

Maternal Satisfaction Through Breastfeeding: An empirical study

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Abstract

A growing body of research indicates that both mothers and children benefit from breastfeeding. Reflecting such research, public health officials and organizations promote the practice of breastfeeding. Despite such research, advocacy, and gradually increasing breastfeeding rates over the past decade, a large fraction of mothers do not breastfeed for a shorter period than the recommended six months. We have identified maternal satisfaction (MS) as a predictor variable and six criterion variables namely maternal knowledge (MK), a socio-cultural attitude of mothers (SCI), mother-baby bonding (MBB), family tradition (FT), concerns for health and figure (CHF), and government initiatives (GI). Primary data were collected from hospitals, tabulated and processed to draw the inferences and relationships among the variables. Results show that there is weak maternal knowledge among the mothers, especially for the first baby delivery. Moreover, there are many concerns like family traditions, social and cultural attitudes, mothers concerns on health and physical figure, government initiatives with maternal satisfaction in our study.

Keywords: Maternal satisfaction, breastfeeding

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Introduction

Breastfeeding is the act of providing milk to a newborn or infant from the mother's breasts. Breast milk is sterile, easily digested, non-allergenic, and transmits maternal antibodies that protect against many infections and illnesses (Thomas, 1997). World Health Organization (2008) explained as breastfeeding is a way of providing ideal food for the healthy growth and development of infants. Leung and Sauve (2005) stated that breastfeeding is the optimal method of infant feeding. Breast milk provides almost all the necessary nutrients, growth factors and immunological components a healthy term infant needs. Breastfeeding is the most widely accepted preferred method of nutrition of the newborn thus providing numerous health benefits to both the mother and her infants (Sinusas & Gagliardi, 2001). Thus, Breastfeeding is a way of providing ideal food the growth and development of infants and protecting against several infectious diseases and thereby experiencing maternal satisfaction by mothers.

Breast milk has been a traditional food for newborn babies. It fulfils not only the physical need for optimum growth but enhances emotional and intellectual development. Breast milk contains an ideal balance of nutrients for the complete growth of the body and brain; more than a food it is a multipurpose medicine, rich in anti-infective factors which protect the baby. Breast milk contains a number of protective substances including antibodies, disease-resistant factors and antimicrobials. World Health Organization (WHO) recommends that children should be exclusively breastfed during the first 6 months and should continue, with supplementation, up to the age of two years.

Review of Literature

Rehana, (1998) conducted a research study and concluded that breastfeeding protects the mother's health. Breastfeeding reduces the mother's risk of breast cancer and protects her from ovarian cancer. It also reduces the risk of postpartum bleeding which may cause death. Breastfeeding contributes to birth spacing. Mothers enjoy the satisfaction of being mothers and getting proper attention in family and friends in society. Leung & Sauve, (2005); Wardley et al., (2018) concludes their study as breastfeeding promotes good bonding between mother and infant which is a continuous process, and early initiation of breastfeeding helps mother and child to get extra contact which promotes bonding between them. It facilitates skin to skin contact and physical warmth between the mother and child, which further strengthens the emotional bond between mother and child.

Laroia & Sharma, (2006) explained that the traditional and cultural beliefs influence breastfeeding practice. Family ritual in child-rearing practice influences breastfeeding. Culture and religious beliefs are important sources for feeding rituals. In Hindu communities, it appears that although almost every Hindu child gets some or exclusive breastfeeding for the recommended duration and the early initiation of breastfeeding are commonly practised.

Heck et al, (2006) mentioned that women whose partners were highly educated and had professional or executive occupations were more likely to breastfeed their babies than women whose partners had lower educational levels and lower-status occupations and women who worked full time were less likely to

breastfeeding than full-time housewives.

Mortin et al, (2016) said that breast care is directed at maintaining cleanliness and adequate breast support is necessary for the normal function of the breast and the comfort of the mother. All these studies shown that though most working women want to do the best for their children, they lack information on the benefit of breast milk, and the method of expression and storage of breast milk.

Hoyer et al, (1998) conducted a study on successful breastfeeding as a result of a health education programme for mothers and results found out that the written instructions, as well as personal encouragement by the field nurse, exerted a favourable influence on breastfeeding practices which was taken as a guideline for our further professional work and change of standards in the field of breastfeeding promotion.

Jennifer Callen, et.al., (2017) conducted a study on breastfeeding is beneficial for preterm infants. The result showed that by proper breastfeeding the infant was protected from nutritional, gastrointestinal, immunological, developmental, and psychological disorders.

