Awareness of Exclusive Breastfeeding among the Women of Reproductive Age Group in Urban Slums

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Abstract
Background: Breastfeeding is the optimal method of providing ideal food for the health, growth and development of infants. It has been estimated that 1.3 million deaths could be prevented each year if babies were exclusively breastfed from birth for the first six months. The benefits of exclusive breastfeeding on child survival, growth, and development are well documented. Unfortunately not every woman or mother is aware about the benefits of exclusive breastfeeding.

Aims: To assess the awareness of exclusive breastfeeding among the women of reproductive age group in urban slum areas of Jorhat town.

Materials and Methods: A Community based cross sectional study was conducted among the women of reproductive age group residing in the urban slums of Jorhat. Using simple random sampling technique total 90 eligible subjects were selected for our study and they were interviewed using a pre-tested pre-designed schedule.

Results: Out of the 90 respondents, 95.56% have heard about exclusive breastfeeding. Health worker (45.56%) found to be the most common source of information. According to 88.9% study subjects the duration of exclusive breastfeeding is 6 months and for 58.9% study subject exclusive breastfeeding includes only mother’s milk. The time of initiation of breastfeeding according to 60% study subjects is within one hour after birth and colostrum should be fed according to 68.9% study subjects.

Conclusion: The results shows that majority of the respondent were aware about exclusive breastfeeding but only 47.8% has correct knowledge about exclusive breastfeeding and so health education of the population is required.

Keywords: Exclusive Breastfeeding, Awareness, Urban, Slum.

Introduction
Breastfeeding is the optimal method of providing ideal food for the health, growth and development of infants. Breastfeeding has been accepted as the most vital intervention for reducing infant mortality and ensuring optimal growth and development of children. It has been estimated that 1.3 million deaths could be prevented each year if babies were exclusively breastfed from birth for the first six months and more than 15%
of 24 lakh child deaths could be averted in India by optimal breastfeeding practices. ³

Exclusive breastfeeding (EBF) refers to the exclusive intake of breast milk or expressed breast milk by an infant without the addition of any other liquids or solids, with the exception of oral drops, or syrups containing vitamins, mineral supplements or medicines.₄ EBF is being advocated the world over as the optimal mode of feeding for young infants in the first six months of life, followed by breast milk and complimentary feeds thereafter till two years of age or beyond. ⁵ The benefits of EBF on child survival, growth, and development are well documented. EBF also confers cognitive benefits and improves intelligence, reduces childhood obesity, stimulates the immune system and enhances response to vaccination. ⁶ Other advantages of EBF include reduction in postpartum bleeding, improvement in bone status later in life and protection against breast and ovarian cancers, lactational amenorrhea which enhances child spacing, early mother-infant bonding and reduction in infant abandonment and child abuse. ⁸ EBF also provides social and economic benefits to the family and the nation as well as a sense of satisfaction to most women. ⁹

Unfortunately not every woman or mother is aware about the benefits of exclusive breastfeeding. With this view the present study was conducted to find out the awareness of exclusive breastfeeding among the women of reproductive age group in urban slum areas of Jorhat town.

Aims and Objectives
To assess the awareness of exclusive breastfeeding among the women of reproductive age group in urban slum areas of Jorhat town.

Materials and Methods
The present study is a community based cross sectional study conducted among the women of reproductive age group residing in the urban slums of Jorhat from 16th July 2016 to 15th August 2016.

As per NFHS-4 prevalence of exclusive breastfeeding for 6 month in Assam was found to be 63.5%. ⁹ So, considering 63.5% prevalence of exclusive breastfeeding with 10% absolute error, the sample size was calculated to be 90.

To get the required sample 1 slum out of 7 Slum was selected randomly. The selection of the household in the slum was done by picking up a random starting number and then every house was visited until the required sample was obtained. The eligible samples from those houses were interviewed. In case of non-availability of the respondent or any house was found locked, next house was visited.

