

# Knowledge, Attitude and Practices Regarding Breast Feeding among Primiparous and Multiparous Mothers in an Urban Slum, West Tripura: A Comparative Cross Sectional Study

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Inadequate knowledge or inappropriate practices of breastfeeding may lead to undesirable consequences. To assess the knowledge, attitude and practices (KAP) regarding breastfeeding among primiparous and multiparous mothers in an urban slum. A community based cross sectional study was conducted among 200 mothers (100 primiparous and 100 multipara) in an urban slum and eligible mothers were selected using simple random sample technique. The mean knowledge score on breastfeeding for the primiparous mothers was  $8.4 \pm 1.8$  and multiparous was  $9.5 \pm 2.2$ . The mean attitude score for the primiparous mothers was  $47.27 \pm 3.09$  and  $48.38 \pm 2.7$  for the multiparous mothers. Out of 200 mothers, 118 (59%) had adequate knowledge and 86 (43%) mothers were correctly done breast feeding practices. However, 52% multiparous were found more correctly practicing breastfeeding than primiparous (34%) and it was statistically significant ( $P=0.01$ ). The level of knowledge among multiparous (71%) were found more adequate than primiparous (47%) and significant difference was observed ( $P=0.001$ ). Most of mothers (83%) had positive attitude towards breastfeeding (82% primiparous and 84% multiparous) and mothers did not have any negative attitude towards breastfeeding. The level of Knowledge is still needed to be improved in primipara mothers and however, the correct practice of breastfeeding was also found low in primipara mothers than multipara mothers. These findings suggest an urgent need for dissemination of information about optimal breastfeeding practices through mass media and education of mothers during antenatal visits and immunization sessions especially in primipara mothers in the study area.

**Keywords:** Breastfeeding, KAP, multipara, primipara, Urban Slum.

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Breastfeeding is a well established and recommended intervention for the improvement of child nutrition.<sup>1</sup> Breastfeeding, particularly exclusive breastfeeding, and appropriate complementary feeding practices are universally accepted as essential elements for the satisfactory growth and development of infants as well as for prevention of childhood illness.<sup>2</sup> In spite

of a worldwide campaign for promotion of breastfeeding, achievements are not up to the desired target. There are many factors which may affect feeding practices in our country. Various studies have shown that infant feeding could be influenced by socioeconomic status, maternal education, place of living and many other factors.<sup>3</sup>

Mother's poor knowledge and negative attitude towards breastfeeding may influence practices and constitute barriers to optimizing. Hence, it is necessary that lactating mothers should have a positive attitude, adequate knowledge and appropriate practices of breastfeeding that can help to prevent pathogens from invading child's system.<sup>4</sup> Therefore, the present study was designed to assess the KAP regarding breastfeeding among primiparous and multiparous mothers in an urban slum.

## METHODOLOGY

A cross sectional study was conducted in an Urban slum, field practice area of Urban Health Training Centre of Department of Community Medicine, Agartala Government Medical College, Agartala, West Tripura, from January 2018 to March 2018. Women having children in the age group of 06-24 months residing permanently in the study area were enrolled for the study and mothers who were not willing to participate and not found after three successive visits were excluded from the study.

### Sample size calculation

A sample size was calculated using the formula,  $n = [(Z_{1-\alpha/2})^2 \times p \times q] \div (l)^2$ , considering the adequate knowledge of breastfeeding among lactating mothers to be as 50% (observation from the pilot study, conducted before the final study), with an allowable error (l) of 15%, at 95% confidence level, Sample size has been calculated as 171 and adding 10% of non response rate, sample came around 188. During the study period, data has been able to collect from 203 consented mothers (101 primiparous and 102 multiparous).

Prepared a list of eligible mothers from the family registers of the Urban Health Training Centre (UHTC) one week prior the start of the study and from that list, mothers were chosen by simple random sampling by using random number table. House of the eligible mothers was identified with the help of ANMs and ASHAs, details about the study had explained to the mothers and head of the families before the start of the interview and informed consent was taken from the mothers in local language. A pre-designed, pre-tested, structured interview schedule has been used to collect the required information.

The interview schedule used for collection of data consisted of 4 sections:

**Section A** - was socio-demographic profile.

**Section B- practice on breastfeeding**, (initiation of breastfeeding after delivery, prelacteal feeding, colostrum, duration of only breast feeding, frequency of feeding etc.). The individual who gave correct answer were given score "one" (1) and those who gave wrong answers were given "zero" (0). Those subjects scoring more than mean were said to have correct practice and subjects scoring less than and equal to mean were said to have incorrect practice.

