

**Original Article**

**Knowledge of breast feeding among primigravida mothers**

Mohite RV<sup>1</sup>, Mohite VR<sup>2</sup>, Kakade SV<sup>3</sup>

**Abstract**

**Background :** Breast feeding, the most natural way of infant feeding to satisfy nutritional, metabolic and psychological needs of the baby. **Objectives :** To assess the knowledge of breast feeding among primi- gravi- da mothers attending ante-natal clinic and to determine the association between socio-demographic variables with their knowledge. **Materials and Methods :** Hospital based cross sectional study was conducted at Ante-natal clinic of Krishna Hospital and Medical Research Center, Karad district Satara. Pre-tested structured proforma used to collect information from 590 married primi gravid mothers attending anti-natal clinic during study period by utilizing personal interview method. **Statistical Analysis :** socio-demographic frequency percentage distribution, knowledge scoreing and statistical association was analysed by using chi-square test. **Results:** Out of 590 primi gravida mothers, 59.66% showed fair quality of knowledge about breast feeding. knowledge about rooming in, family support for breast feeding & burping after breast feeding was 97.7%, 95.4% , 93.5% however weaning, colostrums feed, hazards of bottle feeding and prelactal food was 84%, 82.7%, 75.5% and 54% respectively. Statistical association was existed between age, education, religion, socio-economic status & occupation of respondents with their knowledge about breast feeding ( $\chi^2=151.52, p < 0.0001^*$ ;  $\chi^2=211.27, p < 0.0001^*$ ;  $\chi^2=133.91, p < 0.0001^*$ ;  $\chi^2=35.59, p < 0.0001^*$  and  $\chi^2=131.04, p < 0.0001^*$ ) respectively. **Conclusion:** knowledge of breast feeding among primi gravida mothers attending ANC clinic was of fair in quality.

**Keywords:** Primi gravid, Knowledge, Breast feeding

**Introduction:**

Breast feeding is the most natural way of infant feeding to satisfy nutritional, metabolic and psychological needs of the baby. A child who is breast fed has greater chances of survival than a child artificially fed. Breast feeding significantly reduces the risk of death especially from diarrhea and pneumonia in infants compared to formula fed babies<sup>1</sup>. It also protects the infant from early malnutrition and some infections<sup>2</sup>. Breast feeding has shown to ensure quality survival, the risk of adult onset of disease like diabetes, allergic disorders like asthma, CAD, hypertension, celiac diseases, lymphoma and cataract is substantially reduced in later life. Breast feeding has advantage to both the baby and the mother.

Owing to the advantages of the breast milk to the infants, WHO in 1993 took efforts to improve infant and young child nutrition by promoting breast feed-

ing. WHO and UNICEF created and promoted Baby Friendly Hospital Initiative (BFHI) in 1991, is to ensure that all maternity services whether free standing or in a hospital, becomes centers of breastfeeding support<sup>3</sup>. According to breast feeding promotion network of India only 10% of hospitals and maternity facilities in India had BFHI status in 2005<sup>4</sup>. This reflects the fact that more effort is needed to make all existing hospitals "Baby Friendly". If appropriate measures are undertaken to strengthen training in breast feeding counseling and the number of trained professional counselor at all level is increased, exclusive breast feeding might become a social norm. The government of India launched various national health programmes through vertical and horizontal health administration to reduce the infant, child mortality and morbidity and malnutrition.

The present study was conducted in a rural area of

1. R.V. Mohite, Assist.prof.Dept.of Community Medicine,Krishna Institute of Medical Sciences (KIMS) Karad
2. V. R. Mohite, Prof.Krishna Institute of Nursing Sciences,KIMS University Karad
3. S. V. Kakade, Asso.Prof cum Statistician, Dept.of Community Medicine,KIMS Karad

**Corresponds to :** Dr. R.V.Mohite, Assist.prof.Dept.of Community Medicine,Krishna Institute of Medical Sciences (KIMS) Karad **E-mail:** rajsinhmohite124@gmail.com

Satara district to assess the awareness regarding breast feeding practices among the primi gravida attending ante-natal clinics in Krishna hospital, karad.

