

A comparative study to assess the knowledge and attitude of mothers regarding exclusive breast feeding in selected rural and urban areas of district Jalandhar, Punjab

Priyanka Kumari¹, Nila Vansa², Suman Lata.³,

Nursing Tutor, Maharishi Markendeshwer University, Mullana, Ambala

Assistant professor, S.G.L. Nursing College, Semi Jalandhar, Punjab

Assistant professor, Maharishi Markendeshwer University, Mullana, Ambala

ABSTRACT: Exclusive breast feeding is an unequal way of providing ideal food for the growth and development of infant. Objective of this research is to assess and compare the knowledge and attitude in between the rural and urban mothers regarding exclusive breast feeding. Total 100 sample, Half-half from the rural and urban mothers was assessed and compared by administering questionnaire and Likert scale. From the Results it is observed that 78% of urban mothers had good knowledge and 90% had positive attitude as compared by the rural mothers, 56% had average knowledge 24% had negative attitude towards the exclusive breast feeding. Urban area mean knowledge score (18.46) and attitude score (19.38) was higher as compared to the rural mothers (14.46) and (17.34). The calculated 'value by using "t" showed that (6.10) of knowledge and attitude (19.38) is greater than tabulated 't' value (2.99) at the level of significance. Results concluded that the mother who is having knowledge definitely having positive attitude for exclusive breast feeding.

Key words: Exclusive Breast feeding, Breast feeding mothers, knowledge, Infant health.

I. Introduction

Good nutrition is one of the basic components of health and as particulars of optimal child development survival and maintenance of health through our life. United nation report also focuses on the reduction of child mortality [1, 2]. Healthy children are the greatest resource and pride of nation, the children must to be healthy and happy to become productive adult of future. Breast feeding is the only natural safety net for infant and provides immunity which make the infant healthy [3-6].

Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. Breastfeeding is one of the most effective ways to ensure child health and survival. The principal composition of the breast milk are lactose 7g/100ml, fat 3.5g/100ml, protein 1.2g/100ml, sodium 7mmol/L, 89 % water and calories 75kcal/100ml [7-10]. Exclusive breast feeding for the first 6 month of life is probably the single most cost effective child survival measure available and the infant's primary defence against infection. In this fast moving modern world this fact is being neglected by mothers, resulting in ill health and increasing morbidity among children.

Exclusive breast feeding is the protection against gastro-intestinal infections, pneumonia and neonatal sepsis which is observed not only in developing but in developed countries also. The risk of mortality due to diarrhoea and other infections increases in infants who are either partially breastfed or not breastfed at all. Exclusive breast feeding is also integral part of the reproductive process with important implication for the health of mother [11, 12]. Exclusive breast feeding is one of the extraordinary gift of the nature and rewarding for both babies and mother in many aspect. Exclusive breast feeding means giving nothing orally other than colostrum and breast milk to the infant. Exclusive breast feeding that is, infant only receives breast milk without any additional food or drink not even water. World Health Organization recommended that exclusive breast feeding for 6 month is the optimal way of feeding infant [13, 14, 15].

Exclusive breast feeding is the protection against gastro-intestinal infections, pneumonia and neonatal sepsis which is observed not only in developing but in industrialized countries. The risk of mortality due to diarrhoea and other infections increases in infants who are either partially breastfed or not breastfed at all. [16, 17] Exclusive breast feeding is also integral part of the reproductive process with important implication for the health of mother [18]. Exclusive breast feeding is also integral part of the reproductive process with important implication for the health of mother. It is documented that breast feeding increases level of oxytocin, resulting in less post-partum bleeding and more rapid uterine involution and lactating mother have an easier return to pre pregnant weight, delayed resumption of ovulation with increased child spacing, improved bone remineralisation and post-partum with reduction in hip circumference It reduces risks of breast and ovarian cancer.

[19, 20,21]

Exclusive breastfeeding eliminates dependence on costly breast milk substitutes, feeding equipment, and fuel for preparation. Knowledge and attitude of mothers regarding exclusive breast feeding varies in rural and urban areas due to many factors like education status, occupation status, number of children, source of information and family Income. There is huge gap in the knowledge and attitude in rural and urban mothers .So in the present study author compare the knowledge and attitude of mothers regarding exclusive breast feeding. Along with this, the effect of other social, physical and economic variables on exclusive breast feeding are also examined.