Dykes F et.al.,(2006) described the lived experience of breastfeeding, in primiparous women. The main focus was upon women's perceptions related to the adequacy of their breast milk, for the purpose of exclusively nourishing their babies. Perceived breast-milk inadequacy is underpinned by a complex and synergistic interaction between socio-cultural influences, feeding management, the baby's behaviour, lactation physiology and the woman's psychological state.

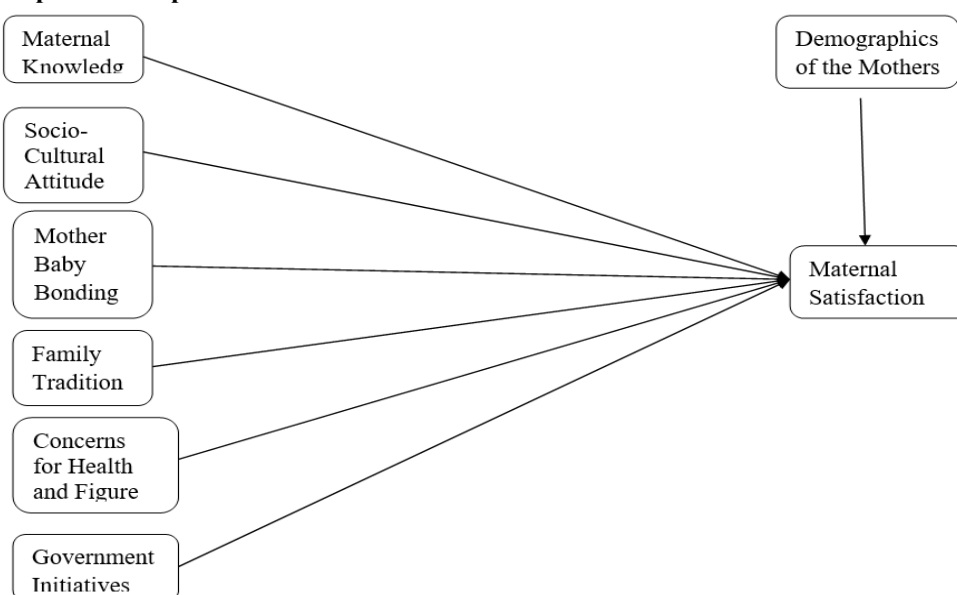
Research Gap

We find a dearth of study on breastfeeding practices and its various communities' health-related dimensions in Indian provinces. India being an old cultural country, mothers were fully aware of breastfeeding benefits and we think therefore we find least research studies on Indian mothers. The literature is lacking in what breastfeeding mothers perceive in terms of maternal satisfaction as supportive in the postpartum period to assist them in achieving their breastfeeding goals. The policy statements, guidelines, and recommendations for breastfeeding success set forth by professional groups are published like health department and community health and publically communicated.

Rationale of the Study

Since breast milk is essential for the infant's health, the mother has to continue exclusive breastfeeding. But in the case of working women, they can feed their children only when they are getting leisure time. One of the other methods through which working women can manage their baby's health is through expressed breast milk. The expression of breast milk is beneficial to both the baby as well as the mother; it provides nutrition to the child and prevents breast complications also. In India, there are a lot of mothers who are working, so there is a need to develop a module on the expression and storage of breast milk, with a view that the health professionals for the employed mothers could utilize this module as a health education material. This study would establish the strength of relationships between the identified variables that would express the importance of criterion variables and the maternal satisfaction amongst the mothers.

Proposed Perceptual Model of Maternal Satisfaction



Objectives of the Research

1. To explore mothers' experiences about breast feeding to babies
2. To identify the factors influencing mothers' breast feeding
3. To find out the level of satisfaction of mothers in breast feeding
4. To find out variables stimulating agents of breast feeding among the mothers

Research Hypothesis

- Ho1: There is no significant relation of maternal satisfaction and maternal knowledge
 Ho 2: There is no significant relation of maternal satisfaction and socio-cultural attitude
 Ho 3: There is no significant relation of maternal satisfaction and mother baby bonding
 Ho 4: There is no significant relation of maternal satisfaction and family traditions
 Ho 5: There is no significant relation of maternal satisfaction and concerns for health and figure
 Ho 6: There is no significant relation of maternal satisfaction and the role of Government initiatives

Research Methodology

Sampling Method

We have used simple random and targeted sampling of the mothers who come to Sitapur district hospital for medical services either pre-delivery or post delivery care and OPD services. We have prepared questionnaire and administered to most of mother who visited the hospital in three month duration. We explained the questions to the respondent mothers and they filled it serious and carefully.

