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Knowledge, Attitude and Practices of Mothers Regarding Breastfeeding in a South Indian Hospital

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ABSTRACT

Study was conducted to assess the knowledge, attitude and practices of mothers attending a south Indian hospital towards breastfeeding. This cross sectional study was conducted on mothers of children, attending outpatient department of a tertiary care hospital, SRM Medical College, Tamil Nadu. They were administered a pre-designed questionnaire of twenty questions related to breastfeeding. A total of 200 mothers were interviewed over a period of two months. Though many mothers (47.5%) were illiterate their knowledge to start early breastfeeding was good (80%). However, only 34.5% initiated breastfeeding within one hour. Twenty five percentage of mothers felt that colostrum is bad and 10.5% gave prelacteals. Exclusive breastfeeding was given for six months by 72% of mothers. Cow's milk was the most commonly used top milk (23.5%). Knowledge about weaning was good but about demand feeding was poor. Doctors were the preferred counselor (87.5%) and not enough breast milk was the main reason for discontinuing breastfeeding. Mothers had good knowledge about breastfeeding practices. But there is a gap between knowledge and practice which needs to be addressed. Doctors should play a key role in educating nursing mothers as nursing mothers rely heavily on doctors for consultation.

Key words: Infant feeding, KAP, weaning.

INTRODUCTION

Exclusive breastfeeding for six months as recommended by WHO & American Academy of Pediatrics (AAP) has a number of benefits to the growing infant. Breast milk in addition to calories and proteins contain bioactive factors like IgA, lactoferrin, K-casein, cytokines, growth factors, glutathione peroxides etc which have anti-infective, antioxidant, growth promoting properties[1]. Human milk protects from various acute and chronic conditions like diarrhea, otitis media, necrotizing enterocolitis, obesity, allergies, cancers etc avoiding hospitalizations and reducing infant mortality[2]. Breast milk improves significantly Intelligence Quotient, Brain size compared to artificial feeds[3].

In spite of this many beneficial effects of breast milk breastfeeding rates in India are abysmally low[4]. Infant mortality rate (IMR) in India is 47/1000 live births with 1.4 million babies dying every year due to poor care and infant feeding practices. A lot of factors ranging from customs, practices, education of parents, support from family and health workers play a role in successful breastfeeding practices as recommended. Through this study we aim to assess the knowledge, attitude and practices of mothers attending our hospital regarding breast feeding. This information will help us in devising specific interventions to promote breastfeeding rates.

MATERIAL AND METHODS

After obtaining Institutional ethical clearance, we conducted this observational study in SRM hospital, Tamilnadu from November 2015 to December 2015. Two hundred mothers attending pediatrics outpatient department were randomly selected. A structured questionnaire of twenty questions was prepared based on infant and young child feeding guidelines issued by Indian government. After obtaining informed consent parents were asked to fill up this questionnaire. Illiterate mothers were interviewed by volunteers and their responses were filled up in the questionnaire. All the data were tabulated and analysed.

Questionnaire

A questionnaire for assessing knowledge, attitude and practice of mothers on breastfeeding was prepared. Most of the questions were based on the questionnaire used in the study of Sushma et al[5] and a total of twenty questions were included.

RESULTS

Table 1 shows the demographic details of parents interviewed with 55.5% of their children less than six months and equal representation from both sexes. Most of their children (59%) were born vaginally. Table 2 describes the educational status of mothers. A high percentage of them (47.5%) were illiterate. While 50.5% of mothers finished their schooling, only 2% completed their college graduation.

KAP of breastfeeding is given in table 3. Although 80% had the knowledge to initiate breastfeeding within one hour of delivery, only 34.5% started giving breastfeeding so. A good number of parents (25%) felt that colostrum is bad and 10.5% gave prelacteals before starting breastfeeding. A satisfactory 89% of mothers gave exclusive breastfeeding and most of them (72%) for six months. Those who didn't practice exclusive breastfeeding gave mainly cow's milk (23.5%). Weaning as recommended was started from six months of age by 91.5% of mothers. They also continued breastfeeding in addition to complimentary feeds. They gave breastfeeding at hourly (24.5%), two hourly (45%) intervals or whenever required (17.5%).

Table 4 caters data about breastfeeding problems and consultations. Preferred counselor for breastfeeding issues was usually a doctor (87.5%). Similarly 96% of times consultation during sickness was a doctor. Not enough breast milk (37%) was the main reason for discontinuing breastfeeding. Personal satisfaction about breastfeeding was very good for mothers (73%).

