Global Advanced Research Journal of Medicine and Medical Sciences (ISSN: 2315-5159) Vol. 1(9) pp. 060-065, October, 2012
Available online http://garj.org/garjmms/index.htm

Full Length Research Paper

Correlates of body image among pregnant women and decision to breastfeed after childbirth

Chiejina EN* and Odira CC

Department of Nursing Science, Nnamdi Azikiwe University, Nnewi Campus, Anambra State.

Accepted 08 October, 2012

The study examined the correlates of body image among pregnant women and their decision to breastfeed after childbirth. The population of the study was prenatal women in their third trimester selected from three Hospitals and one Health Centre in Anambra State of Nigeria, and the sample size was 200. Two research questions and two null hypotheses guided the study. The instrument used for data collection was questionnaire on Body Image and Decision to Breastfeed (QBIDBF). Mean scores, standard deviation (SD) and Spearman Rank Correlation co-efficient (rho) were used to answer the research questions while Wilcoxon Rank Sum test statistics was adopted in testing the null hypotheses at 0.01 Level of significance. The result indicated significant correlation between pregnant women's body image and the body satisfaction they derive from decision to breastfeed. Social influence and residential location were found to have significant impact on expectant women's body image with regard to their decision to breastfeed. It also showed that marital status of pregnant women was not significantly related to their body image with regard to their decision to breastfeed.

Keywords: Body image, Body satisfaction, Marital status, Residential location, Social influence, Pregnant women, Decision to breastfeed.

INTRODUCTION

Body image is how a person perceive the size, appearance and functioning of the body and its parts (Kozier et al., 2004). Body Image also refers to a person's perception of the aesthetic and sexual attractiveness of his or her own body (Kozier et al., 2004). DeLaune and Ladner (2002) refer to body image as an attitude about one's physical attributes and characteristics, appearance and performance.

Body image is dynamic because any change in body structure or function, including the normal changes of growth and development, can affect body image. Many teenagers will have harmless body image distortions, and it is not uncommon for adolescents to feel self-conscious because "they think their noses are too big, or their hips too wide, or their blemishes too prominent" (DeLaune and Ladner, 2002).

Human society has at all times placed great value on beauty of the human body, but a person's perception of his/her own body may not correspond to society's standard (Kozier et al., 2004). A person's body image is thought to be, in part, a product of his or her personal experiences, personality and various social and cultural forces. A person's sense of his or her own physical appearance usually in relation to others or in relation to some cultural "Ideal", can shape his or her body, image (Kozier et al., 2004).

Researchers (Thompson et al., 1999) classified body image into body esteem (positive or negative feelings about one's body), body satisfaction (satisfaction with an

*Corresponding author E-mail: nkechichiejina@yahoo.com; Phone number: +2348037463279

aspect of one's body), and body distortion (size estimation accuracy). Monteath and McCabe (1997) explained that although societal ideals influence a woman's body satisfaction, the degree of sway is balanced by a woman's self-esteem. Sydney (2010) noted that people who have low body image will try to alter the body image in some way such as dieting or undergoing cosmetic surgery. Francoise (1984), in his theory of unconscious body image stated that negative perceptions about a persons body (eg fatness), can in some cases lead to mental disorders such as depression or eating disorders such as bulimia nervosa. Studies have shown that females tend to link more about their body shape and endorse thinner figures than men even into old age (Fermro et al., 2008; Sonia et al., 2008; Hawkins et al., 2004). Some girls and young women compare themselves to models in terms of their physical attractiveness, and according to Martin and Gendry (1997), many commentators regard the emphasis in the media and in fashion industry on thinness and on ideal female body shape and size.