Sample Size

In three months duration we find 126 mothers and they were included in our sample of the study. Hence our sample size is 126 mothers who delivered babies either in the hospital or in home.

Design and Development of Questionnaire

We have conceptualized and developed seven constructs/variables and designed a questionnaire suitable for the subject of study i.e. breastfeeding practices amongst the mothers in the sampled area and drawing thereby maternal satisfaction of the mothers. The scale in the form of a questionnaire has been tested for its consistency and reliability.

We have also examined and ensured the validity of the questionnaire. There are many research studies and authenticated reports about the acceptable values of alpha, ranging from 0.60 to 0.95. The Cronbach's alpha value for our entire seven identified constructs for the purpose of the study has arrived at .692 which shows that the designed questionnaire is reliable as its value must be above .60. Thus our estimates value shows the reliability and it is free of errors.

The Kaiser-Meyer-Olkin is the measure of sampling adequacy, which varies between 0 and 1. The values closer to 1 are better and the value of 0.60 is the suggested minimum. Bartlett's Test of Sphericity is the test for the null hypothesis that the correlation matrix has an identity matrix.

Table 1 Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	No. of Constructs/ Variables	
.692	7	
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.743	
Bartlett's Test of Sphericity	Approx. Chi-Square	370.998
	df	21
	Sig.	.000
Reliability Statistics		
Cronbach's Alpha	No. of Items/ Questions	
.836	36	

Table 2 Explained variance/ coverage of study

Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.283	28.563	28.563	10.283	28.563	28.563
2	5.599	15.552	44.116	5.599	15.552	44.116
3	3.693	10.258	54.374	3.693	10.258	54.374
4	2.152	5.979	60.353	2.152	5.979	60.353
5	1.628	4.522	64.875	1.628	4.522	64.875
6	1.585	4.403	69.278	1.585	4.403	69.278
7	1.398	3.884	73.163	1.398	3.884	73.163
8	1.301	3.615	76.778	1.301	3.615	76.778
9	1.214	3.372	80.150	1.214	3.372	80.150
10	1.055	2.931	83.081	1.055	2.931	83.081
11	.917	2.547	85.628			
12	.831	2.308	87.936			
13	.681	1.890	89.827			
14	.627	1.742	91.568			
15	.511	1.419	92.987			
16	.393	1.092	94.080			
17	.340	.943	95.023			
18	.325	.904	95.927			
19	.303	.842	96.769			
20	.250	.693	97.462			
21	.235	.653	98.115			
22	.155	.430	98.545			
23	.120	.334	98.879			
24	.097	.271	99.150			
25	.076	.212	99.362			
26	.065	.180	99.542			
27	.046	.127	99.669			
28	.039	.109	99.778			
29	.030	.082	99.860			
30	.015	.041	99.901			
31	.012	.033	99.935			
32	.010	.028	99.963			
33	.006	.017	99.980			
34	.004	.012	99.992			
35	.002	.005	99.998			
36	.001	.002	100.000			

Extraction Method: Principal Component Analysis.

The coverage of our study goes to 83.08% that is shown in the cumulative Extraction Sums of Squared Loadings as shown in table -2. Thus there may be some other variables that we have been unable to trace as per our research objectives and the conceptual thinking process. Future researchers on similar objectives may explore the remaining 16.92% of the coverage in the study. Table 3 Factor loading on the questions as asked to mothers