Table 1: Demographic Details

Demographics		Number (Percentage)
Age of Child	<6mths	111(55.5%)
	>6mths	89(44.5%)
Gender of Child	Male	101(50.5%)
	Female	99(49.5%)
Type of delivery	Vaginal	118(59%)
	Caesarean	82(41%)

Table 2: Education level of mothers

Education	Number (Percentage)
Illiterate	95(47.5%)
School education	101(50.5%)
Graduation	4(2%)

DISCUSSION

In our study almost half of the mothers who participated were illiterate but their knowledge to start early breastfeeding (80%) was good. Probable reason could be the positive impact of doctors being the preferred choice as counselors (87.5%). Since mothers also rely on doctors for consultation during sickness, doctors play an important role in promoting good breastfeeding practices by setting aside some time for health education. Just like our study Oomen et al (2009)[4] in their study found that doctor's reinforcement was an important factor for continuation of breastfeeding.

A Ghana based study[5,6] has shown that breastfeeding within one hour of delivery reduces mortality by 22%. In our study although 80% had

the knowledge to start breastfeeding within one hour, only 34.5% initiated so early. Most of them (57.5%) started breastfeeding 1-4 hours after delivery. There is a gap between knowledge and practice about initiation of breastfeeding. Health programmes that only impart knowledge are not enough.

According to Karnawat et al (2015)[7] only about 50% had correct knowledge about timing of initiation of breastfeeding. In a hospital based study in Rajasthan[8] 66% of doctors preferred initiating breastfeeding on day one while 60% of nurses and 96% of class IV workers preferred on second or third day. Kumar et al (2006)[9] in their study found that 58.9% of mothers initiated breastfeeding before completion of six hours after birth.

Colostrum has been considered bad by 25% of mothers and 10% have given prelacteals like sugar, honey. This increases the chances of infection to babies. According to Yadav et al[10] two

Table 3: Breastfeeding KAP

Attribute of Breastfeeding		Number(Percentage)
Knowledge of time	Within 1hr	160 (80%)
of starting BF	1-4 hrs	27(13.5%)
	1-3 days	9(4.5%)
	1 week	4(2%)
Practice of Time	Within 1hr	69 (34.5%)
of starting BF	1-4 hrs	115(57.5%)
	1-3 days	13(6.5%)
	1 week	3(1.5%)
Knowledge about	Good	150(75%)
colostrums	Bad	50(25%)
Whether Prelactealsgiven?	Given	21(10.5%)
	Not given	179(89.5%)
Whether exclusive	Yes	178(89%)
breastfeeding given	No	22(11%)
Duration of exclusive	3 months	34(17%)
breastfeeding given	6 months	144(72%)
	9 months	9(4.5%)
	12 months	11(5.5%)
	18 months	2(1%)
Top feeding used	Packaged milk	17(8.5%)
	Fresh Cow's milk	47(23.5%)
	Fresh Goat's milk	10(5%)
	Formula milk	10(5%)
	None	116(58%)
When was Weaning	6 months	183(91.5%)
started	1 year	15(7.5%)
	2 years	2(1%)
Was BF continuedafter	Yes	187(93.5%)
weaning	No	13(6.5%)
Frequency of	1 hr	49(24.5%)
Breast feeding	2 hrs	90(45%)
	3 hrs	22(11%)
	4 hrs	4(2%)
	Whenever required	35(17.5%)

thirds of nursing mothers didn't give colostrums. 15.9% of respondents in Kumar et al (2006)[9] study threw away colostrums and 40% of them gave prelacteals. 43% of mothers in Ben Slama et al[11] study didn't have any knowledge about colostrum.

Eleven percentage of mothers didn't exclusively breastfeed their child and 17% of them gave breast milk exclusively only for three months. Mothers should be educated about the benefits of exclusively breastfeeding till six months. Also the fact that breastfeeding can be given ad libitum should also be taught as only 17.5% knew this. In a Delhi based study Taneja et al (2003)[12] reported that although 90.6% of mothers breastfed their infants till six months, exclusive breastfeeding was not practiced in majority (26.4%). Medhi & Mahouta (2004) et al[13] reported 100% breastfeeding rates with 69.35% of it being exclusive for six months. Exclusive breast feeding rates by foreign studies were 36.8% (Ben Slama et al[11]) in Riyadh and 22.4% (Yesildal et al[14]) in Turkey. According to Karnawat et

Table 4: Breast feeding problems

Question		Number (Percentage)
Counsellor to disccuss BF issues	Doctor	175(87.5%)
	Nurse	20(10%)
	Relative	5(2.5%)
If stopped BF early, reason for stopping	No breast milk	74(37%)
	Baby didn't drink	26(13%)
	Mother became pregnant	6(3%)
	Baby became sick	2(1%)
	Mother became sick	6(3%)
	Didn't stop BF	86(43%)
Consultationduring sickness	Doctor	192(96%)
	Relatives	6(3%)
	Friends	2(1%)
Mother's Satisfaction about BF	Fully Satisfied	146(73%)
	First satisfied, now not	42(21%)
	Initially not, but later yes	4(2%)
	Satisfied	8(4%)
Duration of Burpingafter BF	5 min	87(43.5%)
	15 min	38(19%)
	30 min	7(3.5%)
	Till burping	68(34%)

al (1987)[8] demand feeding was preferred by 77% of lower class workers while 62% of doctors preferred timed feeding.