In relation to breastfeeding, body image disturbance traits may influence a woman's initial decision to breastfeed, as well as possibly promote discomfort within the breastfeeding relationship causing early cessation. Littleton and Engebretson (2005) stated that the initial changes that occur in the woman's body validate her pregnancy, and she may demonstrate pride in her changing body; but as pregnancy progresses, her increasing size, waddling gait, and positive changes may become distressing. Fawett (1989) has it that during pregnancy, body image changes as the woman begins to envision herself as a mother in addition to being daughter and/or wife. This change in body image is part of the basis for the woman becoming narcissistic and introverted. According to Fawett (1989), how the woman feels about her body as pregnancy progresses may influence decisions such as whether to breastfeed. Huang et al (2004) reports that body image become increasingly negative as pregnancy progresses, and reaches its peak during postpartum period. In addition, Littleton and Engebretson (2005) opined that barriers or deterrents to breastfeed may be biologic, psychologic, social or cultural in nature. Women who do breastfeed and encounter negative or sexual messages about their bodies (whether real or imagined) may stop breastfeeding to shift the focus from themselves and to feel more comfortable about their own bodies. Also Breast size has also been found to be an indicator of female attractiveness in the context of Western culture (Furnham et al, 1998; Latteier, 1998; Jones, 2004).

Empirical works that focus on women's social and emotional impacts of breastfeeding are less common (Schmied and Barclay, 1999). The few studies conducted were focused on Western culture, and some of the findings have not established clear relationship between body image and the choice of infant feeding by pregnant women (Strang and Sullivan, 1985). Also, despite the global campaign on promotion of breastfeeding, Foster et al (1996) reported attrition in breastfeeding rates. Roth (2006) noted that while the educational programs launched to convey the benefits of breastfeeding often focus on the health of the baby, the focus needs to shift to the decision making process that mothers go through in making infant-feeding choice, including the effect body image has on breastfeeding initiation and duration. These remarks constitute the problem of this study.

Research Questions

- What is the relationship between body image and the body satisfaction derived from decision to breastfeed by pregnant women?
- To what extent does social influence relate to the body image of pregnant women with regard to their decision to breastfeed?

Hypotheses

- There is no significant relationship between residential location of pregnant women and their body image with regard to their decision to breastfeed.
- Significant relationship does not exist between the marital status of expectant women and their body image with regard to their decision to breastfeed.

MATERIALS AND METHODS

The study was a correlational survey design which was carried out between April and June 2012. A sample of 200 expectant mothers were selected from three health care institutions during their third trimester. The selected health institutions were one University Teaching Hospital, one General Hospital, One Voluntary Agency (Mission) hospital and one Primary Health Centre, all in Anambra State of Nigeria. Ethical approval and the respondents' consent were obtained prior to the study.

Inclusion factors in the study population were both primigravid and multigravid women. All the 200 respondents were included in the analysis as there were no missing data.

The instrument used for data collection was questionnaire titled "Body Image and Decision to Breastfeed (QBIDBF) which had two sections. Section A of the instrument elicited information on demographic data (eg age, educational level, religion, residential location (whether urban or rural), marital status and parity). Section B of the instrument elicited information on self-concept of body image (eg. whole body figure, body parts including the breasts), perceived breast role in beauty and attraction, body satisfaction derived if

Table 1. Demographic characteristics of the study population

Item	Frequency	Percentage
Health Institutions		
Teaching Hospital	50	25
Voluntary Agency (Missionary) Hospital	100	50
General Hospital	21	10.5
Primary Health Centre	29	14.5
Education Level		
Illiterate	7	3.5
Primary School	39	19.5
O' Level	61	30.5
Tertiary	93	46.5
Ethnicity		
Igbo	194	97.0
Yoruba	1	0.5
Edo	2	1.0
Efik	1	0.5
Tiv	2	1.0
Occupation		
Civil Servant (CS)	55	27.5
Business	145	72.5
Religion		
Christianity	196	98
Moslem	2	1.0
Traditional	2	1.0
Residence		
Urban	152	76.0
Rural	48	24.0
Marital Status (MS)		
Married	191	95.5
Single	9	4.5
Parity		
Primigravid	73	36.5
Multigravid	127	63.5

Total population N=200

breastfeeding is adopted, social and spouse influence on choice of breastfeeding and duration to breastfeed if chosen so as to preserve the attractive role of the breast. The questionnaire items in section B adopted ordinal scales. A four points scale ranging from 1-4 was used to measure the variables with strongly disagree having 1 point, disagree 2 points, agree 3 points and strongly agree 4 points. Reliability co-efficient of the instrument was established through test-retest procedure and Kinder Richards formular 21 method of estimating reliability was used giving a result of 0.64.

