-230.
- Nikniaz et al. (2016). “Factors associated with body image dissatisfaction and distortion among Iranian women”. *Eating Behaviors*, Volume 22, pages 5-9.
<https://doi.org/10.1016/j.eatbeh.2016.03.018>

- Patt M R (2002). “Body image assessment: Comparison of figure rating scales among urban Black women”. *Ethnicity&Disease* , volume 12, issue 1, pages 54- 62.
- Pimenta A M et al (2009). “ Relationship between body image disturbance and incidence of depression: The SUN prospective cohort”. *BMC Public Health*, Volume 9, issue 1. <https://doi.org/10.1186/1471-2458-9-1>.
- [Pingitore R et al \(1997\). “Gender Differences in Body Satisfaction”, *Obesity Research*, Volume 5, issue 5, Pages 402-409.](#)
- Rallis S et al (2007). “Predictors of body image during the first year postpartum: A Prospective Study”. *Women & Health*, volume 45, issue 1, 87-104.
- Rguibi, M., & Belahsen, R. (2006). Body size preferences and sociocultural influences on attitudes towards obesity among Moroccan Sahraoui women. *Body Image*, 3(4), 395–400. <https://doi.org/10.1016/j.bodyim.2006.07.007>
- Richard, A., Rohrmann, S., Lohse, T., & Eichholzer, M. (2016). Is body weight dissatisfaction a predictor of depression independent of body mass index, sex and age? Results of a cross-sectional study. *BMC Public Health*, 16(1), 863. <https://doi.org/10.1186/s12889-016-3497-8>
- Romano, M., Cacciatore, A., Giordano, R., & La Rosa, B. (2010). Postpartum period: three distinct but continuous phases. *Journal of Prenatal Medicine*, 4(2), 22–25.
- Santos Silva, D A Nahas et al. (2011). “ Prevalence and associated factors with body image dissatisfaction among adults in southern Brazil: A population- based study”. *Body Image* , Volume 8, issue 4, pages 427-431. <https://doi.org/10.1016/j.bodyim.2011.05.009>
- Schilder, P. (1935). *The image and appearance of the human body*. APA PsycNET.

Retrieved from <http://psycnet.apa.org/psycinfo/1935-05693-000>

Schulte, S. J., & Thomas, J. (2013). Relationship between eating pathology, body dissatisfaction and depressive symptoms among male and female adolescents in the United Arab Emirates. *Eating Behaviors*, 14(2), 157–160.

<https://doi.org/10.1016/j.eatbeh.2013.01.015>

Schwartz M B & Brownell K D (2004). “Obesity and body image”. *Body image* , volume 1, issue 1, page 43- 56. [https://doi.org/10.1016/S1740-1445\(03\)00007-X](https://doi.org/10.1016/S1740-1445(03)00007-X)

Simon G E et al (2008). “Association between obesity and depression in middle-aged women”. *ResearchGate*, Volume 30, issue 1, pages 32 – 39.

<https://doi.org/10.1016/j.genhosppsy.2007.09.001>

Stevens C & Tiggemann M (1998). “Women’s body figure preferences across the life span”. *The Journal of Genetic Psychology*, Volume 159, issue 1, pages 94-102.

<https://doi.org/10.10800221329809596137>

Stice E & Whitenton K (2002). “Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology*, Volume 38, issue 5, pages 669-678.

Teasdale J D et al (1980). “Speech Rate as a measure of short term variations in depression. *British Journal of Social and clinical psychology*, volume 19, pages 271-278.

Thompson J (1996). “Body image, eating disorders and obesity: An emerging synthesis”. *Body Image, Eating Disorders and Obesity: An integrative Guide for Assessment and Treatment; Washington Dc: American Psychological Association*, Pages 1-20.