When top feeding was used, mothers relied on cow's milk (23.5%), formula milk (5%) and packaged milk (8.5%). Hence health education should also include appropriate and safe usage of artificial feeds. Weaning was started appropriately after six months in 91.5% of infants and breast feeding was continued even after weaning by 93.5% of mothers. Study probing further into details of weaning like type of foods, quantity and frequency which we didn't include would have been more useful. Oomen et al (2009)[4] in his study found 55% usage of formula feeds which was much higher than our study (5%). According to Karnawat et al (2015)[7] 20% of all mothers had correct knowledge about weaning age and in Yadav et al's study (2004)[10] only 55% correctly practiced weaning between six to twelve months. While Taneja et al (2003)[12] showed 40% of mothers improperly weaning before infant reaches four months.

Not enough breast milk (37%) and baby didn't drink well (13%) were the main reasons for stopping breastfeeding. This could have been tackled by giving hands on practical training through lactation workshop and appropriate support by health workers during the time of need. Overall 73% of mothers were satisfied with the way they provided breastfeeding to their children. Our aim should be to reach 100% satisfaction of mothers. Oomen et al (2009)[4] similar to our study reported that perceived insufficiency of milk was the main factor behind discontinuation of breastfeeding.

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REFERENCES

1. Hamosh M. Bioactive factors in human milk. *Pediatric Clinics of North America* **48**(1):69-86 (2001).
2. Hanson LÅ. Human milk and host defence: immediate and long term effects. *Acta Paediatrica* **88**(s430): 42-6 (1999).
3. Isaacs EB, Fischl BR, Quinn BT, Chong WK, Gadian DG, Lucas A. Impact of breast milk on intelligence quotient, brain size, and white matter development. *Pediatric research* 2010;Apr 1;67(4):357-62.
4. Oommen A, Vatsa M, Paul V, Aggarwal R. Breastfeeding practices of urban and rural mothers. *Indian Pediatr* **46**: 891–4 (2009).
5. Sriram S, Soni P, Thanvi R, Prajapati N, Mehariya KM. Knowledge, attitude and practices of mothers regarding infant feeding practices. *National Journal of Community Medicine* **3**(2) (2013).
6. Edmond KM, Zandoh C, Dingley MA, Amenga Etega S, Weesee Agyei S, Kirkwood BR. Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics* **117**: e380-86 (2006).
7. *Divya Karnawat, B S Karnawat, Avadhesh Joshi, G. Kalsi Kohli* Knowledge, attitude & practices about infant feeding among mothers of urban & rural areas of Ajmer district *J. Med. Res* **1**(3): 90-94 (2015).
8. Karnawat BS, Singh RN, Gupta BD, Chaudhary SP. Knowledge and attitudes of hospital employees regarding infant feeding practices. *Indian Pediatr* **24**: 939-48 (1987).
9. Kumar D, Agarwal N, Swami HM. Socio-demographic correlates of breastfeeding in urban slums of Chandigarh. *Indian J Med. Sci* **60**:461-66 (2006).
10. Yadav RJ and Singh P. Knowledge attitude and practices of mothers about breast feeding in Bihar. *Indian J Community Med* **29**(3):130-31 (2004).
11. Ben Slama F, Ayari I, Buzini F, Belhadj O, Achour N. Exclisive breastfeeding and mixed feeding- knowledge, attitudes and practices of premiparous mothers. *East Mediterr Health J* **16**(6): 630-35 (2010).
12. Taneja DK, Saha R, Dabas P, Gautam VP, Tripathy Y, Mehra M. Study of infant feeding practices and the underlying factors in a rural areas of Delhi. *Indian J Community Med* **28**: 107-11 (2003).
13. Medhi GK and Mahauta J. Breastfeeding weaning practices and nutritional status of infants of tea gardens of Assam. *Indian Pediatr* **41**: 1277-78 (2004).
14. Yesildal N, Aytar G, Kocabay K, Mayda AS, Dagil SC and Bahcebasi T. Breastfeeding practices in Duzce Turkey. *J Hum Lact* **24**: 393-400 (2012).