The researchers adopted direct contact approach in data collection from the respondents. The participants' characteristics were calculated using frequency distribution. Mean scores, standard deviation (SD) and Spearman Rank correlation co-efficient (rho) were used to answer the research questions while Wilcoxon Rank Sum test statistics was adopted in testing the null hypotheses at 0.01 level of significance. The statistical analysis was performed using SPSS package.

RESULT

Demographic characteristics of the study population are shown in table 1. Majority (50%) of the respondents were selected from Missionary (Voluntary Agency) hospital while the least number (21%) was drawn from General Hospital. 14.5% of the respondents were drawn from Primary Health Centre (grassroot), while 25% were selected from Teaching Hospital (tertiary Health Institution).

Table 1 also shows that majority of the respondents (46.5%) had tertiary education while 3.5% were illiterates.

Table 2. Descriptive Statistics of the measured variables

Variable	N	Minimum	Maximum	Mean ($\bar{x}$)	SD
ge	200	16.00	45.00	29.0350	5.09742
ody Image (BI)	200	1.00	4.00	1.6950	0.65363
ody size satisfaction (BS)	200	1.38	4.00	2.9737	0.53806
ocial Influence	200	1.00	3.80	1.4740	0.54443
elf-perceived Breast eauty	200	1.00	4.00	1.6263	0.56987
pouse influence	200	0.50	3.00	1.2300	0.50894
uration to Breastfeed	200	1.00	4.00	1.7270	0.56290
valid N (Listwise)					

Table 3. Relationship between expectant women's body image and body satisfaction derived from decision to breastfeed

Variables	N	$\bar{X}$	SD	rho value	Level of significance
Body Image (BI)	200	1.6950	0.65363	0.203**	0.01
Body Satisfaction (BS)	200	2.9737	0.53806		

** Correlation is significant at 0.01 level (1-tailed).

Table 4. Relationship between social influence and expectant women's body image with regard to decision to breastfeed

Variables	N	$\bar{X}$	SD	rho Corr value	Level of significance
Social Influence	200	1.4740	0.54443	0.481**	0.01
Body Image	200	1.6950	0.65363		

** Correlation is significant at 0.01 level (1-tailed)

Table 5. Wilcoxon Rank Sum test comparison of residential location of pregnant women and their body image with regard to their decision to breastfeed

Variable	Ranking order	N	Mean Rank	Sum of Ranks	Z-cal	Z-crit	Probability
Residential location-Body Image	Urban	152	102.49	15579.00	0.879	0.380	P<0.01
	Rural	48	94.19	4521.00			
	Total	**200**					

NB: Z-Cal = standard score**.**

19.5% and 30.5% were Primary school and O'Level holders respectively. 72.5% were business women while 27.5% were Civil Servants (White collar job). The Christians were 98%, Moslems and traditionalists constituted 1.0% respectively. Majority (76%) resided in urban areas while 24% were living in the rural community. On marital status, 95.5% were married while 4.5% were single. 63.5% were multigravid while 36.5% were primigravid women. The total population of the respondents was 200.

Table 2 shows the descriptive statistics of the measured variables. Out of the 200 respondents, the mean age was 29.0350 with a standard deviation of 5.09742, mean for body image (BI) was 1.6950 with SD of 0.65363, mean value for BSS was 2.9737 with SD of 0.53806; for social influence, the mean value was 1.4740 with SD of 0.54443, self-perceived breast beauty had mean value of 1.6263 with SD of 0.56987, mean value for spouse influence 1.2300 with SD of 0.50894, while the mean value for duration to breastfeed was 1.7270 and the SD 0.56290. The table also indicates minimum and maximum values for each of the variables.