- Tiggemann M(2004). “Body image across the adult life span: Stability and change”.
Body Image , volume 1, issue 1, pages 29-41. [https://doi.org/10.1016/S1740-1445\(03\)00002-0](https://doi.org/10.1016/S1740-1445(03)00002-0)
- Vesco K K et al. (2009). “Excessive gestational weight gain and Postpartum weight retention among obese women”. *Obstetrics and Gynecology*, volume 114, issue 5, pages 1069-1075. <https://doi.org/10.1097/AOG.0b013e3181baeacf>
- Voelker D K et al (2015). “Weight status and body image perceptions in adolescents: current perspectives”. *Adolescent Health, Medicine and Therapeutics*, Volume 6, pages 149-158. <https://doi.org/10.2147/AHMT.S68344>
- Walker L et al. (2004). “Weight and behavioral and psychosocial factors among ethnically diverse, low-income women after childbirth II. Trends and correlates. *Women & Health*, volume 40, issue 2, pages 19-34.
https://doi.org/10.1300/J013v40n02_02
- Walker L O (2007). “Managing excessive weight gain during pregnancy and the postpartum period”. *Journal of Obstetric, Gynecologic and Neonatal Nursing*: JOGNN, volume 36, issue 5, pages 490 -500. <https://doi.org/10.1111/j.1552-6909.2007.00179.x>
- Wardle J & Johnson F (2002). “Weight and dieting: examining levels of weight concern in British Adults”. *International Journal of Obesity*, volume 26, issue 8, pages 1144-1149. <https://doi.org/10.1038/sj.ijo.0802046>.
- Zauderer C (2009). “Postpartum Depression: How child birth educators can help break the silence”. *The Journal of Perinatal Education*, volume 18, issue 2, pages 23-31.

11. APPENDICES

Appendix A: English Body Dissatisfaction Questionnaire

Appendix B: Arabic Body Dissatisfaction Questionnaire

Appendix A: English Body Dissatisfaction Questionnaire



Qatar University

Department of Health Sciences

Questionnaire

This survey is one of the methods that we are going to use to help us in our research about “prevalence and determinants of body dissatisfaction among Arab women at postpartum in Qatar”. We hope to be able to understand their food habits and their daily life style.

The following pages contain a series of statements about how women at postpartum might think, feel or behave. You are asked to indicate truly the answers to these statements.

Your answers to the items in this questionnaire are anonymous, so please do not write your name on any of the materials. In order to complete the questionnaire, read each statement carefully and be completely honest and answer all the items. There is no right or wrong answers. Just give the answer that is mostly accurate for you.

Please note that this is a purely academic, non-commercial study and all information you provide will be held in strict confidence.

Thank you for your help and good luck in your life.

Private information:

1. Age: _____
2. Nationality:
 - a. Qatari
 - b. Non-Qatari
3. Educational level:
 - a. Illiterate
 - b. Primary
 - c. Intermediate
 - d. Secondary
 - e. University
4. family income
 - a. less than 5000
 - b. 5000 to 10000
 - c. 10000 to 15000
 - d. Above than 15000
5. Employment status:
 - a. Not employed
 - b. If Employed:
 - a. Currently working at a job
 - b. on leave

Life events:

6. History of depression
 - a. Yes
 - b. No

Maternal characteristics:

7. Mode of delivery
 - a. Vaginal delivery
 - b. Cesarean

8. Lactation status:

- a. Fully breastfeeding
- b. Partially breastfeeding
- c. Non-breastfeeding

9. How many children you have? _____

10. Anthropometric measurements:

- **Height:** _____
- **Weight before pregnancy:** _____
- **Weight at delivery:** _____
- **Actual weight:** _____

Appearance:

1. Use this scale to indicate how satisfied you are with each of the following areas of aspects of your body.

Statements	Very dissatisfied	Mostly Dissatisfied	Neither satisfied nor dissatisfied	Mostly satisfied	Very satisfied
Face (facial features, complexion)					
Hair (color, thickness, texture)					
Lower torso (buttocks, hips, thighs, legs)					
Mid torso (waist, stomach)					
Upper torso (chest or breasts, shoulders, arms)					
Muscle tone					
Weight					
Overall appearance					

