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EFFECTIVENESS OF HEALTH EDUCATION ON INCREASING KNOWLEDGE ABOUT BREAST FEEDING PRACTICES AMONG POST-NATAL WOMEN

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ABSTRACT

Objectives: 1.To study the knowledge about breast feeding practices among post-natal women. 2. To assess the effectiveness of health education session in increasing the knowledge about breast feeding practices among the post-natal women. **Material and methods:** An interventional study involving health education as the intervention conducted through audio-visual aid and lecture method. Knowledge was assessed as pre-test and post-test using prestructured questionnaire through interview method. Effectiveness was assessed through the increase in post test score compared to pre-test score. **Results:** Study showed that there was significant difference (p=0.000) between average score of pre test knowledge (14.25) and post test knowledge (18.40). Pre-test score ranged from 8 to 17 whereas post-test score ranged from 15 to 20. **Conclusion:** There was poor knowledge regarding some aspects of breast feeding practices among post-natal women. Health education session was effective in improving the knowledge about breast feeding practices among the postnatal women.

Keywords: health education, audio-visual media, breast feeding, knowledge.

INTRODUCTION

Breastfeeding is the normal way of providing nutrients for healthy growth and development of infants as the breast milk contains all the nutrients that a baby needs.[1] Breastfeeding should begin within an hour after birth. The first milk which is called “colostrum” is the most suitable food for the baby because it contains high concentration of protein and other nutrients. It should be "on demand", as often as the child wants day and night. Exclusive breast feeding should be done till 6 months of age. Followed by complimentary feeding and breast feeding should be continued till the age of 2 years. A child who is breast fed has greater chances of survival than a child artificially fed.[2] Prolonged breast feeding does protect the infant from early malnutrition and some infections. It has been rightly said that breast feeding acts as first immunization.

Adequate breastfeeding could save many young lives. But globally less than 40% of infants under six months of age are exclusively breastfed.[3] In India 51% of the mothers will not give colostrum to the newborn soon after birth.[4] According to NFHS-3 survey, in India, 46% of the under 3 year children are underweight and 38% are stunted.[5] Lack of exclusive breast feeding and improper breast feeding is one of the major contributory factor for this high prevalence of malnutrition and its associated morbidities and mortality.

For having a good practices related to breast feeding and to save the many infant lives, it is essential to have proper knowledge regarding the breast feeding practices. Raichur being one of the backward districts of Karnataka has shown poor

values in various health related indicators. Hence a study was conducted in this area to assess the knowledge of post natal women regarding breast feeding and impact of health education session in increasing the knowledge.

MATERIAL AND METHODS

Study was carried out at the Urban health training centre (UHTC), Amtalab, Raichur, which is run by the department of Community medicine, Raichur Institute of medical sciences. All the Anganwadi workers coming under the catchment area of our UHTC were informed about the health education session and given the responsibility of motivating the postnatal women to the UHTC on the prefixed day (which was chosen during breast feeding week August 2012). Study was conducted among all those postnatal women who have attended the breast feeding awareness programme. Oral consent of the post-natal women for participation in the study was obtained after explaining about the study. Data was collected regarding demographic profile and knowledge of breast feeding practices through the prestructured questionnaire by interview method.

Data was collected by prior trained interns and Post graduates. After the pre test interview, health education session was conducted involving all the participants. It was conducted through a video session and lecture method covering all the aspects of exclusive breast feeding, importance of breast feeding, complimentary feeding, hazards of bottle feeding etc. To assess the impact of the health education session a post test was conducted through the same questionnaire used for pre test. Change in terms of total score was assessed using Wilcoxon signed rank test and individual question was assessed using chi-square test. For both the test p value of <0.05 was considered as significant. Data was analyzed using SPSS 16 software.

