

Nomen Health, Author manuscript; available in PMC 2010 September 1.

Published in final edited form as:

Women Health. 2009 September; 49(6): 491–504. doi:10.1080/03630240903423998.

Predictors of Mothers' Postpartum Body Dissatisfaction

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Abstract

Purpose—To investigate changes in mothers' body dissatisfaction from delivery to 9 months postpartum, and the relationship of postpartum body dissatisfaction to weight, other health, and social characteristics.

Methods—In this prospective longitudinal study, 506 mothers completed surveys at 0-1 and 9 months postpartum. Postpartum changes in body dissatisfaction and weight were evaluated by paired t-tests, and predictors of postpartum body dissatisfaction were identified by stepwise multiple regression analysis.

Results—Mothers' body dissatisfaction increased significantly from 0-1 to 9 months postpartum (mean scores of 15.2 and 18.2, respectively, p < .001). Although women lost an average of 10.1 pounds (sd = 16.3) or 4.6 kg. (sd = 7.4) between 0-1 and 9 months postpartum (p < .001), their weight at 9 months postpartum remained an average of 5.4 pounds (sd = 15.6) or 2.5 kg (sd = 7.1) above their pre-pregnancy weights (p < .001). Body dissatisfaction at 9 months postpartum was associated with overeating or poor appetite, higher current weight, worse mental health (SF-36 Mental Health scale), race other than black, bottle-feeding (vs. breastfeeding), being single (vs. married), and having fewer children,.

Conclusions—Mothers' body satisfaction worsened from 1 to 9 months postpartum, and 9-month body dissatisfaction was associated with eating/appetite abnormalities, greater weight, worse mental health, non-black race, non-breastfeeding status, and fewer immediate family relationships. Given these relationships, it is important to educate women about expected postpartum weight and body changes, and to find ways to enhance mothers' postpartum self-esteem and body satisfaction.

Keywords

postpartum; body image; mental health; weight gain							
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Pregnancy and childbirth are associated with dramatic changes in women's body shape and size, and for many women, these changes are perceived negatively, resulting in body dissatisfaction, or a negative body image (Jenkin & Tiggemann, 1997; Rallis, Skouteris, Wetheim, & Paxton, 2007; Skouteris, Carr, Wetheim, Paxton, & Duncombe, 2005). "Body image" has been defined as an individual's internal representation of his or her own outer appearance, and "body dissatisfaction" as one facet of body image relating to dissatisfaction with particular aspects of the body (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). One prospective study evaluated changes in mothers' weight and body satisfaction from before pregnancy to one month after delivery, and found that mothers were on average 4.88 kg. heavier after delivery than before becoming pregnant, and they were less satisfied with their weight and shape after delivery (Jenkin & Tiggemann, 1997). Similarly, another longitudinal study found that women experienced greater levels of body dissatisfaction in the postpartum period than during pre-pregnancy or late pregnancy (Rallis et al., 2007).

While a decline in body satisfaction is important in its own right, it is also important because it may contribute to other problems. For example, women who are preoccupied or less satisfied with their body shape are less likely to breastfeed (Barnes, Stein, Smith, & Pollock, 1997; Foster, Slade, & Wilson, 1996; Walker & Freeland-Graves, 1998). Other studies have demonstrated a relationship between postpartum body dissatisfaction or poor body image and depressive symptoms or psychological distress (Abraham, Taylor, & Conti, 2001; Clark, Skouteris, Wertheim, Milgrom, Paxton, 2009; Dipietro, Millet, Costigan, Gurewitsch, & Caulfield, 2003; Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Walker, Timmerman, Kim, & Sterling, 2002; Walker et al., 2004). Depression could provoke body dissatisfaction either through diminished self-esteem or overeating, weight retention, and obesity, each of which have been linked to perinatal depression and/or anxiety (Carter, Baker, & Brownell, 2000; Herring et al., 2008; Hurley, Caufield, Sacco, Costigan, & Dipietro, 2005; Laraia, Siega-Riz, Dole, & London, 2008). Alternatively, body dissatisfaction could lower a mother's self-esteem and thereby contribute to depression.

In additional to mothers' psychological distress and breastfeeding status, other factors that have been found to be associated with perinatal body/shape dissatisfaction or poor body image include: prior body image (Rallis et al., 2007), race (Walker et al., 2002), gestational weight gain (Rallis et al., 2007), postpartum weight (Jenkin & Tiggemann, 1997), postpartum weight gain among bottle-feeding mothers (Walker & Freeland-Graves, 1998), dieting behaviors (Rallis et al., 2007), perceived socio-cultural pressure (Skouteris et al., 2005), and perception of teasing (Skouteris et al. 2005).

