Research Paper

A Study on Knowledge on Breastfeeding Practices in Rural Area

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Introduction

Breastfeeding is the universally accepted means of infant feeding. The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life and thereafter continued breastfeeding until two years of age along with complementary feeds (WHO, 2009).

Methodology

The cross-sectional study is conducted in the following areas of the Coimbatore district which is selected using Multi stage strata sampling techniques. The blocks are Karamadai, Annur, Thondamuthur, Madukarai, Sarkkarsamakkulam (Kovilpalayam) and Narachimmanaichenpalayam. From each block two Village Panchayats are chosen randomly to conduct the research

Rapport was developed through frequent visits and discussions with Panchayat Presidents, Panchayat Level Federation Leaders, Self Help Groups, Non Governmental Organisations, School Head Masters, Integrated Child Development Scheme Officers, Child Development Programme Officers, Anganwadi Teachers, rural people, to select the target people.

The total sample size 1000 was drawn from five blocks of Coimbatore district. Multi stage strata sampling techniques were used to select the area and sample for the study. Fifty women were chosen from each Panchayat, The criteria used for the selection of the sample was mothers who have breastfeed their children at least for two years, newly married women, pregnant women, who were going to deliver the second child. Interview Schedule was used to collect data from the women. The prepared interview schedule was evaluated by the experts for standardization. The independent and dependent variables were identified, based on the data collected from the respondents. The study was approved by the Institutional Human Ethics Committee, Avinashilingam Institute for Home Science and Higher Education for Women. The Approval Number is AUW/IHEC13-14/XMT-04. The data was collected from selected 1000 women by face-to-face contact after agreeing to participate in the study.

After pre assessment the education on breastfeeding techniques was imparted to the women in their respective areas. The knowledge on breastfeeding techniques were disseminated through frequent meeting with respondents and distributing the training materials developed by ICDS, UNICEF, WHO and the researcher.

Lectures and large group interactive sessions, small group discussions and role playing were used to teach different components of breastfeeding. The training materials were distributed to the women in order to enhance their knowledge regarding breastfeeding techniques. Impact of the training programme was evaluated with the support of structured interview schedule which was made for women. The collected data were consolidated, analysed and presented in Results and Discussion.

Results and Discussion

Socio – Economic Characteristics of the Women in Rural Areas

Table I reveals the socio- economic characteristics of the respondents. It can be seen that a higher per cent of respondents belong to the age group of 18-23 years (47 per cent), followed by the 24-29 years (38 per cent) with the least per cent (1 per cent) seen in the age group of 35 and above. Majority of the households belonged to the Hindu religion (91 per cent) while the Muslim community households were the lowest in the village Panchayats.

More than half of the respondents in all village Panchayats belonged to the scheduled caste; 44 per cent of the women were under the category of Most Backward Community (MBC); one fourth of the respondents (20 per cent) belonged to the Backward Classes (BC). About 60 per cent of the respondents lived in joint family system. More than 50 per cent of the respondents came from families which had four or more members.

With regard to the educational qualification of the respondents, it is seen that a high per cent of them had completed primary school (40 per cent) while 36 per cent of them had undergone high school education. One fourth of the respondents (20 per cent) were diploma holders and only 4 per cent were illiterates. Thirty per cent of the house-holds heads had completed the primary school level education, followed by 26 per cent who had finished their high school (X standard). Twenty per cent of the respondents had done their diploma education. Only nine per cent of the house-holds heads had completed their degree.

Regarding the occupation of the respondents, it was seen that fifty per cent of head of the households were daily wage earners followed by the people in the private sector (30 per cent) while one forth of them (10 per cent) were working as agricultural labourers. All respondents were housewives (100 per cent). Fifty per cent of the head of the households were earning between Rs. 2500- 5000/- while thirty per cent were earning in the range between Rs 5001-7000/-; only twenty per cent had an income above Rs 7500.