S.No.	Code	Questions	Factor Loading
1	MS1	eS eka cuuk HkkX;”kkyh le>rh gwWA	.779
2	MS2	eS eka cuus ij vfr izLkUu gwWA	.519
3	MS3	eka cuuk vR;ar d’Vdkjh vuqHko gksrk gSA	.471
4	MS4	eka cuus ij L=h lEiw.kZ gksrh gSA	.685
5	MS5	eS eka cuus ij viuh lEiw.kZ ftEEksnfj;ksa dk fuokZg d:axhA	.526
6	MS6	eka cuus ij ifjokj esa izfr’Bk c<rh gSA	.512
7	MBB1	eka dh ekufld LokLFk; dk lh/kk vlj cPPks ij iMrk gSA	.515
8	MBB2	eka dk lkfu;/ cPps dks lqjf{kr vuqHko djkrk gSA	.843
9	MBB3	eka cPps dk lEcU/k fuLokFkZ gksrk gSA	.548
10	MBB4	cPps ds lokZaxh.k fodkl ds fy, eka dk iw.kZ LoLFk gksuk vko”;d gSA	.748
11	MBB5	cPps ds lokZaxh.k fodkl esa eka dh Hkwfedk vR;ar egRo iw.kZ gSA	.792
12	FT1	eka cuus ij ifjokj esa izfr’Bk c<rh gSA	.916
13	FT2	eka cuus ij ikfjokfjd fj”rksa dk egRo le> esa vkrk gSA	.476
14	FT3	Ekak cuus ij ifjokj dk oa”k c<rk gSA	.592
15	FT4	eka cuus ij ikfjokfjd nkf;Ro c< tkrk gSA	.727
6	FT5	eka cuus ij ikfjokfjd fj”rksa eas e/kqjrk vk tkrh gSaA	.612
17	CPF1	Ekak cuus ij esjs lkSn;Z esa deh gks tkrh gSA	.905
18	CPF2	Ekak cuus ij LoHkko essa fpMfpMkiu vk tkrk gSA	.838
19	CPF3	Ekak cuus ij “kkfjfd enyko dk Hk; cuk jgrk gSA	.822
20	CPF4	Ekak cuus ij “kkfjfd “kfDr esa deh gks tkrh gSA	.678
21	CPF5	Ekak cuus thou esa ,dkdh iu lekIr gks tkrk gSA	.623
22	SCA1	eka cuus ij lekt esa izfr’Bk c<rh gSA	.596
23	SCA2	eka cuus ij Lora=rk de gks tkrh gSA	.745
24	SCA3	eka cuus ij lkekftd nk;jk c< tkrk gSA	.487
25	SCA4	eka cuus ij vius lkaLd’ frd nkf;R;ksa dk fuHkkus dk ekSdk fey tkrk gSA	.489
26	SCA5	eka gh cPps dh izFke lkekftd xq; gksrh gSA	.478
27	MK1	eq>s ekr’Ro dk iw.kZ Kku ugh Fkka	.856
28	MK2	eS vius cMksa ls ekr’Ro Kku izkIr dj jgh gwWA	.864
29	MK3	Ekkr’Ro dk Kku eq>s fofHkUUk L=ksrks ls izkIr gksrk jgrk gSA	.546
30	MK4	eq>s ekr’Ro dk Kku viuh ekrk ,oa lEcU/k;ksa ls izkIr gksrk jgrk gSA	.458
31	MK5	ekr’Ro dk lq[k vR;ar lq[knk;d gksrk gSA	.421
32	RGI1	eq>s ljdkj }kjk lapkfy; ;kstuvks dk ykHk gks jgk gSA	.525
33	RGI2	eq>s ljdkj }kjk lapkfy; eq”r Vhdkdj.k vKsj lykg dk ykHk gks jgk gSA	.747
34	RGI3	ekrk ds vkgkj ls lEcU/kr ljdkjh funsZ”kksa dk iw.kZr;k ikyu djrh gwWA	.623
35	RGI4	ekrk dk Lruiku cPps ds fy, ve’rleku gksrk gS A	.805
36	RGI5	ldkj; ;kstuvksa dk fdz;kUo;u “kh/kz gksrk gSA	.762

Table-3 depicts that our instrument of research study has been valid scientifically as it has better factor loading above 0.40 in all the cases considering the minimum threshold for judging face validity, construct validity and criterion validity.

Table 4 Correlation analysis between variables

Correlations							
	MS	MBB	FT	CPF	SCA	MK	RGI
MS	1						
MBB	.359**	1					
FT	.637**	.468**	1				
CPF	.642**	.547**	.755**	1			
SCA	.402**	.511**	.386**	.578**	1		
MK	.109**	.389**	.124**	.131**	.174**	1	
RGI	.364**	.366**	.295**	.335**	.397**	.205*	1

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix as shown in table -4 depicts that maternal knowledge (0.109) has the weakest strength of relationship with the maternal satisfaction (MS) followed by maternal knowledge (MK) and family traditions (FT) i.e 0.124 then with concerns for the physical figure (CPF) i.e 0.131 and 0.174 strength of relationship with social and cultural attitude (SCA). It needs to be strengthened in the communities so that

breastfeeding practices can be promoted adequately.

Regression Model

In the regression model, the independent variable is labelled the X variable, and the dependent variable is the Y variable. The relationship between X and Y can be shown on a graph, with the independent variable X along the horizontal axis, and the dependent variable Y along the vertical axis. The aim of the regression model is to determine the straight-line relationship that connects X and Y. The straight line connecting any two variables X and Y can be stated algebraically as $Y = a + bX$ where a is called the Y-intercept, or simply the intercept, and b is the slope of the line. If the intercept and slope for the line can be determined, then this entirely determines the straight line.