**Materials and methods :**

Hospital based cross- sectional study was conducted at Ante-natal clinic of Krishna Hospital & Medical Research Center(KH&MRC), Krishna Institute Of Medical Sciences University, Karad, district Satara. KH & MRC is well known tertiary health care center with 850 bedded hospital with all medical disciplines providing specialty and super-specialty services to rural people located in western Maharashtra of Satara district with income source mainly coming from sugar industry, dairy, poultry etc. with 74.5% female literacy rate and stood 1<sup>st</sup> rank in provision of health care services in whole Maharashtra. Randomly three months were selected by lottery method during year 2010 and all primi gravid mothers attending anti-natal clinic in these three months were included as study population. With prior permission from Medical Director, KH & MRC and after verbal consent from each study respondents after inclusion and exclusion criteria, data was collected from 590 study subjects who were participated in study. Personal interview method was used to collect data from study respondents by utilizing pretested structured proforma that includes socio-demographic characteristics as well as knowledge variables related to breast feeding. Study variables were selected from previously published research papers as well as designed by experts from pediatrics and community medicine. Pilot study was conducted and any ambugations obtained were corrected. Duplication of cases was avoided. Socio-economic status was assessed according to modified B-J Prasad <sup>5</sup> classification based on Consumer Price Index of year March 2010.

The respondent with right or correct answer was marked as knowledge score ‘1’and with don’t know or wrong scored as ‘0’ for variables under study. The maximum and minimum knowledge score was obtained and respondents were categorized into poor , fair and good knowledge quality . Knowledge variable and socio-demographic frequency percentage distribution of study subjects were done and Chi-square test applied to find out statistical association between knowledge and socio-demographic characteristics by using statistical software, InStat.

**Results:**

The table I shows, maximum 377 (63.8 %) respondents were belonged to age group 19 – 24 yrs, 432 (73.2%) Hindu by religion, 478 (81% ) from rural area and 399 (67.5 %) completed their secondary & higher secondary level of education. However, 320 (54.2%) respondents were housewife by occupation and 217 (36.7%) belonged to socio-economic class III according to modified B-J Prasad (AICPI 2010).

**Table I : Distribution of respondents according to socio-demographic profile ( N=590 )**

Category	Frequency	Percentage
<b>Age ( yr.)</b> 10-24	377	63.8%
25-30	182	30.8%
31-36	31	5.2%
<b>Religion</b> Hindu	432	73.2%
Muslim	141	23.8%
Christen	17	2.8%
<b>Reside.</b> Rural	478	81.0%
Urban	112	18.9%
<b>Education</b> Primary	63	10.6%
Secondary	192	32.5%
Higher secondary	207	35.0%
Graduates	128	21.6%
<b>Occupation</b> Service	82	13.8%
Housewife	320	54.2%
Agriculture	134	22.7%
Laborers	36	6.3%
Others	18	3.0%
<b>S-E Class</b> Class I	92	15.5%
Class II	137	23.2%
Class III	217	36.7%
Class IV	87	14.7%
Class V	57	9.6%

**Table II: Knowledge category distribution of respondents**

**Table no II depicts, maximum 352(59.6%) respondents had fair quality of knowledge about breast-feeding.**

Category	Knowledge Score	Frequency	%
<b>Poor</b>	0-6	106	17.96
<b>Fair</b>	7-12	352	59.66
<b>Good</b>	13-17	132	22.37

Table no III depicts, maximum respondents 19 (61.2%), 280 (74.2%) and 88 (48.3%) from age group 31-36, 19-24 and 25-30 yrs. had poor, fair and good knowledge about breast-feeding. Similarly 41(65%), 149 (77.6%) and 81(39.1%) with primary, secondary & higher secondary had poor, fair and good knowledge about breast feeding. Maximum, 58.2% Christen had good quality of knowledge about breast-feeding as compare to Hindus and Muslims. Almost equal knowledge was observed among urban & rural residence of study subjects. Maximum respondents 23 (40.3%), 145 (66.8%) and 30 (32.6%) from socio-economic class V, III & I had poor, fair and good knowledge. Similarly 62(46.2%), 231 (72.1%) and 26(31.7%) respondents with occupation agriculture, housewife & service showed poor, fair and good knowledge. There was strong statistical association was existed between age, education, religion, socio-economic status & occupation of respondents with their knowledge about breast feeding ( $\chi^2=151.52, p < 0.0001^*$ ;  $\chi^2=211.27, p < 0.0001^*$ ;  $\chi^2=133.91, p < 0.0001^*$ ;  $\chi^2=35.59, p < 0.0001^*$  and  $\chi^2=131.04, p < 0.0001^*$ ) respectively.