Noteworthy among body dissatisfaction-related factors are those related to weight. Excessive gestational weight gain, defined as over 35 pounds for normal weight women, over 25 pounds for overweight women, and over 20 pounds for the obese (Institute of Medicine, 2009), may be associated with long-term weight retention (Gunderson et al., 2004; Linne, Dye, Barkeling, & Rossner, 2004) or obesity (Gunderson et al., 2004; Rossner, 1997; Rossner & Ohlin, 1995), which could in turn lead to body dissatisfaction. However, it is not clear which weight characteristic (e.g., prenatal weight, postpartum weight, or pre-pregnancy to postpartum weight gain/retention) is most important in predicting body dissatisfaction. Also unknown is the contribution of certain social variables (some discretionary), such as employment status, marital status, number of children, or baby's gender to postpartum body dissatisfaction. Further, given the relationship between postpartum body image concerns, mood disorders, and eating disorders suggested by other researchers (Astrachan-Fletcher, Veldhuis, Lively, Fowler, & Marcks, 2008), it is important to consider the relationship of abnormal appetite or eating to postpartum body dissatisfaction.

Taken together, these studies show preliminary evidence of a decline in body satisfaction after delivery, and a relationship between postpartum body dissatisfaction and breastfeeding, depressive symptoms, eating disorders, and postpartum weight and weight retention. However, the relative importance of each of these factors, particularly the weight variables, and the significance of certain social factors such as close relationships or employment status remain unknown. Therefore, this study sought to help fill these gaps by investigating the relationship of postpartum body dissatisfaction to current postpartum weight, weight retention, certain social characteristics (e.g., marital status, number of children, employment status), other demographic and health characteristics, and several of the above-listed previously identified correlates (e.g., breastfeeding status, mental health, and poor appetite or overeating).

Methods

Setting and Participants

This analysis was conducted from surveys administered from October, 2005 through June, 2007, for a randomized, controlled trial (RCT) that tested the impact of stepped collaborative care on postpartum depression outcomes (Gjerdingen, Crow, McGovern, Miner, & Center, 2009). All 506 trial participants were included in this study. The University of Minnesota's Institutional Review Board approved the study prior to its initiation.

Mothers' eligibility criteria for the RCT included: English literate, ≥12 years of age and mother of 0-1 month old infant who received care at one of 7 participating Minneapolis/St. Paul metropolitan area clinics: 4 were urban university-affiliated family medicine residency clinics, and 3 were suburban, private pediatric clinics. As each woman registered her infant for an initial visit, research assistants (RAs) informed mothers of the study and gave them enrollment packets (consisting of a brief description of the study, a self-administered questionnaire that screened for eligibility, consent form, and initial survey). Although RAs attempted to approach as many mothers as possible, some mothers were missed due to RAs' multiple, often competing responsibilities (e.g., RAs also registered infants and made follow-up appointments). Eligible, willing mothers completed their informed consent and initial survey at this time, and were mailed a follow-up survey at 9 months postpartum.

Of approximately 1988 mothers encountered during the enrollment phase of the study, an estimated 1556 were eligible (most of the 432 non-eligible women were not English literate). Of the 1556 eligible women, 506 (33%) women participated, and 1050 did not participate for various reasons: 170 were known refusals, 65 completed the enrollment form but not the first survey, and 815 were either not offered the enrollment packet for reasons described above, or ignored it, due to tacit refusal or preoccupation with infant care or form completion.

Measures

Survey measures included the following:

1. <u>Body dissatisfaction</u> (0-1 and 9 month surveys), defined as dissatisfaction with particular aspects of the body (Thompson et al., 1999), was assessed by sum score of the 8-item Body Shape Questionnaire, Alternate Form 8B (Evans & Dolan, 1993; www.psyctc.org/tools/bsq/). Responses are given on a 6-point scale (possible score range 8-48), with a higher body shape score representing a greater number of body concerns relating to physical appearance, or more body dissatisfaction. This 8-item survey, derived from the 34 item Body Shape Questionnaire, has been previously tested on 342 adult women attending a London family planning and well woman clinic (mean age 27 years, 60% never married, mean body mass index of 22.4). In that study, the mean score was 20.4 (sd = 8.1), Cronbach's alpha = .87, and the scale correlated