Table 3 above shows that the rho correlational value on the relationship between pregnant women's body image and the body satisfaction they will derive from decision to breastfeed was 0.203. This correlational value was significant at 0.01 level.

In table 4, the rho correlational value of the relationship between social influence and pregnant women's body image with regard to their decision to breastfeed was 0.481, and it was significant at 0.01 level.

Table 5, shows that at 0.01 level of significance, the

Table 6. Wilcoxon Rank Sum test comparison of marital status of pregnant women and their body image with regard to their decision to breastfeed.

Variable	Ranking order	N	Mean Rank	Sum of Ranks	Z-cal	Z-crit	Probability
Marital Status -	Married	191	100.66	19225.50	0.179	0.858	P>0.01
Body Image	Single	9	97.17	874.50			
	Total	**200**					

NB: = Z-cal = Standard scores.

calculated Z-score of 0.879 was more than the critical value of 0.380. The null hypothesis is rejected. Therefore there is significant relationship between the residential location of pregnant women and their body image with regard to their decision to breastfeed.

At 0.01 level of significance the calculated Z-cal of 0.179 was less than the critical value of 0.858 (table 6). There is no significant relationship between marital status of pregnant women and their body image with regard to their decision to breastfeed. The null hypothesis is therefore accepted.

DISCUSSION

Findings from the study indicate significant correlation (rho = 0.203) between pregnant women's body image and the body satisfaction derived from decision to breastfeed (table 3). An integral part of a woman's personality is the way she perceives her own body (eg whether she seems to value her body and nurse with ease, whether she has low self esteem or whether she is ashamed of her shape). Sydney (2010) noted that people who have low body image will try to alter the body image in some way. Francoise (1984) stated that negative perceptions about a person's body (eg fatness) can in some cases lead to mental disorders such as depression. O'Brien et al. (2009) observed that physical appearance comparison process appear to play a critical role in the link between fashion media and body image dissatisfaction. According to Fawett (1989), how the woman feels about her body as pregnancy progresses may influence decisions such as whether to breastfeed. Similarly, Foster et al. (1996) reported in their study that a correlation exists between body satisfaction and choice of infant feeding method.

Consistent with some studies, in the current study, the researchers observed significant correlation (rho = 0.481) between social influence and expectant women's body image with regard to decision to breastfeed (table 4). Littleton and Engebretson (2005) noted that inclusive to barriers or deterrents to breastfeed is social influence. According to Littleton and Engebretson (2005), women who are initially more conscious of social judgments of body image may not have the confidence to display their body as a vessel of infant nourishment, even in the relative privacy of their own homes. Hughes (1984) noted that society defines women by their appearance, and that a woman's breasts are especially vulnerable to scrutiny. This culturally based taboo directly affects the initial infant feeding decision in Western culture (Hughes, 1984).

The significant relationship observed between residential location and body image with regard to decision to breastfeed (table 5) could be associated to the craze for fashion, which is stronger in urban cities. Martin and Gentry (1997) observed that many commentators regard the emphasis in the fashion industry on thinness and on ideal female body shape and size.

Findings from the study indicate absence of significant relationship between marital status of pregnant women and their body image with regard to decision to breastfeed (table 6). The implication of this finding is that marital status may not likely constitute a barrier and that pregnant women could comfortably chose to breastfeed their infants irrespective of their marital status. However, in contrast to this finding, Littleton and Engebretson (2005) stated that women with problems such as single parenthood and marital problems have more difficult time in accepting the physical changes of pregnancy.

CONCLUSIONS

This study has demonstrated significant correlation between pregnant women's body image and the body satisfaction they derive from their decision to breastfeed. The study has also established that social influence and residential location have impact on expectant women's body image with regard to their decision to breastfeed. However, the study indicated absence of significant relationship between the marital status of pregnant women and their body image with regard to choice of breastfeeding as a method of infant nutrition.