**Table III: Association between demographic characteristics and knowledge**

Socio-demo.Factor	Poor(%)	Fair(%)	Good (%)	$\chi^2$	
<b>Age(yr.)</b> 19-24	57(15.1)	280( 74.2)	40(10.6)	151.52*	
	25-30	30(16.4)	64( 35.1)		88(48.3)
	31-36	19(61.2)	8( 25.8)		4(12.9)
<b>Education:</b> Primary	41(65)	17(26.9)	5(7.9)	211.27*	
	Secondary	42(21.8)	149(77.6)		1(0.5)
	Higher sec.	20(9.6)	106(51.4)		81(39.1)
	Graduates	3(2.3)	80(62.5)		45(35.1)
<b>Religion:</b> Hindu	35(8.1)	295(68.2)	102(23.6)	133.91*	
	Muslim	69(48.9)	52(36.8)		20 (14.1)
	Christen	2(11.7)	5(29.4)		10(58.2)
<b>Reside.</b> Urban	27(24.1)	60(53.5)	25(22.3)	3.76	
	Rural	79(16.5)	292(61)		107(22.3)
<b>S-E Class:</b> Class I	13(14.1)	49(53.2)	30(32.6)	35.59*	
	Class II	25(18.2)	84(61.3)		28(20.4)
	Class III	24(11)	145(66.8)		48(22.1)
	Class IV	21(24.1)	50(57.4)		16(18.3)
	Class V	23(40.3)	24(42.1)		10(17.5)
<b>Occup.</b> Service	5(6)	51(62.1)	26(31.7)	131.04*	
	Housewife	21(6.5)	231(72.1)		68(21.2)
	Agriculture	62(46.2)	42(31.3)		30(22.3)
	Laborer	12(33.3)	21(58.3)		3(8.3)
	Others	6(33.3)	7(38.8)		5(27.7)

Table IV shows that knowledge about rooming in, family support for breast feeding & burping after breast-feeding was 97.7%, 95.4%, and 93.5% respectively. Knowledge about weaning was 84%. 82.7% respondent knew that breast-feeding is complete food to baby till 6 months of age but awareness about colostrums feed was 72.2%. Knowledge about hazardness of bottle-feeding was 75.5%. Knowledge about expressed breast milk; exclusive breast-feeding & prelactal food was 68.9%, 57.2%, and 54% respectively. 40.3% respondents aware that breast-feeding should be started immediately after normal delivery but awareness about breast-feeding after caesarian section, weaning time, maternal illness & breast-feeding, demand feeding was 14.5%, 49.4%, 26.4% and 46.7% respectively. 21.3% respondents aware that there was no relation between size of breast and breast milk secretion.

**Table IV: Knowledge study variable frequency percentage distribution of primi gravida**

Knowledge Variables	Frequency	%
BF complete food	488	(82.7)
BF immediately after normal delivery	238	(40.3)
BF after caesarean	86	(14.5)
Prelacteal food is harmful	319	(54.0)
Colostrum feed	426	(72.2)
Demand of BF	276	(46.7)
Exclusive BF	338	(57.2)
Weaning start	292	(49.4)
No bottle feed	396	(67.1)
BF with weaning	496	(84.0)
Expressed milk	407	(68.9)
Rooming in	577	(97.7)
Burping after BF	552	(93.5)
Relation of size of breast and milk secretion	126	(21.3)
BF in working mother	145	(24.5)
BF in maternal illness	156	(26.4)
Family support for BF	563	(95.4)

**Discussion:**

The key to successful breast-feeding is likely to be information, education, and communication (IEC) strategies. The quality of knowledge and support has a crucial role in success of breast-feeding promotion<sup>6</sup>. In our study it was seen that 95.4% mothers knew that full family support need for breast-feeding with overall average satisfactory knowledge about breast-feeding was 59.6%. Study carried out by Kishore SS<sup>7</sup>, among rural Indian population showed similar knowledge i.e. 60% with overall average satisfactory knowledge about breast feeding was 39% which may be due to low level of female literacy rate and poor information, education and communication activities (IEC). Study carried out by Wagner et al<sup>8</sup> in U.S. showed that knowledge was 97% may be due to high female educational status. 57.2% respondents knew about exclusive breast feeding in present study while study carried out by Borade A<sup>9</sup>, in Pune showed that 48.6% respondents were knew about it, Similar findings were also reported by Kishore SS<sup>7</sup> as knowledge was 46%.