- significantly with body mass index, anxiety, and depression measures (Evans & Dolan, 1993).
- 2. <u>Demographic information</u> (all from 0-1 month survey except marital status, taken from 9 month survey): age, education, marital status, annual family income, race, health insurance, number of children, and baby's gender.
- **3.** Employment status (9 month survey): this question asked whether the woman was employed, currently working at a job, or on leave.
- **4.** General Health (9 month survey): consisted of the widely used single-item rating of health from the SF-36, "In general, would you say your health is: poor, fair, good, very good, or excellent?" (range 1-5; Ware, Snow, Kosinski, & Gandek, 1993).
- **5.** Depressive symptoms (0-1 and 9 month surveys): Patient Health Questionnaire, 9-item depression module (PHQ-9; possible range of total score 0-27; Kroenke, Spitzer, & Williams, 2001).
- **6.** Mental health (9 month survey): 5-item SF-36 Mental Health scale, which consists of items relating to both positive and negative mental states (i.e., nervous, down in the dumps, calm and peaceful, down-hearted and blue, happy person; range 5-30; Ware et al., 1993).
- 7. Poor appetite or overeating (9 month survey): this PHQ-9 item asks "How often over the past 2 weeks have you been bothered by a poor appetite or overeating?" (range 0-3; 0 = not at all, 1 = several days, 2 = more than half the days, and 3 = nearly every day). Mean scores in primary care populations have ranged from approximately 0.4 to 1.0 (Huang, Chung, Kroenke, Delucchi, & Spitzer, 2006).
- **8.** Breastfeeding status (9 month survey): currently breastfeeding (yes/no)
- 9. Mother's weight: included self-reported current weights (0-1 and 9 month surveys), and recalled pre-pregnancy weight (0-1 month survey). In a previous study, self-reported weight correlated well with measured weight, with only small errors which increase somewhat in overweight groups (Rowland, 1990). In another study of overweight and obese women, participants underestimated their weight by an average of 0.8 kg (Rossouw, Senekal, & Stander, 2000).

Statistical Analysis

We performed paired t-tests to compare participants' body image scores at 0-1 and 9 months postpartum. We also used paired t-tests to determine significant maternal weight changes from pre-pregnancy to 0-1 month and 9 months postpartum.

We conducted a stepwise multiple regression analysis to explore the relationship between mothers' postpartum body dissatisfaction and variables previously shown to be related to body dissatisfaction (e.g., mental health, not breastfeeding, postpartum weight and weight retention), as well as other important demographic and social variables not previously associated with body dissatisfaction (e.g., marital status, number of children, and employment status). New variables that were significant at p < .05 were allowed to enter the equation and were removed if p became greater than .10 (no variables were removed from the equation). We selected the model with the highest variance (R square), and goodness of fit was determined by whether the proportion of variance accounted for by the model was significant (p < .05). We did not examine interactions. The dependent variable was the 9-month body dissatisfaction score, and the independent variables were: mother's age, education, marital status, family income, race (black vs. other), health insurance (medical assistance vs. other or no insurance), number of children, baby's gender, breastfeeding status (any vs. none), currently working at a job, PHQ-9

depressive symptom score, mental health score (SF-36), general health, poor appetite or overeating, pre-pregnancy weight, 9 month postpartum weight, and weight change from pre-pregnancy to 9 months postpartum.

We also evaluated the potential impact of our stepped collaborative care intervention (consisting of a multidisciplinary treatment team, including care manager) on body dissatisfaction for the 39 depressed women who were in the RCT component of the study by performing a one-way analysis of variance, with body dissatisfaction as the dependent variable and treatment group as the independent variable.

We computed Cronbach's internal consistency on the Body Shape Questionnaire and evaluated stability of this scale over time with Pearson's Correlation Coefficient on the 0-1 month and 9-month Body Shape Questionnaire total score. Cronbach's alpha for the Body Shape Questionnaire was 0.88 at 0-1 month, and 0.89 at 9 months postpartum. The stability of the Body Shape Questionnaire score from 0-1 month to 9 months postpartum was r = .56, indicating that this measure of body dissatisfaction was fairly stable over time.