- 2. What do you think makes an individual attractive?**
 - a. Slim
 - b. Beauty
 - c. Outgoing
 - d. Friendly
 - e. Good personality
- 3. How happy are you with your present weight?**
 - a. Happy
 - b. Somewhat happy
 - c. Unhappy
- 4. Do you think you are?**
 - a. Underweight
 - b. Overweight
 - c. Normal weight
- 5. What do people think about your body?**
 - a. Thin
 - b. Fat
 - c. Moderate
- 6. I am careful select clothes that will make me look the best**
 - a. Agree
 - b. Disagree
 - c. Neither agree or disagree
- 7. How many times do you look at the mirror a day?**
 - a. More than 7
 - b. Less than 7
 - c. Never
 - d. Always
- 8. Do you carry a mirror in your bag whenever you go out, to work or to any other places?**
 - a. Yes
 - b. No

9. I am in control of my health

- a. Agree
- b. Disagree
- c. Neither agree or disagree

10. I know a lot about things that affect my physical health

- a. Agree
- b. Disagree
- c. Neither agree or disagree

11. I check my appearance in mirror whenever I can

- a. Agree
- b. Disagree
- c. Neither agree or disagree

12. I am very conscious of even small changes in my weight

- a. Agree
- b. Disagree
- c. Neither agree or disagree

13. It is important that I always look good

- a. Agree
- b. Disagree
- c. Neither agree or disagree

14. I take my health for granted

- a. Agree
- b. Disagree
- c. Neither agree or disagree

15. I am self-conscious if my grooming isn't right

- a. Agree
- b. Disagree
- c. Neither agree or disagree

Media:

16. Do you think the media's representation of females is accurate and a healthy image to portray (ex. are the images they show accurate to girls as yourselves?)

- a. Yes
- b. No

17. Does the way the media represent females in your age encourages girls to have a healthy self-esteem of them?

- a. Yes
- b. No

Food and diet:

18. Have you tried to lose/gain weight?

- a. Yes
- b. No

19. How much weight did you lose/gain when you were on a diet?

20. For how much time were you in trying to lose/gain weight?

21. What is the weight management technique that you use through your diet?

- a. Food eating habits
- b. Pills
- c. Excessive physical activity

22. From where do you get the information of perfect body-image?

- a. T.V.
- b. Magazines and newspapers (pictures)
- c. Internet.
- d. Friends and family

23. Circle (one or more) of the following:

* **If I want to lose weight, I will**

- a. Reduce the amount of food I used to eat.
- b. Exercise more.
- c. Skip meals.
- d. Starve myself the whole day.
- e. Use weight reducing medications.

* **If I want to gain weight, I will**

- a. Increase the amount of food I used to eat.
- b. Eat more meals than I usually eat each day.
- c. Take supplements to increase energy intake.
- d. Eat food that contains high fat.

24. I make no special effort to eat a balanced and nutritious diet

- a. Agree
- b. Disagree
- c. Neither agree or disagree

25. I have tried to lose weight by fasting or going on crash diet

- a. Never
- b. Rarely
- c. Sometimes
- d. Often

26. How many times do you measure your weight?

- a. Daily
- b. Weekly
- c. Monthly

27. Does your weight affect your mood?

- a. Yes
- b. No

28. Do you eat your breakfast before going to work?

- a. Yes
- b. No

29. What do you eat at work?

- a. Sandwiches
- b. Chips
- c. Chocolate
- d. Made at home

30. Do you eat lunch at home?

- a. Yes
- b. No

31. What do you mostly like to drink?

- a. Fresh juices
- b. Soft drinks (Pepsi, 7up,)
- c. Hot drinks (coffee, tea,)
- d. Milk

Physical activity:

32. Do you like doing exercises:

- a. Yes
- b. No

33. How many times do you exercise?

- a. Daily
- b. Weekly
- c. Monthly
- d. never

34. What is the kind of exercises that you do?

- a. Walking
- b. Running
- c. Playing (tennis, football,,,,)
- d. Specific exercise on the body

Social and culture:

35. In a day, how many meals do you have?

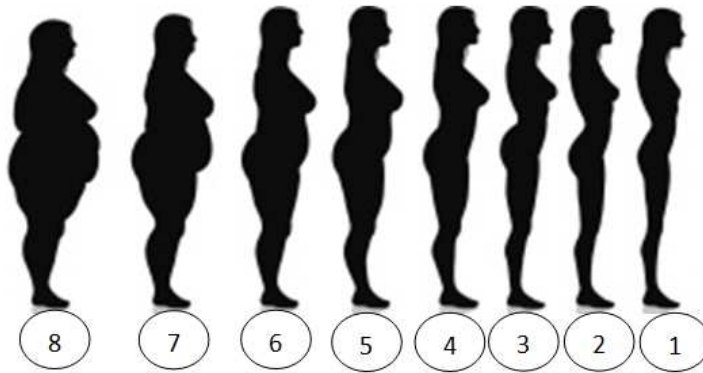
- a. 2
- b. 3
- c. 4
- d. 5
- e. 6

36. At which meal do you sit and eat with your family?

- a. At all meals
- b. Just on lunch and dinner
- c. Lunch
- d. Dinner
- e. Breakfast and lunch
- f. Breakfast and dinner

❖ Shape of the body :

37. For the following pictures please select the shape that best describes:



Thin	
Normal Weight	
Fat	

Look Best	
Clumsy	
More popular than other	
The stronger	
The weakest	
The happiest	
The most unhappy	

You want to look like	
Your friend will want you to look like	

You look the most like	
------------------------	--

Appendix B: Arabic Body Dissatisfaction Questionnaire



كلية العلوم الصحية

الاستبيان

هذه الدراسة هي واحدة من الأساليب التي سيتم استخدامها لمساعدتنا في البحث عن " صورة الجسم ومسبباته على النساء العربيات بعد الولادة في قطر "، ونأمل أن نكون قادرين على معرفة عاداتهم الغذائية ونمط الحياة اليومية.

الصفحات التالية تحتوي على سلسلة من الأسئلة حول كيفية تفكير أو شعور النساء بعد الولادة عن صورة الجسم، ونطلب منك أن تبين الإجابة الصحيحة على هذه الأسئلة.

جوابك على الأسئلة الواردة في هذا الاستبيان سوف تكون مجهولة الهوية، ويجب الإجابة على جميع الأسئلة، وليس هناك إجابات صحيحة أو خاطئة، فقط اختر الإجابة التي تراها أكثر دقة بالنسبة لك.

يرجى العلم بأن هذه دراسة أكاديمية غير تجارية، وجميع المعلومات التي تقدمينها سوف تكون في سرية تامة.

"شكرا لكم على مساعدتكم وحظا طيبا"

البيانات الشخصية:

1. العمر _____
2. الجنسية :
 - a. قطري
 - b. غير قطري
3. المستوى التعليمي:
 - a. غير متعلم
 - b. ابتدائي
 - c. إعدادي
 - d. ثانوي
 - e. جامعي
4. مدخل الأسرة:
 - a. أقل من 5000 ريال قطري
 - b. بين 5000 إلى 10000 ريال قطري
 - c. بين 10000 إلى 15000 ريال قطري
 - d. أكثر من 15000 ريال قطري
5. الوظيفة :
 - a. غير موظف
 - b. موظف:
 - a. على رأس العمل
 - b. في إجازة

أحداث الحياة

6. هل مررت بإكتئاب ما بعد الولادة
 - a. نعم
 - b. لا

خصائص الأمهات:

7. طريقة الولادة:
 - a. طبيعي
 - b. عملية قيصرية

8. حالة الرضاعة:

a. رضاعة طبيعية كاملة

b. رضاعة طبيعية و حليب صناعي

c. حليب صناعي

9. كم عدد أطفالك ؟ _____

10. القياسات:

- الطول _____
- الوزن قبل الحمل _____
- الوزن أثناء الولادة _____
- الوزن الحالي _____

المظهر العام:

1. استخدم هذا الجدول للتعبير عن مدى رضائك لكل من المناطق التالية في جسمك.