Table I: Socio – Economic Characteristics of the Women

Characteristics		Blocks										Average percentage N=500
		Annur		Kovilpalayam		Karamadai		Madukarai		Thondamuthur		
		Village Panchayats										
		1	2	3	4	5	6	7	8	9	10	
Age (in years)	18-23	40	46	64	58	40	44	52	42	42	44	47
	24-29	50	36	26	18	36	30	38	42	50	52	38
	30-35	10	18	10	18	24	26	10	16	8	4	14
	Above 35	-	-	-	6	-	6	-	-	-	-	1
Religion	Hindu	94	86	90	100	90	86	92	92	94	90	91
	Muslim	4	10	-	-	4	6	-	2	2	-	3
	Christian	2	4	10			10	8	6	4	10	6
Community	Scheduled Caste (SC)	52	48	52	28	52	28	54	50	52	40	46
	Most Backward Caste(MBC)	38	32	44	22	44	22	32	34	32	44	34
	Backward Caste(BC)	10	20	4	50	4	50	14	16	16	16	20
Family type	Nuclear family	36	30	46	82	40	30	36	36	30	38	40
	Joint family	64	70	54	18	60	70	64	64	70	62	60
Size of the family	Small (4 members)	32	36	46	82	46	82	42	34	32	30	46
	Large (More than 4 members)	68	64	54	18	54	18	58	66	68	70	54
Education (Head)	Illiterate	2	6	10	4	10	4	6	4	2		4
	Primary school (1-5)	20	18	46	6	44	52	20	10	20	20	26
	High school (6-10)	22	26	20	58	20	14	20	10	23	18	23
	Higher secondary (+12)	22	20	8	10	16	10	20	22	22	14	16
	Diploma	26	20	12	20	10	20	24	38	26	30	23
	College	8	10	4	2	-	-	10	16	8	18	8
	Illiterate	2	4	12		12		4		2		4
	Primary school (1-5)	50	48	48	12	28	12	40	34	50	56	38
	High school (6 to 10)	36	30	36	20	36	46	38	40	36	30	35
	Higher secondary level (+12)	6	4	-	50	24	34	4	-	6	-	12
	Diploma	6	14	-	8	-	8	14	26	6	14	10
	College	-	-	-	10	-	-	-	-	-		1

Characteristics		Blocks										Average percentage N=500
		Annur		Kovilpalayam		Karamadai		Madukarai		Thondamuthur		
		Village Panchayats										
		1	2	3	4	5	6	7	8	9	10	
Occupation (Head)	Agriculture	6	-	10	22	20	22	12	6	6		10
	Coolie	50	68	54	26	60	68	48	38	62	68	54
	Business		-		8				4	32	32	8
	Private sector	44	32	36	44	20	10	40	52	-	-	28
Occupation (Women)	Housewives	100	100	100	100	100	100	100	100	100	100	100
Income – Head (per month in Rs)	2500-5000	58	74	30	12	30	20	62	50	72	74	48
	5001-7500	20	14	14	70	46	58	20	30	12	14	30
	Above 7500	22	12	56	18	24	22	18	20	16	12	22

Source: Field survey 2013

1-Machakowdampalayam, 2- Kariyampalayam, 3- Vellamadai, 4 – Keeranatham, 5- Odanthurai, 6- Chikkarampalayam, 7- Malumichampatti, 8- Madukarai, 9-Theethipalayam, 10 –.Maathampatti

Table II: Knowledge on Breastfeeding

Knowledge	(N:500)			
	Paired Differences			t value
	Mean	SD	SEM	
Colostrum is the mother's early milk, which is thick, sticky, and yellowish in colour	2.034	1.603	.071	28.371**
Colostrum is rich in all nutrients and protects against infection	2.156	1.541	.068	31.273**
Wash the breast with water for each feeding	1.552	1.850	.082	18.749**
Production of breast milk increases when the baby sucks and by pressing the nipple	2.120	1.565	.070	30.283**
Breast milk secretion will improve by taking healthy food	1.884	1.565	.070	26.906**
Breast milk expression can be done every 3 hours	1.254	1.941	.086	14.443**
It is necessary to express breast milk from both side of the breast	1.694	1.781	.079	21.259**
Foremilk is the milk produced early in a feed	1.650	1.833	.082	20.121**
Foremilk looks bluer than hindmilk, it contains large amount of protein, lactose and other nutrients	1.650	1.833	.082	20.121**
Hindmilk is the milk that is produced later in a feed	1.796	1.764	.078	22.763**
Hindmilk looks whiter than foremilk, because it contains more fat	1.818	1.785	.079	22.770**
For optimum growth the baby needs both foremilk and hindmilk	1.886	1.723	.077	24.467**
Breast engorgement may be reduced with cold packs/massage	2.800	1.191	.053	52.563**
The use of cabbage/jasmine flower may help to reduce breast engorgement	2.078	1.049	.046	44.260**
Massage may reduce breast engorgement	2.668	.991	.044	60.149**
Exclusive breastfeeding for 6 months is compulsory	3.056	.760	.034	89.881**
Breastfeeding should be continued up to 2 years of child age	2.634	.798	.035	73.777**
Babies will gain normal weight with effective breastfeeding	2.952	.771	.034	85.582**
Babies who get enough feeding will pass urine more frequently	2.992	.783	.035	85.440**
Correct positioning helps to achieve effective breastfeeding	2.790	.864	.038	72.163**
All artificial nipples including pacifiers should be avoided in the early stages of breast feeding	2.634	.798	.035	73.777**

***Significant at 1per cent level*

The value of t for the knowledge level of breastfeeding for the various aspects such as importance of colostrum, production of breast milk, Breast milk expression, Measures taken before breastfeeding, Solution for Breast engorgement and Practical aspect of breastfeeding were significant at one per cent level. It shows that the training programme had made a favorable change in knowledge level on breastfeeding among the respondents.