RESULTS

A total of 67 postnatal women who have attended the session were the study population. Among the 67 women studied mean age of the women was 24.16. Majority of the women were illiterate (43.3%). 67.2% of the women were belonging to the nuclear family. 38.8% of the women were having one child & 26.9% of the women were having 2 children. (Refer table no.1)

Initial assessment of the women revealed that only 47.76% of the women were aware that pre-lacteal feed should not be given to the newborn. 71% of the women were aware that water is not required during the first 6 month of life but only 58.2% of the women were aware that even in summer, infants up to the age of 6 months do not require external water. 64.17% of the women were aware that bottle feeding can cause the diarrhoea. 68.65% of the women were aware that demand feeding is better than the timed feeding. Majority (94%) of the women were aware that breast feeding provides all the nutrients. 73% of the women were aware that complimentary feeding should be started at 6 months of age. (Refer table no.2)

After the health education session there was significant change in the knowledge related to pre-lacteal feeding (95.5%), giving colostrum (98.5%), effect of breast feeding on uterine bleeding (85%), Breast feeding protect from hypothermia (82%), feeding during illness (97%), water not needed during summer (94%), water not needed during first 6 months of life (98.5%), demand feeding (89.5), Breast feeding act as first immunization (77.6%), Breast feeding is a cheaper method (97%), bottle feeding can cause diarrhoea (86%), complimentary feeding should be started at 6 months of age (94%). Even though there was change in knowledge related to "ideal time of initiation of breast feeding", "breast milk provides all the nutrients", "smashed food should be given at the initiation of complementary feeding", "breast feeding should be continued till 2 years of age" were found to be statistically not significant. (Refer table no.2)

As shown in the table 3, mean pre-test score was 14.25 whereas mean post test score was 18.40 and

there was significant increase in the knowledge level after the health education session compared to the pre-test. As shown in Figure 1 the pre-test score ranged from 8 to 17 where as post test score ranged from 15 to 20.

As shown in the table 4, there was not much difference in pre-test score with respect to the Religion & type of family and also there was significant increase in the knowledge after health education irrespective of their religion and type of family. Pre- test score was lesser in case of illiterates compared to literates but the gap was lessened in the post test.

DISCUSSION

In our study 86% of the women knew the ideal time of initiation of breast feeding but according to NFHS-3 only 23.4% of the women have initiated breast feeding within one hour after birth in India and 35.6% in Karnataka.[5] It may be because of poor conversion of knowledge into practice or may be our area having better knowledge on this aspect.

According to NFHS-3 only 55.8% of the children's have received complimentary feeding during 6-9 months of age in India but in Karnataka it was 72.5%.[5] In our study 73.13% of the women were aware that complimentary feeding should be initiated at 6 months of age. In this aspect our study findings are similar to NFHS-3 survey and support the data that Karnataka is better compared to national average in this aspect.

In our study 68.65% of the women were aware about the demand feeding, 47.76% about the pre-lacteal feeding, 71.64% about the water during first six months where as in study conducted by Maheswari et al, 45% of the post-natal women were aware about the demand feeding, 74% were aware about the pre-lacteal feeding, 84% about the water during first six months.[6] In a study conducted by Maseer Khan et al, only 45% were aware about the demand feeding and only 20% were aware about the water during first six months.[7] According to Hungama survey 58% of the mothers fed water to their infants before 6 months.[4] Here our study re-highlights the fact that there is still need to educate the people regarding pre-lacteal feeding, demand feeding and importance of exclusive breast feeding in first 6 months.

Majority of the women were having prior awareness about giving smashed food at initiation of complementary feeding, breast feeding till 2 years of age and breast milk contains all the nutrients. Hence there was no statistical significance with respect to change in knowledge to these questions. It also implies that poor knowledge can't be generalized for all the aspects of breast feeding.

A study in Surat demonstrates there was no difference in the practice of early weaning with respect to type of family and literacy status of mother.[8] In our study even though we didn't study the practice but it was obvious that religion, type of family & literacy are not hurdles in increasing the knowledge among the postnatal woman regarding breast feeding.

In a randomized controlled trial conducted in primiparous women by Khresheh R et al, postnatal education and support program significantly improved breastfeeding knowledge which was measured by differences between mean pre- and post-test scores.[9] in a study conducted in Islamic republic of Iran by M.D. Froozani et al, breast feeding education in post-natal woman revealed that Exclusive breastfeeding rates were significantly higher in the study group (54%) than in the control group (6.5%).[10] Even though in the present study control group was not chosen as like in above studies but our study was successful in showing the effectiveness of health education as demonstrated by rise in post-test score.