REFERENCES

American Psychological Association (2007). Report of the APA Task Force on the Sexualization of Girls.

DeLaune SC, Ladner PK (2002). Fundamentals of Nursing (2nd ed.). New York: Delmar Thomson Learning.

Fawcett J (1989). Spouses' experiences during pregnancy and the postpartum Image. J. Nursing Scholarship, 21.149

Ferguson C, Winegard B, Winegard BM (2011). Who is the fairest one of all?: How evolution guides peer and media Influence on female

body dissatisfaction. Rev. of General Psychol. 15(1):11-28.
Ferraro FR, Muehlenkamp JJ, Paintner A, Wasson K, Hager T, Hoverson F (2008) Aging, Body image, and Body Shape. J. General Psychol., 15(1): 11-28.
Foster SF, Slade P, Wilson K (1996). Body Image, maternal fetal attachments and breast feeding. J. Psychosomatic Res., 41(2): 181-84.
Francoise D (1984). L'Image Inconscient du Corps. Paris: Seuil ISBN20201830.
Furnham A, Dias M, McClelland A (1998). The role of body weight, waist-to-ratio, and breast size in judgment of female attractiveness. Sex Roles, 39(3/4):311-26
Garner DM, Garfinkel PE (1980). Socio-cultural Factors in the development of anorexia nervosa. Psychol. Med., 10(4): 647-56.
Hawkin N, Richards PS, Granley HM, Stein DM (2004). The impact of Exposure to the Thin-Ideal Media Image on Women. Eating Disorders, 12(1): 35-50
Huang H, Wang S, Chen C (2004). Body Image, maternal-fetal attachment, and choice of infant feeding method: A Study in Taiwan. Birth, 31 (3): 183-88
Hughes RB (1984). Satisfaction with one's body and success in breastfeeding. Issues Compr Pediatr. Nursing, 7:141-53
Kozier B, Erb G, Berman A, Snyder SJ (2004). Fundamentals of Nursing (7th ed.). Upper Saddle River, NJ,: Pearson Prentice Hall.
Littleton LY, Engebretson JC (2005). Maternity Nursing Care. London: Thomson Delmar.
Martin MC, Centry JW (1997). Stuck in the Model Trap: The Effects of Beautiful Models in Ads on Female Pre-Adolescents and Adolescents. J. Advertising, 19
Monteath SA, McCabe MP (1997). The influence of societal factors on female body image. J. Soc. Psychol., 137(6): 708-27.
O'Brien KS, Caputi P, Minto R, Peoples G, Hooper C, Kell S, et al (2009). Upward and Downward Physical Appearance- Related Comparisons: Development of a Measure and Examination of Predictive Qualities. Body Image, 6:201-206.
Pisacane A, Continislo P (2004). Breastfeeding and perceived changes in the appearance of the breasts. A retrospective study. Acta Paediatirics 93(10):1346-48.
Roth M (2006). Could Body Image Be a Barrier to Breastfeeding?: A Review of the literature. LEAVEN, 42 (1): 4-7.
Schmeid V, Barclay L (1999). Connection and pleasure, disruption and distress: Women's experiences of breastfeeding. J. Human Lactation, 15(4): 325-34.
Sonia T, Jennifer PS, Peters J (2008). Media Influences on body satisfaction in female students. Psicothema, 20(4): 521-4.
Strang VR, Sullivan PL (1985). Body Image attitudes during pregnancy and the postpartum period. J. Obstetr., Gynecol. and Neonatal Nurs., 14:332-37.
Sydney MH (2010). "Skinny Celebs a health hazard". The Free Press.
Toro J, Salamero M, Martinez E (1994). Assessment of Sociocultural influences on the aesthetic body shape model in anorexia nervosa. Acta Psychiatrica Scandinavica, 89(3): 147-51.
Tzuriel D, Weller L (1999). Social and Psychological determinants of breastfeeding and bottle-feeding mothers. Sociology of Health and Health Care in Israel-Studies of Israel Society, pp. 99-115 .