Data was collected in a pre-designed proforma by interviewing the women of reproductive age group (15-49) years after taking verbal consent. Women of reproductive age group giving verbal consent and dwelling in the slum for more than 6 months were included in the study whereas women not giving verbal consent and living in the slum less than 6 month were excluded.

Ethical Clearance
The clearance to conduct the study was obtained from Institutional Ethics Committee (IEC) Jorhat Medical College

Statistical analysis
The data collected on various aspect of the study were completed, tabulated and subjected to statistical analysis. Data analytical procedures involved frequency distribution, chi square test and fisher’s exact test where applicable. The statistical analysis was done using SPSS 16.1 software

Operational definition used in our study
EBF: Exclusive breastfeeding" is defined as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for 6 months of life, but allows the infant to receive ORS, drops and syrups (vitamins, minerals and medicines) ¹⁰

Correct Knowledge of EBF: ¹¹
Knowledge about initiation of BF within 1 hour,
Feeding of colostrum
No prelacteal feed,
Knowledge about feeding only mother’s milk for 6 month and not giving any other food not even water.

Those women who have answered all the above indicators were considered as completely aware and have the correct knowledge of EBF.

Results and Observation
Out of the 90 study subjects, majority (44.5%) were of the age group 20-25 years, 88.9% followed Hinduism with 44.5% study subjects were SC by caste and 67.8% subjects belongs to Nuclear family. Among the study subjects most of them (45.6%) have completed their education till Secondary level but only 17.8% was found Employed and 52.2% belongs to Lower Middle Class (Table 1)

In our study majority (95.56%) have heard about exclusive breastfeeding and health workers (45.56%) found to be the most common source of information (Fig 1). According to 88.9% study subjects the duration of exclusive breastfeeding is 6 months and for 58.9% study subject exclusive breastfeeding includes only mother’s milk. The first food for the baby is mother’s milk according to 74.4% study subject and the time of initiation of breastfeeding according to 60% study subjects is within one hour after birth. Majority (87.8%) study subjects have heard about colostrum and according to 68.9% study subject colostrum should be fed. (Table 2)

Concerning about the correct knowledge of EBF, only 43 (47.8%) respondent had correct knowledge of EBF. On comparing the relationship between various socio-economic factors and correct knowledge of EBF (Table3), it was found that majority (60.8%) of study subjects more than 25 years of age and 52.6% of Literate study subjects had the correct knowledge of EBF, statistically significant association (P value <0.05) was found between correct knowledge of EBF with regards to age of the respondent and education status. Our study also shows that 46.3% of Hindu respondent, 55.2% respondent belonging to Joint family, 43.7% of employed women and 58.8% middle class study subjects had correct knowledge of EBF. But no statistically significant (P value <0.05) association found between the correct knowledge of EBF with employment, family type, religion and socio-economic class

Table 1: Socio demographic profile of the respondent (N=90)

| Variable                | Number | Percentage |
|-------------------------|--------|------------|
| Age Group               |        |            |
| <19                     | 4      | 4.4%       |
| 20-25                   | 40     | 44.5%      |
| 26-30                   | 25     | 27.8%      |
| >30                     | 21     | 23.3%      |
| Religion                |        |            |
| Hindu                   | 80     | 88.9%      |
| Muslim                  | 10     | 11.1%      |
| Caste                   |        |            |
| General                 | 22     | 24.4%      |
| OBC                     | 28     | 31.1%      |
| SC                      | 40     | 44.5%      |
| Type of family          |        |            |
| Joint                   | 29     | 32.2%      |
| Nuclear                 | 61     | 67.8%      |
| Marital Status          |        |            |
| Married                 | 84     | 93.3%      |
| Unmarried               | 6      | 6.7%       |
| Education               |        |            |
| Illiterate              | 12     | 13.3%      |
| Primary                 | 10     | 11.1%      |
| Secondary               | 41     | 45.6%      |
| HS                      | 23     | 25.6%      |
| Graduate                | 4      | 4.4%       |
| Occupation              |        |            |
| Unemployed              | 74     | 82.2%      |
| Employed                | 16     | 17.8%      |
| Socio economic status   |        |            |
| Lower                   | 26     | 28.9%      |
| Upper lower             | 47     | 52.2%      |
| Middle                  | 17     | 18.9%      |
Table 2: Knowledge of women regarding indicators of exclusive breastfeeding (N=90)