The findings showed that the mothers had a satisfactory level of knowledge about breastfeeding and recognition of danger signs and how to solve these problems.

A.13.1. Knowledge on Breastfeeding Practices in Rural Areas

Table III: Knowledge on Breastfeeding Practices in Rural Areas

Name of the Areas	Paired Differences			t value
	Mean	Std. Deviation	Std. Error Mean	
Machakakowdampalayam	34.960	50.803	7.184	4.866**
Kariyampalayam	68.440	67.029	9.479	7.220**
Odanthurai	82.340	48.992	6.928	11.884**
Chikarampalayam	88.860	50.202	7.099	12.516**
Malumichampatti	85.840	50.683	7.167	11.976**
Madukarai	8.480	50.146	7.091	11.957**
Vellamadai	8.264	51.020	7.215	11.453**
Keeranatham	94.000	48.992	6.928	13.567**
Theethipalayam	84.620	49.732	7.033	12.031**
Maathampatti	8.262	51.275	7.251	11.394**

***Significant at 1per cent level*

The t value of all the Panchayats was significant at one per cent level. It shows that there was a significant improvement in the knowledge level on breastfeeding after the training programme.

According to the focus group data, the majority of selected women reported that the knowledge level has increased on the best practices related to breastfeeding techniques.

13.2. Correlation between the Selected Demographic Variables vs Knowledge on Breastfeeding Techniques among Women

Table IV: Correlation between the Selected Demographic Variables vs Knowledge on Breastfeeding Techniques among Women

Name of the Areas	Age (in Yrs)	Religion	Community	Family type	Education (Women)	Occupation (Head)	Income – Head (per month in Rs)
Machakakowdampalayam	.449** .001	-.062 .671	.209 .145	-.436** .002	-.117 .419	.409** .003	.205 .153
Kariyampalayam	.650** .000	-.080 .580	.294* .038	-.488** .000	-.199 .166	-.221 .122	-.221 .122
Odanthurai	.426** .002	.075 .605	.383** .006	-.278 .051	.062 .670	.068 .641	.125 .387
Chikarampalayam	318* .024	.115 .426	-.090 .535	-.414** .003	-.387** .005	-.194 .176	-.284* .046
Malumichampatti	.520** .000	-.145 .314	.085 .556	-.507** .000	-.207 .149	-.027 .850	-.017 .906
Madukarai	.549** .000	-.146 .311	.067 .646	-.473** .001	-.264 .064	.029 .840	.007 .959
Vellamadai	.524** .000	-.081 .575	.213 .138	-.633** .000	-.096 .506	.052 .719	-.024 .867
Keeranatham	.487** .000	.018 .902	.257 .071	-.489** .000	-.388** .005	-.293* .039	-.184 .201
Theethipalayam	.179 .212	-.367** .009	.122 .397	-.474** .001	-.185 .199	.050 .730	.068 .641
Maathampatti	.312* .027	-.102 .482	.169 .242	-.289* .042	.064 .661	-.153 .287	.092 .525

***Significant at 1per cent level * Significant at 5per cent level*

The Table IV reveals that there is a significant relationship between the age and knowledge breastfeeding in Machakakowdampalayam, Kariyampalayam, Odanthurai, Malumichampatti, Maadukkarai, Vellamadai and Keeranatham at one per cent level, while Chikarampalayam and Mathampatti were significant at five per cent level. In Theethipalayam there is a significant relationship between the religion and knowledge on breastfeeding at one per cent level. There is a significant relation between the community and knowledge on breastfeeding in Odanthurai at one per cent level and Kariyampalayam at five per cent level.

All the Panchayats had a significant relation with the type of family and knowledge at one per cent level. The relationship between the educational qualification and knowledge does not have significance except at Chikarampalyam and Keeranatham Panchayats. No relationship between occupation and monthly income of the household on knowledge on breastfeeding of the respondents except in Machakowndampalyam, Keeranatham and Chikarampalayam respectively.

Conclusion

It may be concluded that breastfeeding is one of the most important determinants of child survival, birth spacing, and prevention of childhood infections. The research also concluded that the advantages and duration of breastfeeding needs to be provided for the community as a whole, practices such as discarding the colostrums and early/late weaning should be discouraged and community-based health education programs is needed. Enthusiastic support and involvement in the promotion and practice of breastfeeding is essential to the achievement of optimal infant and child health, growth and development.

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