**Section C- knowledge on breastfeeding:** It consist of 15 structured items on knowledge and all these items were measured in terms of knowledge scores of multiple option items (questions). There was only one correct answer. Those who gave correct answers were given score "one" (1) and those who gave wrong answers were given "zero" (0). The highest possible answer was 16. For deciding adequate knowledge – mean score was taken as a cut of value. Those subjects scoring more than mean were said to have adequate knowledge and subjects scoring less than and equal to mean were said to have inadequate knowledge.

**Section D - attitude towards breastfeeding:** The attitude questionnaire consists of 12 statements identifying the attitudes of respondents towards breastfeeding. A five point likert scale were utilized to assess attitude in terms of strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. There were 2 types of questions i.e. positive attitude and negative attitude questions out of the 12 statements. The possible score was 60 (sixty). The attitude level were categorized based on scores obtained as Positive attitude (75 – 100 %), Neutral attitude (50 – 74 %), Negative attitude (0 – 49 %).

### Data analysis

Data analysis has been done by IBM SPSS Version 20. Descriptive statistics (frequencies, percentages, mean, and standard deviation) were used. Chi- square test and Fisher's exact was used for categorical variables and independent t-test was used to establish for significant differences between continuous data. Pearson's correlation coefficient test was done to see the strength of correlation between knowledge, attitude and practice on

breastfeeding among the respondents. P value of < 0.05 has been considered as statistically significant.

**Ethical Consideration**

The study was conducted after getting approval from Institutional Ethics Committee of Agartala Government Medical College, AGMC.

**RESULTS**

A total of 203 respondents were interviewed. Due to data incompleteness one primiparous and two multiparous mothers were excluded from the study. Final analysis was done among 200 mothers (100 primiparous and 100 multiparous). Mean age of the primiparous

mothers were 20.7 and SD= 2.7 and mean age of multiparous were 25.5 and SD= 3.6

**Sociodemographic characteristics**

It was observed that maximum primiparous mothers (61%) were in adolescent age group (17-19 years) and multiparous (53%) were age group of (21-25) years. Most of the subjects, both primiparous and multiparous mothers were belonged to Hindu 56%, 54% respectively and home maker (93% primiparous, 85% multiparous). Majority of the primiparous mothers (51%) were secondary educated and 48% multiparous were primary educated. Both the respondents during their last pregnancy, had gone for antenatal check up (ANC) more than 4 times i.e. 66% and 71%

**Table 1.** Knowledge about breastfeeding among study participants (n=200)

| Category  |                  | Parity of the mother (n=200) |                             |               | Significance     |
|---|------------------|------------------------------|-----------------------------|---------------|------------------|
|   |                  | Primipara<br>(100)<br>n (%)  | Multipara<br>(100)<br>n (%) | Totaln<br>(%) |                  |
| Knowledge of initiation of breast feeding after delivery  | Correct response | 54 (54.0)                    | 70 (70.0)                   | 124 (62.0)    | *P value = 0.02  |
|   | Wrong response   | 46 (46.0)                    | 30 (30.0)                   | 76 (38.0)     |                  |
| Knowledge about what is colostrums  | Correct response | 92 (92.0)                    | 95 (95.0)                   | 187 (93.5)    | P value = 0.390  |
|   | Wrong response   | 8 (8.0)                      | 5 (5.0)                     | 13 (6.5)      |                  |
| Knowledge of advantages of colostrums   | Correct response | 59 (59.0)                    | 77 (77.0)                   | 136 (68.0)    | *P value = 0.006 |
|   | Wrong response   | 41 (41.0)                    | 23 (23.0)                   | 64 (32.0)     |                  |
| Knowledge about prelacteal feeding  | Correct response | 27 (27.0)                    | 46 (46.0)                   | 73 (14.6)     | *P value= 0.005  |
|   | Wrong response   | 73(73.0)                     | 54 (54.0)                   | 127 (63.5)    |                  |
| Knowledge about breastfeeding beneficial to the baby  | Correct response | 93 (93.0)                    | 94 (94.0)                   | 187 (93.5)    | P value = 0.774  |
|   | Wrong response   | 7 (7.0)                      | 6 (6.0)                     | 13 (6.5)      |                  |
| Knowledge about what to do if a baby is < 4 months and feel that the baby is not getting enough milk? | Correct response | 29 (29.0)                    | 46 (46.0)                   | 75 (37.5)     | *P value = 0.01  |
|   | Wrong response   | 71 (71.0)                    | 54 (54.0)                   | 125 (62.5)    |                  |
| Knowledge what to do after feeding  | Correct response | 96 (96.0)                    | 93 (93.0)                   | 189 (94.5)    | P value = 0.537  |
|   | Wrong response   | 4 (4.0)                      | 7 (7.0)                     | 11 (5.5)      |                  |
| Knowledge about baby getting enough milk  | Correct response | 25 (25.0)                    | 30 (30.0)                   | 55 (27.5)     | P value = 0.428  |
|   | Wrong response   | 75 (75.0)                    | 70 (70.0)                   | 145 (72.5)    |                  |
| Knowledge what to do if baby spits breast milk while feeding  | Correct response | 96 (96.0)                    | 90 (90.0)                   | 186 (93.0)    | P value= 0.164   |
|   | Wrong response   | 4 (4.0)                      | 10 (10.0)                   | 14 (7.0)      |                  |
| Knowledge about continuation breastfeeding for the baby   | Correct response | 24 (24.0)                    | 35(35.0)                    | 59 (29.5)     | P value= 0.08    |
|   | Wrong response   | 76 (76.0)                    | 65 (65.0)                   | 141 (70.5)    |                  |
| Knowledge about breast feeding beneficial to the mother   | Correct response | 2 (2.0)                      | 6 (6.0)                     | 8 (4.0)       | P value = 0.279  |
|   | Wrong response   | 98 (98.0)                    | 94 (94.0)                   | 192 (96.0)    |                  |
| Knowledge about breast engorgement  | Correct response | 87 (87.0)                    | 89 (89.0)                   | 176 (88.0)    | P value= 0.663   |
|   | Wrong response   | 13 (13.0)                    | 11 (11.0)                   | 24 (12.0)     |                  |
| Knowledge about care of sore nipple   | Correct response | 9 (9.0)                      | 7 (7.0)                     | 16 (8.0)      | P value= 0.602   |
|   | Wrong response   | 91 (91.0)                    | 93 (93.0)                   | 184 (92.0)    |                  |
| Knowledge about food for successful lactation   | Correct response | 56 (56.0)                    | 76 (76.0)                   | 132 (66.0)    | *P value= 0.003  |
|   | Wrong response   | 44 (44.0)                    | 24 (24.0)                   | 68 (34.0)     |                  |