| Variable | Number | Percentage |
|----------|--------|------------|
| Have heard about EBF: | | |
| Yes | 86 | 95.6% |
| No | 4 | 4.4% |
| Duration of EBF | | |
| 6 month | 80 | 88.9% |
| >6 month | 2 | 2.2% |
| <6 month | 2 | 2.2% |
| Don’t know | 6 | 6.7% |
| EBF means: | | |
| Only mothers milk | 53 | 58.9% |
| Milk with water | 33 | 36.7% |
| Don’t know | 4 | 4.4% |
| First food for the baby: | | |
| Breast milk | 67 | 74.4% |
| Honey | 18 | 20% |
| Water | 5 | 5.6% |
| Feed within | | |
| Within 1 hour | 54 | 60% |
| 1-6 hour | 10 | 11.1% |
| >6 hours | 4 | 4.4% |
| Don’t know | 22 | 24.5% |
| Heard about colostrum | | |
| Yes | 79 | 87.8% |
| No | 11 | 12.2% |
| Colostrum | | |
| To be feed | 62 | 68.9% |
| Discarded | 18 | 20% |
| Don’t know | 10 | 11.1% |

Table 3: Table showing the relation between various socio economic factors and correct knowledge of exclusive breastfeeding (N=90)

| Variable | Correct knowledge about EBE(N=43) | Incorrect knowledge about EBF(N=47) | Total (N=90) | P value | Chi square |
|----------|------------------------------------|-------------------------------------|-------------|---------|-----------|
| Age | No. | % | No. | % | No. | % |
| <19 | 3 | 75% | 1 | 25% | 4 | 4.4% | 0.011 | 6.46 |
| 20-25 | 12 | 30% | 28 | 70% | 40 | 44.5% | 0.19008 | 0.674 |
| 26-30 | 16 | 64% | 9 | 36% | 25 | 27.8% | 0.333 | 0.938 |
| >30 | 12 | 57.2% | 9 | 42.8% | 21 | 23.3% | 0.01707 | 5.371 |
| Religion | Hindu | 37 | 46.3% | 43 | 53.7% | 80 | 88.9% | 0.011 | 6.46 |
| Muslim | 6 | 60% | 4 | 40% | 10 | 11.1% | 0.01707 | 5.371 |
| Type of family | Nuclear | 27 | 44.3% | 34 | 55.7% | 61 | 67.8% | 0.011 | 6.46 |
| Joint | 16 | 55.2% | 13 | 44.8% | 29 | 32.2% | 0.01707 | 5.371 |
| Educational status | Illiterate | 2 | 16.7% | 10 | 83.3% | 12 | 13.3% | 0.01707 | 5.371 |
| Literate | 41 | 52.6% | 37 | 47.4% | 78 | 86.7% | 0.01707 | 5.371 |
| Occupation | Unemployed | 36 | 48.6% | 38 | 51.4% | 74 | 82.2% | 0.01707 | 5.371 |
| Employed | 7 | 43.7% | 9 | 56.3% | 16 | 17.8% | 0.01707 | 5.371 |
| Socio-Economic | Lower | 30 | 36.5% | 43 | 63.5% | 63 | 70% | 0.01707 | 5.371 |
| Middle | 13 | 58.8% | 7 | 41.2% | 17 | 30% | 0.01707 | 5.371 |
Discussion
The present study was undertaken to assess the awareness of exclusive breastfeeding among the women of reproductive age group in the Urban Slum of Jorhat town and also to find out the influence of socio-demographic factors on exclusive breastfeeding. The urban slum population constitute one of the fastest growing sections of the society with millions of babies being born annually. Breast feeding practices of children among urban slum dwellers is considered poor leading to various conditions of ill health and malnutrition.