Results

Participants

Five hundred six women completed the initial survey, and 472 completed the 9 month survey. Participants' demographic characteristics (Table 1) revealed a somewhat diverse sample, with approximately two-thirds of women being married, employed and white, and nearly one-third on medical assistance. Although we do not have information about the characteristics of eligible non-participants, we do know that the 34 drop-outs (women who did not complete the final survey) were on average younger, less educated, had more children, and were more likely to be single, compared to women who completed the study (Gjerdingen et al., 2009). The 0-1 month survey was completed at an average of 16.8 days (sd = 10.1) postpartum, and the 9-month survey at an average of 38.7 weeks (sd = 1.7) postpartum.

Change in Weight

Mean self-reported weights at three time intervals were: 150.1 pounds (sd = 35.4) or 68.2 kg. (sd = 16.1) at pre-pregnancy, 166.1 pounds (sd = 37.3) or 75.5 kg. (sd = 17.0) at 0-1 months postpartum, and 155.9 pounds (sd = 37.4) or 70.9 kg. (sd = 17.0) at 9 months postpartum (Table 1). Participants lost an average of 10.1 pounds (sd = 16.3) or 4.6 kg (sd = 7.4) from 0-1 months to 9 months postpartum (p < .001), and remained an average 5.4 pounds (sd = 15.6) or 2.5 kg. (7.1) heavier at 9 months postpartum, compared to pre-pregnancy (p < .001).

Change in Body Dissatisfaction

On average, mothers' body dissatisfaction increased significantly from 0-1 to 9 months postpartum. On a scale for which larger numbers reflect greater body dissatisfaction, the mean Body Shape score increased by 3.0 points, from 15.2 (sd = 7.0) at 0-1 month to 18.2 (sd = 8.5; p < .001) at 9 months postpartum (Table 2).

Characteristics Related to Body Dissatisfaction

Body dissatisfaction at 9 months postpartum was significantly associated with overeating or poor appetite, higher current weight, worse mental health (SF-36 mental health scale), being single (vs. married), race other than black, bottle feeding (vs. breastfeeding), and having fewer children (Table 3). Variables that were not significantly related to body dissatisfaction included: mother's age, education, income, health insurance, currently working at a job, PHQ-9 depressive symptom score, general health, pre-pregnancy weight, weight gain from pre-

pregnancy to 9 months postpartum, and baby's gender. In addition, body dissatisfaction was not influenced by our stepped care intervention.

Discussion

Postpartum Body Dissatisfaction

In this sample of postpartum women, body dissatisfaction increased from 0-1 to 9 months postpartum. This is in line with Rallis et al.'s (2007) finding that women's body dissatisfaction is greatest at 6 months postpartum, and with other research indicating that body image becomes increasingly negative during pregnancy and reaches its nadir during the postpartum period (Drake, 1988; Moore, 1978).

To put the current findings in context, the mean responses to items such as "feeling ashamed of your body" and "avoiding wearing clothes which make you particularly aware of the shape of your body" increased from a score of "rarely" to "sometimes." Thus the absolute body dissatisfaction scores indicated a relatively low level of concern. In addition, the mean total score of 18.2 at 9 months postpartum indicated greater body satisfaction in our sample, compared to Evans & Dolan's (1993) sample of mostly single young adult women (average age of 27 years), whose mean score was 20.4. Despite this, the lower body dissatisfaction scores were significantly associated with poorer mental health, highlighting the importance of body satisfaction to women.

Relationship of Postpartum Body Dissatisfaction to Weight and Mental Health

We found that at 9 months postpartum mothers weighed an average of 5.4 pounds or 2.5 kilograms more than before pregnancy. This postpartum weight retention is in line with a historical upward trend. In 1995, the mean 12 month postpartum weight retention in a cohort of 1423 Swedish women was 0.5 kg, (Rossner, 1997; Rossner & Ohlin, 1995) while in 2003 a mean 12 month weight retention of 1.51 kg. was reported in a prospective study of 540 women in upstate New York (Olson & Strawderman, 2003).

Mothers' body dissatisfaction at 9 months postpartum was associated with greater current weight, but not with pre-pregnancy (baseline) weight or 9 month postpartum weight retention. Previous investigators have shown that women want to return to a normal weight after childbirth (Fairburn & Welch, 1990; Walker & Freeland-Graves, 1998), so it is possible that this expectation contributed to an increase in body dissatisfaction ratings at the later postpartum interval. The significant relationship found here between body dissatisfaction and 9 month postpartum weight suggests that the postpartum period, often characterized by greater weight and slow return to former body shape, may predispose women to a poorer body image in a culture that often equates beauty with thinness.