CONCLUSION

A well conducted health education session should have a prior assessment of the knowledge of the participants so that the health education can be stressed more on the factors about which

participants have misconceptions or no knowledge. It is obvious in our study that many participants were prior aware about the some of the important aspects of breast feeding but they were poor in some areas like pre-lacteal feeding and water is not required in summer for children below 6 months of age etc. Our health education session was succeeded in increasing the knowledge in those areas where the participant's knowledge was limited. Hence a well conducted health education session with proper audio-visual media helps in increasing the knowledge about breast feeding practice among post-natal women.

We conclude that reugular health education session about breast feeding practices needs to be conducted for the post-natal women with focus on areas with poor knowledge.

Drawback: As the study didn't conduct the follow-up, sustainability of the knowledge and actual practices can't be concluded from the present study.

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Table 1. Socio-demographic profile of the Women studied

Socio -demographic characters of mothers		Frequency	Percentage
Religion	Hindu	28	41.8
	Muslim	39	58.2
Age	19-23	33	49.25
	24-28	25	37.31
	29-33	09	13.43
Education	Illiterate	29	43.3
	Middle school	17	25.4
	High school	17	25.4
	PUC/ post high school diploma	3	4.5
	Graduate or post graduate	1	1.5
Type of family	Nuclear	45	67.2
	Joint	22	32.8
Number of children for the mother	1	26	38.8
	2	18	26.9
	3	17	25.4
	4	6	9.0

Table 2. Knowledge of mothers before and after the health education session

Knowledge regarding breast feeding	Pre-test correct response	Post-test correct response	p value
Pre-lacteal feed should not be given	32 (47.76)[a]	64 (95.52)	0.00 (S)
Colostrum should not be denied for infant	58 (86.56)	66 (98.50)	0.008 (S)
Ideal time to initiate breast feeding	58 (86.56)	64 (95.52)	0.069 (NS)
Breast feeding reduces uterine bleeding	30 (44.77)	57 (85.07)	0.00 (S)
Breast feeding protect from hypothermia	34 (50.74)	55 (82.08)	0.0001 (S)
Breast feeding should be continued even if child is ill	53 (79.10)	65 (97.01)	0.001 (S)
External water is not required during summer in first 6 months of life	39 (58.20)	63 (94.02)	0.00 (S)
Water is not needed in first 6 months of life	48 (71.64)	66 (98.50)	0.00 (S)
Breast feeding provides all nutrients	63 (94.02)	67 (100)	0.119 (NS) (Fisher exact)
Demand feeding better than timed feeding	46 (68.65)	60 (89.55)	0.0029 (S)
Breast feeding acts as first immunization	33 (49.25)	52 (77.61)	0.0006 (S)
Breast feeding cheaper than any other method	50 (74.62)	65 (97.01)	0.0002 (S)
Bottle feeding can cause diarrhoea	43 (64.17)	58 (86.56)	0.0026 (S)
Bottle feeding is costly & difficult procedure	45 (67.16)	55 (82.08)	0.047 (S)
Complementary feeding should be started at 6 month	49 (73.13)	63 (94.03)	0.001 (S)
Complementary food started with liquid food	55 (82.08)	63 (94.03)	0.033 (S)
Variety of food should not be tried at once	48 (71.64)	59 (88.06)	0.018 (S)
Breast feeding should continue till 2 year	54 (80.59)	61 (91.04)	0.083 (NS)
Smashed food at initiation of complementary feeding	62 (92.53)	66 (98.50)	0.094 (NS)
Usual home food can be given by one year	55 (82.08)	64 (95.52)	0.013 (S)

a- Values in parenthesis indicate percentage. S-significant NS-Not significant

Table 3. Comparison of pre-test and post-test scores

	Mean	Std. Deviation	Std. error mean	z value*	P value	Result
Pre-test	14.25	1.804	.220	-7.146	0.000	HS**
Post-test	18.40	1.292	.158			

*Wilcoxan signed rank test ** highly significant

Table 4. Comparison of pre-test and post test scores with different demographic variables

Demographic variables		Pre-test score	Post-test score	p
Type of family	Nuclear	14.10	18.22	0.00*
	Joint	14.50	18.77	0.00*
Religion	Hindu	14.14	18.46	0.00*
	Muslim	14.33	18.36	0.00*
Literacy	Illiterate	13.69	18.07	0.00*
	Literate	14.68	18.66	0.00*

Figure 1. Comparison of pre-test and post test scores