Our study revealed that only 47.8% of the respondent had the correct knowledge regarding EBF which was almost similar to study done by Ouchi et al\textsuperscript{12} where (31%) mothers had adequate knowledge of exclusive breastfeeding and in a study done by Abasiattai et al\textsuperscript{13} showed (42.0%) of antenatal attendees were able to define exclusive breastfeeding correctly. However, the figure obtained in this study is low when compared to the study done by Oluwatosin et al\textsuperscript{14} where 66.1% female young adults correctly defined the definition of exclusive breastfeeding. Our study corroborates that correct knowledge regarding EBF among the urban slum dwellers is far from satisfactory.

Statistically significant association (P value<0.05) between correct knowledge of EBF with regards to education status directly points that lower education status of urban slum dwellers is one of foremost reason for lower awareness of EBF and appropriate public education needs to be augmented.

On assessing the duration of EBF, our study has revealed that 88.9% of the respondent has good knowledge regarding the duration of EBF. Similar findings were supported by studies done by Bayissa Z B. et. al\textsuperscript{15} where majority of the respondents (90.8%) know that the duration of EBF was 6 months and Lucen Afrose et al\textsuperscript{16} where majority (74%). of the respondents have good knowledge regarding duration of exclusive breastfeeding.

EBF includes only mother’s milk. Our study shows according to only 58.9% of the respondent EBF should include only mother’s milk. Similar results were found in study done by Oluwatosin Leshi et al\textsuperscript{14} shows 69.4 % only breast milk is sufficient for infants in the first 6 months. However, in study done by Pandey et al\textsuperscript{17} showed more than 85% women (younger generation: 89.8%; elder generation: 87.5%) agreed that for a newborn breast milk should not be supplemented with anything without giving any additional food except necessary medications. The reason for lower result is due to some traditional belief that

Fig 1: Most common source of information on EBF (N=90)

- Health Worker: 46%
- Relatives: 20%
- Mass media: 30%
- None: 4%
mother’s milk alone is not enough for growth without giving supplementation. 

On assessing the knowledge of first food for the new born baby, our study shows 74.4% study subjects agreed that the first food for the new born baby is mother’s milk and there should not be any prelacteal feed, which is well supported in study done by Tariku et al \(^\text{18}\) shows according to 73.2% study subjects mentioned of not giving any prelacteal feed and study done by Oluwatosin Leshi et al \(^\text{14}\) shows 50.1 % study subjects mentioned about not taking any prelacteal feed. Community beliefs influenced EBF in this setting. There are symbolic cultural procedures of ‘Mooh Meetha Karo’ (Mouth Sweetening Ceremony) with some kind of prelacteal feed like honey once the baby is born.

The first hour of an infant’s life is of great importance for the initiation and continuation of breastfeeding, it also establishes the emotional bond between mother and the baby. Early initiation of breastfeeding within an hour of birth is therefore recommended. Our study shows only 60% of the respondent stated that breastfeeding should be initiated within first hour of birth, well supported in study done by Oluwatosin Leshi et al \(^\text{14}\) shows 52.1% recommends early initiation of breastfeeding. However in study done by Chinnasami et al \(^\text{19}\) showed 80% of the mothers had the knowledge to initiate breastfeeding within one hour of delivery. In our study lower percentage result of early initiation of breastfeeding is may be due to ignorance, wrong perception that pure mothers milk comes only after 2 or 3 days.

Colostrum on other hand has got immunologic benefit for the newborn and therefore should be fed to the baby. Our study shows according 68.9% respondent colostrum should be fed to the new born baby, which is similar to the study done by Chinnasami et al \(^\text{19}\) where 75% had correct knowledge about colostrum and also study done by Pandey et al \(^\text{17}\) showed 78.1% mothers of younger generation agreed that colostrum to be fed to the baby. The lower values on regards to colostrum intake is due to prevalent traditional cultural customs and negative perception on colostrum feeding, as first milk is very dirty and so must be discarded.