This cultural "thinness" mindset could unfortunately have negative repercussions on a mother's mental health. Similar to previous studies that documented an association between perinatal depressive symptoms and body image or shape concerns (Abraham et al., 2001; Dipietro et al., 2003; Walker et al., 2002), our study also showed a significant relationship between body dissatisfaction and poorer mental health. It is interesting to note that our global measure of mental health, the SF-36 Mental Health Scale, was a better predictor of body dissatisfaction than was our measure of depressive symptoms, the PHQ-9. While we do not know the direction of causation between poor mental health and body dissatisfaction, it is possible that this relationship is bi-directional: that is, poor mental health may contribute to body dissatisfaction, and body dissatisfaction could also predispose to mental health declines. Further, the combination of body dissatisfaction and poor mental health may heighten the risk for postpartum eating disorders, as suggested by other investigators (Astrachan-Fletcher et al.,

2008), as well as our own findings of a significant association between body dissatisfaction and poor appetite or overeating.

Relationship of Postpartum Body Dissatisfaction to Demographic Characteristics

Our finding that black women had greater body satisfaction is also supported in previous research. In an ethnically diverse low income sample of women at 6 weeks postpartum, 76 of whom were Anglo/White, 72 African American, and 135 Hispanic, the Anglo mothers had the highest number of negative body image components and the African-American women had the least (Walker et al., 2002). Similarly, in a study of 114 female college students, African-American Women had both higher levels of self-esteem and a more positive body image than did white women (Molloy & Herzberger, 1998).

Prior research on the relationship between body image and marital status is mixed: some studies showed no association between body image and marital status (Friedman, Dixon, Brownell, Whisman, & Wilfley, 1999; Khorshid, Eser, Denat, & Cinar, 2007), and others, like ours, showed a positive association (Manos, Sebastian, Bueno, Mateos, & De la Torre, 2005). Less evidence exists from prior work about the link between mothers' body image and number of children; however, it is possible that these close social relationships could positively affect a mother's body image and self esteem.

Relationship of Body Satisfaction to Breastfeeding

Mothers' postpartum body satisfaction was also associated with breastfeeding. This is consistent with three previous studies that showed a relationship between intent to breastfeed and positive body image (Barnes, Stein, Smith, & Pollock, 1997; Foster et al., 1996; Huang, Wang, & Chen, 2004). In a study of 195 Taiwanese women, those who intended to breastfeed rated their pre-pregnancy body image more positively than those who planned to bottle-feed (Huang et al., 2004). A study of 38 British women showed that women intending to bottle-feed had a higher level of body shape concerns (Foster et al., 1996). Similarly, in the large (n = 12,000) Avon Longitudinal Study of Pregnancy and Childhood, women who were preoccupied with their body shape and those who expressed controlling, less child-centered responses to managing an infant were less likely to express intentions to breastfeed (Barnes et al., 1997). In contrast, in a survey of 207 women at approximately 4 months postpartum no significant differences in body image scores or in postpartum weight retention were observed between breast- and bottle-feeding mothers (Walker & Freeland-Graves, 1998). Thus, most of the current evidence points to a positive relationship between breastfeeding (or intent to breastfeed) and mother's body image.

Strengths and Weaknesses

Strengths of this study included its primary care-based sample, prospective longitudinal design, use of a previously tested body shape (dissatisfaction) survey, and the evaluation of women's body dissatisfaction at a time when their bodies were undergoing dramatic changes, that is, after childbirth. The study also had several limitations, including possible social acceptability bias in the self-reported data on weight and body dissatisfaction, and potential participation bias and non-representativeness of the study sample, resulting from our exclusion of non-English literate women, our relatively low participation rate (due to women either refusing to participate or not being approached —we often could not differentiate between the two), and study dropouts (who were younger, less educated, and more often single). In addition, study follow-up was limited to 9 months postpartum, making it difficult to know whether body satisfaction improves beyond 9 months, as occurred in the Rallis et al. (2007) study.

Conclusions

This study showed a significant increase in mothers' postpartum body dissatisfaction over 9 months, and a relationship between body dissatisfaction and higher postpartum weight. Further, findings suggest that breastfeeding and close social relationships (e.g., spouse and children) may positively affect mothers' body satisfaction, although the direction of causation remains unknown. Given the many ways in which body image, weight gain, and mental health are intertwined, along with current trends toward increasing obesity and postpartum weight retention, it is important to educate women about the expected course of postpartum weight loss and body changes, and to find ways to enhance mother's body image and self esteem after delivery.