II. Objectives

- To assess the knowledge on exclusive breast feeding among mothers in selected rural and urban areas.
- To assess the attitude on exclusive breast feeding among mothers in selected rural and urban areas.
- To compare the knowledge and attitude on exclusive breast feeding among mothers in selected rural and urban areas.
- To find the association between knowledge and attitude with selected socio demographical variable.

III. Materials and Methods

The research approach adopted for the study was non experimental approach with the comparative research design The conceptual framework adopted for the study was based on Imogene M. King Goal attainment Theory (1960).Sampling: For this study, Total 100 mothers of age group 20-36, who is having children of age 0-1 years from rural and urban areas was selected by nonprobability Purposive sampling technique. Tool with Questionnaire and Likert scale was administered to the sample. Criterion measure for assess the knowledge was excellent, good, average poor cat and for attitude positive, negative and neutral was kept by the researcher with the different range.

Data Collection Technique: Self-structured questionnaire and Likert scale was administered to mothers and who was not able to read Hindi method is used for that mothers.Structured Knowledge Questionnaire was comprised of two sections: Section I: Comprised of items seeking information on background data such as age, residence, number of children, types of family, educational status of mother, occupation, family monthly income, and source of information. Section II: This part consisted of 28 items of structured knowledge questionnaire with multiple choice questions having one correct answer among four options to assess the knowledge regarding exclusive breast feeding of mothers. Section III:Likert scale consisted of 10 statements concerning the attitude in which 5 were belonging to positive and 5 were negative statement. Negative statements are scored reversely. Each respondent had taken 25-30 minutes during the procedure of data collection. Inferential and descriptive analysis of data was done using SPSS version 20.0.

The content validity of the tools was established by seven experts including six nursing experts in the field of Obstetrics and Gynaecological Nursing and one nursing experts from Community Health Nursing. The investigator obtained written permission was taken from surpanch of villages and Municipal Council of Urban areas, of district Jalandhar, Punjab. Written consent was obtained from the respondent to gain the confidentiality to obtain free and frank response. Self-structured questionnaire and Likert scale was administered to mothers regarding exclusive breast feeding. Each respondent had taken 25-30 minutes during the procedure of data collection. The data obtained were analysed using both descriptive and inferential statistics.

IV. Results

Out of 100 mothers more than half (44% from rural and 56% from urban) were in the age group of 20-25. Most of 26% from rural mothers were having education unto senior secondary and in urban 52% of mothers were Graduate.

Table -1: Percentage distribution of mean knowledge score regarding exclusive breast feeding among mothers in selected rural and urban areas.

N=100

Level of knowledge					
		Rural		Urban	
Level	Score	n	%	n	%
Excellent	22-28	00	00	06	12
Good	15-21	22	44	39	78
Average	8 -14	28	56	05	10
Poor	0-7	00	00	00	00

The data presented in table no. 1 showed that the knowledge score in rural area 56% of mothers were having the average knowledge and in urban area 78% of mothers were in the good category.

Table -2: Percentage distribution of mean attitude score regarding exclusive breast feeding among mothers in selected rural and urban areas.

N= 100					
Level of Attitude					
Rural			Urban		
Level	Score	n	%	n	%
Positive	Above 31	28	56	45	90
Neutral	25 to 30	10	20	05	10
Negative	Below 25	12	24	00	00

The data presented in Table 2, showed that the attitude score in rural area 56 % and in urban 90 % of mothers having positive attitude And 24 % of mothers also having the negative attitude in rural area towards the exclusive breast feeding

Table -3: Compare the knowledge and attitude on exclusive breast feeding among mothers in selected rural and urban area

N=100					
Mean knowledge and attitude score					
Rural			Urban		
	Mean	SD	Mean	SD	
Knowledge	14.46	3.09	18.46	2.87	t= 4.00**
Attitude	31.74	6.34	37.84	5.18	t=6.10**
		t= 17.34 **		t= 19.38**	