**Conclusion**

The result shows that majority of the respondent had heard about exclusive breastfeeding but only 47.8% were completely aware of exclusive breastfeeding. So public health education campaign related to exclusive breastfeeding is required which supports and encourage breastfeeding particularly at a primary care level, focusing more on younger, less well-educated women and those from lower socioeconomic class.

**References**

1. Thamizhvanan EP et al. A Quasi Experimental Study to access the effectiveness of educational package on knowledge regarding Breastfeeding among Primigravide Mothers: A Study from South India, Asia Pacific Journal of Research 2015 Feb; 24(1):66-72.
2. Doherty T, Sanders D, Goga A, Jackson D. Implications of the new WHO guidelines on HIV and infant feeding for child survival in South Africa. Bulletin of the World Health Organization 2010;89(1):62-67.
3. Gupta A, Arora V, Bhatt B. The State of World’s Breastfeeding: India Report card 2006. International Baby Food Action Network (IBFAN), Asia Pacific. India 2006.
4. Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding. WHO/UNICEF policymakers meeting on “Breastfeeding in the 1990s: A Global Initiative.” Spedale degli Innocenti, Florence, Italy 1990 July-August. Available at http://www.unicef.org/nutrition/index_24807.html
5. Setegn T, Belachew T, Gerbaba M, Deribe K, Deribew A, Biadgilign S. Factors associated with exclusive breastfeeding practices among mothers in Goba district, South East Ethiopia: a cross-sectional study. Int Breastfeed J 2012;7(1):17.

6. Moore SE. Nutrition, immunity and the fetal and infant origins of disease hypothesis in developing countries. Proc Nutr Soc 1998;57(2):241-7.

7. Worugji IN, Etuk SJ. The National Breastfeeding Policy in Nigeria: the working mother and the law, Health Care Women Int 2005;26(7):534-54.

8. Vekemans M. Postpartum contraception: the lactational amenorrhea method. Eur J Contracept Reprod Health Care 1997;2(2):105-11.

9. National Family Health Survey -4(NFHS 4), International Institute for Population Sciences (Deemed University) Mumbai State Fact Sheet, Assam.

10. http://www.who.int/nutrition/topics/infantfeeding_recommendation/en.

11. WHO(2008),Indicators for assessing infant and young child feeding practices .Part 1 Definitions
http://apps.who.int/iris/bitstream/10665/43895/1/9789241596664_eng.pdf

12. Oche MO, Umar AS, Ahmed H. “Knowledge and practice of exclusive breastfeeding in Kware, Nigeria. African Health Sciences 2011; 11(3): 518 – 523.

13. Abasiattai et al. Knowledge and practice of exclusive breastfeeding among antenatal attendees in Uyo, Southern Nigeria Gaziantep Med J 2014;20(2):130-135.

14. O. Leshi et al. Breastfeeding Knowledge, Attitude and Intention among Female Young Adults in Ibadan, Nigeria. Open Journal of Nursing 2016, 6, 11-23.

15. Bayissa Z B. et. al. Knowledge and Practice of mothers towards exclusive breastfeeding and its associated factors in ambo Woreda west Shoa zone Oromia Region, Ethiopia, Int. J. Res. Dev. Pharm. L. Sci. 2015 April – May; 4(3):1590-1597.

16. Lucen Afrose et al. Factors associated with knowledge about breastfeeding among female garment workers in Dhaka city, WHO South-East Asia Journal of Public Health 2012;1(3):249-255.

17. Pandey D et. al. Awarenessand Attitude towards Breast feeding among Two Generations of Indian Women:A Comparative Study, PLoSONE 2015; 10(5).

18. Tariku et al. Factors associated with prelacteal feeding in the rural population of northwest Ethiopia: a community cross-sectional study, International Breastfeeding Journal 2016; 11(14).

19. Chinnasami et al. Knowledge, Attitude and Practices of Mothers Regarding Breastfeeding in a South Indian Hospital, Biomed. & Pharmacol. J 2016;9(1), 195-199.