Acknowledgments

This study was funded by the National Institute of Mental Health. None of the authors has a conflict of interest.

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 $\label{eq:Table 1} \textbf{Participants' Characteristics}^* \ in \ Frequencies \ (\%) \ or \ Means \ (sd), \ n=506$

Characteristic	Number (%) or Mean (sd
Race/Ethnicity, # (%)	
White	339 (67.0%)
Black or African American	89 (17.6%)
Asian	34 (6.7%)
Other	44 (8.7%)
Total Annual Family Income, # (%)	
≥\$80,000	178 (36.5%)
\$20,000 - \$79,999	177 (36.3%)
< \$20,000	133 (27.3%)
Education, # (%)	
≥ 4-year degree	263 (52.2%)
High School Diploma or some Post-High School	160 (31.8%)
< High School Diploma	81 (16.1%)
Health Insurance, # (%)	
Private Insurance	257 (55.3%)
Medical Assistance	142 (30.5%)
None	6 (1.3%)
Mother's age in years, mean, s.d.	29.1 (6.2)
Married (9 month survey), # (%)	328 (65.2%)
Employed: working or on leave (9 month survey), # (%)	322 (63.6%)
Having only one child, # (%)	207 (41.7%)
Breastfeeding (9 month survey), # (%)	155 (32.9%)
Weight, pounds or kilograms (s.d.)	
Baseline (pre-pregnancy)	150.1 (35.4) lb.
	68.2 (16.1) kg.
0-1 month postpartum	166.1 (37.3) lb.
	75.5 (17.0) kg.
9 months postpartum	155.9 (37.4) lb.
	70.9 9 (17.0) kg.
PHQ-9 (9 mo.), mean (sd)	3.7 (4.5)
Possible range: 0-27; higher score – more depressive symptoms	
Mental Health Score (9 mo.) mean (sd)	24.3 (4.0)
Possible range: 5-30; higher score – better mental health	
General Health Score (9 mo.), mean (sd)	3.6 (0.9)
Possible range: 1-5; higher score – better general health	
Poor appetite or overeating, (9 mo.), mean (sd)	0.5 (0.8)
Possible range: 0-3; higher score – greater difficulty	

 $^{^{}st}$ Characteristics were measured at 0-1 month postpartum, unless otherwise stated.

 Table 2

 Body Shape Questionnaire:* Item Means (sd) at 0-1 and 9 Months Postpartum (n=506)

Questions	0-1 Month Mean (sd)	9 Month Mean (sd)
1. Have you worried about your flesh being not firm enough?	2.4 (1.4)	2.7 (1.5)
2. Has eating even a small amount of food made you feel fat?	1.5 (0.9)	1.8 (1.3)
3. Have you avoided wearing clothes which make you particularly aware of the shape of your body?	2.4 (1.5)	2.7 (1.5)
4. Have you felt ashamed of your body?	2.0 (1.3)	2.5 (1.5)
5. Has worry about your shape made you diet?	1.7 (1.2)	2.3 (1.5)
6. Have you felt happiest about your shape when your stomach has been empty (e.g., in the morning)?	1.7 (1.2)	2.2 (1.5)
7. Have you felt that it is not fair that other women are thinner than you?	1.7 (1.1)	2.0 (1.4)
8. Have you worried about your flesh being dimply?	1.9 (1.2)	2.2 (1.4)
Total Score	15.2 (7.0)	18.2 (8.6)

^{*}Body Shape Questionnaire (Evans & Dolan, 1993). Items were scored on a 1-6 scale, with 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often, and 6 = always.

Table 3

Factors Associated with Women's Body Dissatisfaction (High Body Shape Questionnaire Score) at 9 Months Postpartum, as Determined by Stepwise Regression Analysis (n = 386)

Independent Variables	Beta	SE	t	P Value
Poor appetite or overeating	3.017	.544	5.547	<.001
Current weight	.052	.010	5.387	<.001
Mental health	491	.110	-4.456	<.001
Married	-1.984	.548	-3.622	<.001
Black race	-4.235	1.218	-3.477	.001
Breastfeeding at 9 months	-2.049	.782	-2.619	.009
Number of children	954	.385	-2.481	.014
R Square	.359			<.001