البيانات	مستاء جدا	مستاء فالغالب	بين مستاء وراضي	راضي فالغالب	راضي جدا
الوجه (ملامح الوجه، بشرة)					
الشعر (اللون، السمك، الملمس)					
أسفل الجسم (الأرداف، الوركين، الفخذين، الساقين)					
منتصف الجسم (الخصر، المعدة)					
أعلى الجسم (الصدر، التفتين، الذراع)					
قوة العضلة					
الوزن					
الشكل العام					

2. برأيك م الذي يجعل الشخص جذابا؟
- الرشاقة
 - الجمال
 - الشكل الخارجي
 - اجتماعي
 - الشخصية الجيدة
3. مامدى سعادتك بوزنك الحالي؟
- سعيد
 - سعيد بعض الشئ
 - غير سعيد
4. هل تعتقد بأن:
- وزنك قليل
 - وزنك زائد
 - وزنك طبيعي
5. ماهي نظرة الناس لجسمك؟
- ضعيف
 - ممتلئ
 - متوسط
6. "أنا أهتم بشراء ملابس تظهرني بأفضل مظهر؟"
- موافق
 - غير موافق
 - بين موافق وغير موافق
7. كم عدد المرات في اليوم الواحد، تشاهد فيها نفسك في المرآة ، ؟
- أكثر من 7 مرات
 - أقل من 7 مرات
 - أبدا
 - دائما
8. هل تحمل مرآه في حقيبتك وأينما ذهبت سواء إلى العمل أو اي مكان آخر؟
- نعم
 - لا

9. "أنا مسيطر ومتحكم بصحتي"

a. موافق

b. غير موافق

c. بين موافق وغير موافق

10. "لدي معلومات كثيرة عن الأشياء التي تؤثر على صحتي الجسدية؟"

a. موافق

b. غير موافق

c. بين موافق وغير موافق

11. أتأكد من مظهري في المرآة متى ما استطعت:

a. موافق

b. غير موافق

c. بين موافق وغير موافق

12. "ألاحظ حدوث أي تغير في وزني حتى لو كان بسيطاً"

a. موافق

b. غير موافق

c. بين موافق وغير موافق

13. من المهم أن أكون بمظهر جيد دائماً

a. موافق

b. غير موافق

c. بين موافق وغير موافق

14. "أنا أهتم بصحتي"

a. موافق

b. غير موافق

c. بين موافق وغير موافق

15. "أنا أهتم بمظهري العام"

a. موافق

b. غير موافق

c. بين موافق وغير موافق

الإعلام:

16. هل تعتقد أن وسائل الإعلام تمثل الإناث بصورة دقيقة وسليمة للتصوير (مثلا: هل الصور التي تعرضها وسائل الإعلام دقيقة في عرض صورة الفتيات الحقيقية؟)
- a. نعم
b. لا
17. هل طريقة الإعلام في عرض مواضيع الفتيات من عمرك تحفز الفتيات الحصول على تعزيز الثقة بالنفس؟
- a. نعم
b. لا

الغذاء والتغذية:

18. هل حاولت أن تخسر /تزيد من وزنك؟
- a. نعم
b. لا
19. مامقدار الوزن الذي خسرتَه/اكتسبته عندما كنت تتبع حمية؟
-
20. ماهي المدة التي كنت تحاول فيها أن تخسر / تكسب وزنا؟
-
21. ماهي الطريقة التي استخدمتها للتحكم بوزنك خلال الحمية الغذائية؟
- a. تغيير عادات تناول الطعام
b. تناول حبوب
c. الإكثار من النشاط البدني
22. من أين اكتسبت المعلومات حول الصورة المثالية للجسم؟
- a. التلفزيون
b. صور المجلات والجرائد
c. الانترنت/ الانستقرام والبرامج الأخرى
d. العائلة والأصدقاء

23. ضع دائرة على (اجابة أو أكثر) حول الآتي:

* "إذا أردت أن أخسر وزنا، سوف"

- a. أقل من كمية الطعام الذي أتناوله
- b. أكثر من الرياضة
- c. ألغي الوجبات
- d. أجوع نفسي طول اليوم.
- e. أستخدم أدوية التي تقلل الوزن

* إذا أردت أن أكسب وزنا، سوف"

- a. أزيد من كمية الطعام الذي أتناوله
- b. أتناول الوجبات أكثر من المعتاد تناوله في اليوم الواحد
- c. أتناول حبوب لزيادة مقدار الطاقة الغذائية
- d. أتناول طعام يحتوي كمية عالية من الدهون

24. لا أقوم بعمل مجهود خاص لتناول غذاء صحي ومتوازن

- a. موافق
- b. غير موافق
- c. بين موافق وغير موافق

25. حاولت أن أخسر وزنا من خلال الصيام أو اتباع حمية قاسية

- a. أبدا
- b. نادرا
- c. بعض المرات
- d. غالبا

26. كم عدد المرات التي تقيس فيها وزنك؟

- a. يوميا
- b. اسبوعيا
- c. شهريا

27. هل وزنك يؤثر على مزاجك؟

- a. نعم
- b. لا

28. هل تتناول فطورك قبل الذهاب للعمل؟

a. نعم

b. لا

29. ماذا تتناول في العمل

a. سندويشات

b. بطاطس

c. شوكولاته

d. طعام من المنزل

30. هل تتناول الغداء في المنزل؟

a. نعم

b. لا

31. ماذا تحب أن تشرب غالبا؟

a. عصائر طازجة

b. مشروبات غازية (بيبيسي، سفن أب، ...)

c. مشروبات ساخنة (قهوة، شاي، ..)

d. حليب

النشاط البدني:

32. هل تحب أن تقوم بعمل الرياضة؟

a. نعم

b. لا

33. كم مرة تقوم بعمل الرياضة؟

a. يوميا

b. اسبوعيا

c. شهريا

d. أبدا

34. مانوع الرياضة التي تقوم فيها؟

a. المشي

b. الركض

c. ممارسة (التنس، كرة القدم، ..)

d. رياضة خاصة للجسم

الحياة الاجتماعية والثقافية:

35. كم وجبة تتناول في اليوم؟

a . 2

b . 3

c . 4

d . 5

e . 6

36. في أي وجبة تجلس فيها مع عائلتك وتناول الطعام؟

a . كل الوجبات

b . وجبة الغداء والعشاء فقط

c . الغداء

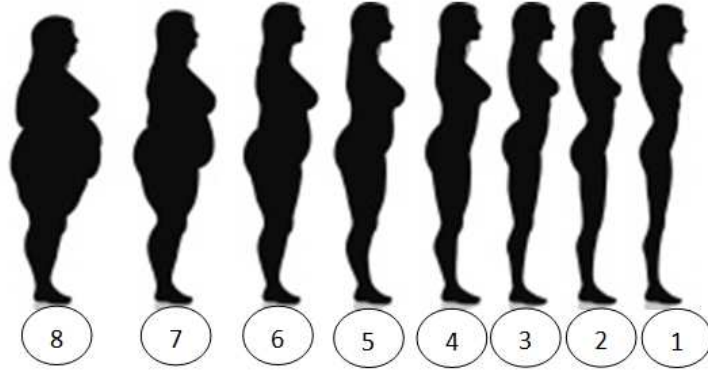
d . العشاء

e . الفطور والغداء

f . الفطور والعشاء

❖ شكل الجسم:

37. من خلال الصور التالية، الرجاء تحديد الشكل الذي يصف الصورة:



	ضعيف
	وزن طبيعي
	ممتلئ

	تبدو أفضل
	غير رشيق
	أكثر شعبية من الآخرين
	الأقوى
	الأضعف
	الأسعد
	الأتعس

	تريد أن تصبح مثل
	صديقك يريدك أن تصبح مثل

	أنت تبدو غالبا مثل
--	--------------------