** Significant (p<0.05)

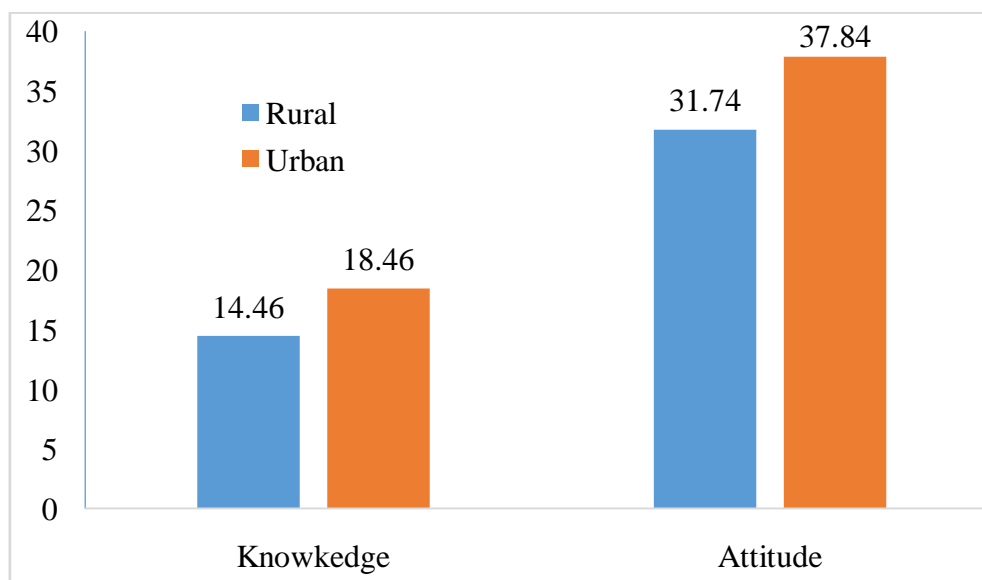


Fig 1 :Comparison between the knowledge and attitude on exclusive Breast feeding among rural and urban mothers

Data in Table 3 showed that in Urban area mean knowledge score (18.46) and attitude score (19.38) was higher as compared to the rural mothers (14.46) and (31.74). The calculated 'value by using "t" showed that (6.10) of knowledge and attitude (19.38) is greater than tabulated' value (2.99) at the level of significance.

Table: 4 Association between mean knowledge score regarding exclusive breast feeding in selected rural and urban areas according selected socio-demographic variables
N=100

Socio Demographic variable	Rural				Urban			
	Mean	S.D	df	F	Mean	S.D	df	F
Number of children								
1								
2	15.27	3.09	3,46	1.23NS	19.11	2.37	2,47	6.12*
3	14.15	2.23			18.70	2.61		
4	12.33	3.78			15.28	3.35		
	14.00	00			00	00		
Education status of mother								
Illiterate	15.5	0.70			00	00		
Primary	13.83	2.48	4,45	3.44*	00	00	2,47	7.9*
Secondary	12.64	3.41			16.16	2.82		
Senior-secondary	14.86	2.71			18.16	2.62		
Graduate	17.5	2.07			19.65	2.34		
Occupational status of mother								
House wife								
Govt. Employee	14.02	3.04	2,47	3.17*	18.05	2.87	3,46	1.35NS
Private employee	16.6	2.70			19.82	2.85		
Self-Employee	17.33	1.15			18.11	2.08		
	00	00			16.66	3.20		
Family monthly income (Rs)								
≥ 5000	12.33	3.60	3,46	4.02*	00	00	2,47	3.41*
5001-10,000	14.09	1.64			17.33	2.08		
10001-150000	14.71	2.94			16.14	3.38		
≤ 15000	16.23	2.71			18.95	2.65		

Significant at 0.05 level, NS-Non Significant

In this study some variable got the association between mean knowledge score regarding exclusive breast feeding in selected rural and urban areas with the socio demographic variable. Researcher got the significant association in urban area with socio demographic variable of number of children, occupational status of mother .there was two more variable in the study where urban as well rural mothers got the association that was the education status and family monthly income family monthly income .All the above mention variable has association with because the calculated value of F was more than the tabulated value. These all shows that socio demographic variable has the impact on the knowledge of the mothers whether she belong to the rural and urban.