Table 5 Regression coefficient and Regression Equation

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.211	.540		4.098	.000
	MBB	.024	.122	.018	.200	.842
	FT	.211	.095	.245	2.233	.027
	CPF	.107	.031	.392	3.399	.001
	SCA	.018	.048	.032	.382	.703
	MK	-.064	.028	-.179	-2.303	.023
	RGI	.141	.058	.177	2.443	.016

a. Dependent Variable: Maternal Satisfaction

Maternal Satisfaction (MS) = 2.21 + .018 (Mother Baby Bonding + .245 (Family Tradition) + .392 (Concerns for Physical Figure) + .032 (Socio-Cultural Attitude) - .169 (Maternal Knowledge) + .177 (Government initiatives)+e

Hypothesis Testing

Pearson Correlation Coefficient is used to test the relationship between the role of green marketing and its seven identified independent variables. ANOVA is used to test the variance from its mean values in the research question and research objectives. For deciding whether the hypothesis is rejected or accepted, the researcher has to examine the significance (p) value. The rule is the null hypothesis is rejected if the p-value (significance value) is less than Alpha. Since the analysis was measured with 95% of the level of confidence, so the alpha would be 5 % i.e. 0.05. Therefore, if the significance value is less than 0.05, the alternative hypothesis (Ha) is accepted. If the significance value is greater than 0.05, the null hypothesis (Ho) is accepted. The results of the hypotheses testing are shown below in the compiled tables:

Table 6 Testing of hypothesis through Levene Statistics and analysis of variance

Testing of hypothesis through Levene Statistics and analysis of variance					
Mother Baby Bonding (MBB)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.131	5	.426	35.564	.000
Within Groups	1.438	120	.012		
Total	3.568	125			
Family Traditions (FT)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.377	5	1.075	37.948	.000
Within Groups	3.400	120	.028		
Total	8.777	125			
Concern on Physical Figure (CPF)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	57.395	5	11.479	44.675	.000
Within Groups	30.834	120	.257		
Total	88.229	125			
Socio-Cultural attitude (SCA)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13.274	5	2.655	42.793	.000
Within Groups	7.445	120	.062		
Total	20.719	125			

Maternal Knowledge (MK)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.429	5	6.686	44.346	.000
Within Groups	18.091	120	.151		
Total	51.520	125			
Role of Government Initiatives (RGI)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.245	5	.849	16.991	.000
Within Groups	5.995	120	.050		
Total	10.240	125			

It is evident from table that all null hypotheses is rejected/ not accepted, hence all alternate hypothesis is accepted.

Findings and Conclusion

We have found that the demographic profile of the respondents has no significant difference in the perception of the role of maternal satisfaction and demographic profile of the respondents in our sample of study like education, employment, breastfeeding counselling, the role of government initiatives etc. There is a significant impact of maternal satisfaction on mother-baby bonding, on the family tradition, on concerns on the physical figure, on Socio-Cultural attitude, on Maternal Knowledge, on the Role of Government initiatives. The mothers in the sampled area do not have maternal knowledge and hence the government must take proper steps to enhance the knowledge so that they could understand its importance.

Suggestions

There is the need to extensively train all health care providers in the state. Health care providers must organize educational programmes for all persons on appropriate delivery care practices such as delay bathing of newborn babies immediately after birth, proper cord care practices, exclusive breastfeeding, breastfeeding on-demand, hygienic breastfeeding practices, as well as recognition and management of more severe danger signs in the neonate. Women should be educated more on neonatal and early neonatal care,

From the findings, factors that influenced exclusive breast feeding in the study community included; Infant age; Infant health; maternal morbidity; maternal experience of breastfeeding complications; maternal correct knowledge on duration of exclusive breastfeeding; maternal knowledge that breastfeeding delays pregnancy; maternal knowledge that semi-solid and solid foods should be introduced at six months and attitudes and beliefs regarding exclusive breastfeeding practice.

The strongest predictor of exclusive breastfeeding in the study community was infant morbidity. Those children who were ill were less likely to receive exclusive breastfeeding. Maternal experience of breastfeeding complications was also a predictor of exclusive breastfeeding in the study community. Mothers who experienced breastfeeding complications were less likely to exclusively breastfeed their infants. Maternal correct knowledge on duration of exclusive breastfeeding was also a predictor of exclusive breastfeeding in the study community. Mothers who had correct knowledge on duration of exclusive breastfeeding were more likely to breastfeed their infants exclusively.

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