Our study revealed that 54% respondents knew that no prelacteal food should give to baby during first 6

months of life. Similar findings were also found by Borade A<sup>9</sup> i.e. 56.6% respondents had knowledge about use of prelacteal food to baby however, a study carried out by Singh B<sup>10</sup>, showed that 38 % respondents knew about prelacteal food in Indonesia may be due to poor IEC activities rendered by local health department. In our study 72.2% respondents knew that colostrums should not be discarded as it is highly nutritious to new born baby similar findings were also showed by Borade A<sup>9</sup> among the respondents in Pune was 77.7% about colostrums. However, study carried out by Garg R et al<sup>11</sup>, showed that knowledge about colostrums was 35.6% among the respondents in rural area of Punjab may be due to low level of education, poor IEC activities or ANC health care services. 67.1% respondents in our study knew that bottle-feeding is hazards to baby while study carried out by Hussein AK<sup>12</sup> in Tanzania was 96.4% may be due to high female educational status or better ANC health care services. The present study revealed that 57.2% respondents knew about exclusive breast-feeding. Study carried out by Borade A<sup>9</sup>, showed that knowledge was 48.6%. Study carried out by Radhakrishnan R<sup>13</sup>, in Tamil Nadu showed that 39% respondents knew about exclusive breast-feeding. Similar findings also observed by other researchers<sup>12-14</sup>.

The present study showed that 82.7% respondents knew that breast feeding is a complete food similarly study carried out by Issler H<sup>154</sup>, in Brazil showed that 100 % respondents knew that breast feeding is complete food to baby. The present study showed that low knowledge i.e. 26.4% about breast feeding in maternal illness, 21.3% about size of breast and amount of breast milk secretion & breast feeding in working mother was 24.5% which could be due to not highlighting all aspects of breast feeding to adolescent, married couple and pregnant and lactating mothers.

**Conclusion:**

The present study was conducted among primi gravida mothers attending antenatal clinics at Krishna Institute of Medical Sciences, Karad. As per socio-demographic data maximum respondents were from rural area and awareness of breast-feeding was fairly satisfactory among study population. It needs to be strengthening of information education & communication activities, need further strengthening of

primary health care services through peripheral health functionaries with co-operation from community itself with other departments of community development.

Informing all pregnant women about the benefits and the management of breast-feeding should be done primarily during their ANC visits.

#### **Acknowledgements:**

We would like to thank all the mothers who participated in this study. We also want to thank to Dr. Asha Pratinidhi, Research Director, Dr. A.Y.Kshirsagar, Prof & Head Dept of Pediatrics Krishna Institute of Medical Sciences University Karad, Maharashtra India.

---

#### **References:**

1. Victora CG et al. Infant feeding and deaths due to diarrhea\_ case control study. *Am J Epidemiol* 1989; **129**:1032-41.PMid:2705424
2. Park K. Preventive and Social Medicine.Text Book, 2009. 20th edition, M/s Banarsidas Bhanot Publisher. Jabalpur, India.
3. [www.unicef.org/programme/breastfeeding/baby.htm](http://www.unicef.org/programme/breastfeeding/baby.htm). Accessed on 21.11.2010.
4. Dr.Dadhich JP. Report of assessment of status of IYCF: practice, policy and program: achievements and gaps. 2009.
5. Baride JP, Kulkarni AP. Text Book of Community Medicine.2006.3rd edition, Vora Medical Pub,Mumbai.
6. Mathai J. the Brazilians national breast-feeding programme. *Assign child* 1983; **6**:225-45.
7. Kishore SS et al. breast feeding knowledge and practice among mothers in a rural population in India: community based survey. *Journal of tropical pediatrics* 2000; **55**(3): 183-188. <http://dx.doi.org/10.1093/tropej/fmn110> PMid:19074494
8. Wagner et al .The role of personality and other factors in mothers decision to initiate breast feeding.*J Hum Lact* 2006;**22**:16-26. <http://dx.doi.org/10.1177/0890334405283624> PMid:16467284
9. Borade A.Maternal knowledge and participation about breast-feeding and factors influencing it. *J Ped child health care* 2000.
10. Singh B.Knowledge, attitude and practice of breast feeding – a case study.*European JScientific Research* 2010;**40**(3):404-422.
11. Garg R et al. breast feeding knowledge and practices among rural women of Punjab,India: a community based study. *Breast feed Med*.2010. <http://dx.doi.org/10.1089/bfm.2010.0005> PMid:20925495
12. Hussein AK. Breastfeeding and complementary feeding practices in Tanzania.*East African J Public Health* 2005;**2**:1.
13. Radhakrishnan R. Breast feeding pattern in Tamil Nadu, South India. *Internal conference on AIDS* 2002;7-12.
14. Sanjaoda Singh N, Sharat Singh N. Determinants of duration of breastfeeding amongst women in Manipur. *Bangladesh Journal of Medical Science* 2011; **10**(04): 235-239. DOI: <http://dx.doi.org/10.3329/bjms.v10i4.9493>
15. Issler H.Knowledge of new born health care among pregnant women: basis for promotion & educational programmes on breast feeding.*Sao.Paulo med.J.* 2001;**119**(1):7-9.