Table: 5 Association between mean attitude score regarding exclusive breast feeding in selected rural and urban areas according selected socio-demographic variable

N=100

Socio Demographic variable	Rural				Urban			
	Mean	S.D	df	F	Mean	S.D	df	F
Age of mother (in yrs.)								
20-25	31.5	6.78			36.00	4.89		
26-31	31.90	6.37	2,47	0.11 NS	40.00	4.52	2,47	3.46*
32-36	30.57	6.60			38.75	4.07		
Occupational status of mother								
House wife	31.33	6.50	2,47	0.92 NS	37.33	3.51	3,46	3.39*
Govt. Employee	35.4	3.50			41.47	3.31		
Private employee	32.00	7.21			37.33	7.21		
Self-employee	00	00			36.83	4.70		

***Significant at 0.05 level, NS-Non Significant**

Table 5 also depicts the association between the mean attitude score regarding exclusive breast feeding with the variable of age of mothers and occupation status of the mother. Hence we can conclude that the attitude can be different according to the age and the occupation, which ultimately affects the health of the children.

V. Discussion

Findings of the present study showed that urban mothers having more knowledge and more positive attitude than the rural mother but in urban areas only 12% were in the excellent knowledge. But the urban mothers also don't have the sufficient knowledge regarding the exclusive breast feeding. These findings are consistent with the study conducted by **Olatona FA, Odeyemi KA.(2011)** Knowledge and attitude of women to exclusive breastfeeding in Ikosi, which concludes that 39% had good knowledge and a high proportion of women had positive attitudes despite the poor knowledge. The findings indicated awareness was high (98.3%) breastfeeding. In the present study urban mean knowledge and attitude score is higher than rural areas. In the present study association between mean attitude score was found with the education status, occupation of mother, family monthly income and attitude mean score was associated with age. [22] The study supported by **Shrestha, KhadagaLaxmi (2013)** in Maharajgunj at Kanti hospital. Result indicated that mothers knew about exclusive breast feeding only eight 8% of mothers of literate group. The rate of breast feeding was higher among the children of literate mothers (100%) than illiterate mothers (92%) of up to 4 to 6 months old child. The limitations were limited to small sample. The recommendation of the study a comparative study can be done between unemployed and employed mothers. Similar study can be undertaken on large sample and quasi experimental study can be done to assess the effectiveness of structured teaching programme on exclusive breast feeding.[23] In the present study also shows that socio demographic variables also have the effect on the knowledge and attitude of mothers who are residing in the different areas.

In contrast, a study by **AshwinBorade, Neeta Hanumante (2007)** conducted a study on maternal knowledge and perception about the breast feeding and factors influencing in urban low socioeconomic class of Pune. Result indicated that Seventy-three (48.6%) babies were exclusively breast fed (EBF), 57 (38%) were top fed, 15 (13.3%) were both breast and top fed. Illiteracy, primigravida, younger age and mothers living in nuclear family were found at significant higher risk of not following EBF. Undesirable sociocultural beliefs and misconceptions in the society affect BF practices. Study concluded that exclusive breast feeding for 6 months is still not routinely practiced by most of mothers. So promotion of optimal breast feeding practices is suggested.[24]

VI. Conclusion

Good nutrition is one of the basic components for child development survival and maintenance. Exclusive breast feeding is a parallel way of providing ideal food for the healthy growth and development of infant by protecting against many infections in children. This study showed that in rural as well as in urban areas mothers not having the enough knowledge and attitude. Various socio demographic variables also affect the health of the children. Study concludes that the urban mothers have the more knowledge and more positive attitude regarding exclusive breast feeding than the rural mothers. So for the awareness of the exclusive breast feeding public enlightenment and continued health education especially in the antenatal clinics and child care practice should be demonstrated to mothers in rural and urban areas.

Acknowledgement

At the very outset, I would like to thank almighty for his presence experienced during the study. My heartfelt thanks to Mrs. Nilavensa Begum Assistant Professor, S.G.L. College of Nursing, Jalandhar for their valuable suggestions and corrections. I would like to acknowledge the contribution of my family.

Ethical Consideration: Ethical approval to conduct the study was obtained from Institutional Ethical Committee of S.G.L. College of Nursing, Jalandhar, and Punjab. Written informed consent was obtained from the study subjects regarding their willingness to participate in the research project.

Conflict Of Interest: There is no conflict of interest.

FundingSource: Self-finance.

References:

- [1]. United Nations(UN),2007.TheMillenniumDevelopmentGoalsReport2007, New York.
- [2]. Simmer, K.,2000.Humanmilkbanksandvidence-basedmedicine.Journalof Paediatrics andChildHealth36,182–183.
- [3]. Heck, K.E.,Braveman,P.,Cubbin,C.,Cha´vez, G.F.,Kiely,J.L.,2006.Socioeconomic Status and Breast feeding Initiation among California Mothers .Public Health Reports 121.
- [4]. Wen, L.M., Baur, L.A., Rissel,C., Alperstein,G., Simpson,J.M., 2009.Intention to breastfeed and awareness of health recommendations : findings from first-time mothers in southwest Sydney ,Australia .International Breastfeeding Journal 4, <http://dx.doi.org/10.1186/1746-4358-4-9>.
- [5]. Kull, I.,Almqvist,C.,Lilja,G.,Pershagen,G.,Wickman,M.,2004.Breast-feeding reduces the risk of asthma during the first 4 years of life. Journal of Allergy and Clinical Immunology 114,755–760.
- [6]. Khassawneh, M.,Khader,Y.,Amarin,Z.,Alkafajei,A.,2006.Knowledge,attitude and practice of breast feeding in the north of Jordan : across-sectional study. International BreastfeedingJournal1,<http://dx.doi.org/10.1186/1746-4358-1-17>.
- [7]. Nishimura RY1, Castro GS, Jordão AA Jr, Sartorelli DS. Breast milk fatty acid composition of women living far from the coastal area in Brazil. *Jornal de Pediatria* 2013 May-Jun;89(3):263-8. doi: 10.1016/j.jped.2012.11.007. Epub 2013 Apr 26.
- [8]. Mäkelä J1, Linderborg K, Niinikoski H, Yang B, Lagström H. Breast milk fatty acid composition differs between overweight and normal weight women: the STEPS Study. *European Journal of Nutrition*. March 2013, Volume 52, Issue 2, pp 727-735.
- [9]. Jenness R. The composition of human milk. *Seminars in Perinatology*. 1979 Jul;3(3):225-39.
- [10]. Finley DA, Lonnerdal B, Dewey KG et.al. Breast milk composition: fat content and fatty acid composition in vegetarians and non-vegetarians. *The American Journal of Clinical Nutrition* 41: 1985.pp 787-800.
- [11]. Peter W. Howie. Protective effect of breastmilk against infection. *Food and Nutrition Bulletin* Volume 17, Number 4, 1996 (UNU, 1996, 163 p.).
- [12]. Alison Stuebe. The Risks of Not Breastfeeding for Mothers and Infants. *Rev Obstet Gynecol*. 2009 Fall; 2(4): 222–231.
- [13]. Adair,L.S.,Popkin,B.M.,Guilkey,D.K.,1993.The durationofbreast-feeding:how is it affectedbybiological,sociodemographic,healthsector,andfoodindustry factors ? *Demography* 30,63–80.
- [14]. WHO,2001. Report of the Expert Consultation of the Optimal Duration of Exclusive Breast feeding. World Health Organization, Geneva.
- [15]. Dyson L., Renfrew M.J., 2005. Interventions for promoting the initiation of breastfeeding. *Cochrane Database of Systematic Reviews*.
- [16]. Victora, C.G., Smith, P.G., Vaughan, J.P., et al. 1987.Evidence for protection by breast-feeding against infant deaths from infectious diseases in Brazil. *The Lancet* 2,319–32
- [17]. Arifeen, S.,Black,R.E.,Antelman,G.,Baqui,A.,Caulfield,L.,Becker,S.,2001.Exclusive breast feeding reduces acute respiratory infection and diarrhoea deaths among infants in Dhaka slums. *Pediatrics* 106, URL:<http://www.pediatrics.org/cgi/content/full/106/5/e675>.
- [18]. Britton,C.,McCormickF.M.,RenfrewM.J.,WadeA.,KingS.E.,2009.Supportforbreastfeeding mothers. *Cochrane Database of Systematic Reviews*