Chi-Squard test applied. \*P value = <0.05

respectively and have delivered at govt. health facility (70% of the primiparous and 67% of the multiparous). At the time of interview, majorities (67%) of the children among primiparous mothers were age of 6-12 months and among multiparous, 70% children were age of 6-12 months.

### Breastfeeding Practices

In the present study, multiparous mothers (55%) had initiated breastfeeding earlier (within half an hour after delivery) than primiparous (48%). The main reasons for delayed initiation of breastfeeding in most of the primiparous were delayed lactation (31%) and among multiparous were due to sickness of the baby (18%). Nearly

half (50%) of the primiparous mothers and 36% multiparous were given prelacteal feeding to their baby and found statistically significant (P value = 0.04). Majority of the primiparous and multiparous gave prelacteal feeds in the form of honey around 36%, 23% respectively. 73% the primiparous and 85% multiparous had given colostrums to their baby and also found statistically significant (P value= 0.03). Reasons for not feeding colostrum were that both the mothers thought it was harmful for their baby (11% primiparous and 8% multiparous). Most of the multiparous (58%) were practiced demand feeding in compared to primiparous (43%) and found statistically significant (P value= 0.03).

**Table 2.** Attitude towards breastfeeding among study participants (n=200)

| Category  |                            | Parity of the mother (n=200) |                             | Total<br>n (%) |
|---|----------------------------|------------------------------|-----------------------------|----------------|
|   |                            | Primipara<br>(100)<br>n (%)  | Multipara<br>(100)<br>n (%) |                |
| Breast feeding can prevent diseases affecting the breast                | Strongly agree             | 48 (48.0)                    | 47 (47.0)                   | 95 (47.5)      |
|   | Agree                      | 47 (47.0)                    | 51 (51.0)                   | 98 (49.0)      |
|   | Neither agree nor disagree | 5 (5.0)                      | 2 (2.0)                     | 7 (3.5)        |
| Breast feeding is healthiest for infant                                 | Agree                      | 100 (100)                    | 100 (100)                   | 100(100)       |
| Breast feeding is embarrassing  | Agree                      | 0 (0.0)                      | 0 (0.0)                     | 0 (0.0)        |
|   | Disagree                   | 100 (100)                    | 100 (100)                   | 100 (100)      |
| Breast feeding helps in mother and child bonding                        | Strongly agree             | 38 (38.0)                    | 45 (45.0)                   | 83(45.1)       |
|   | Agree                      | 62 (62.0)                    | 55 (55.0)                   | 117 (58.5)     |
| Breast feeding is old fashioned   | Strongly disagree          | 0 (0.0)                      | 1(1.0)                      | 1 (0.5)        |
|   | Disagree                   | 100 (100)                    | 99 (99.0)                   | 199 (99.5)     |
| It's not difficult for breastfeeding mother to care for the family      | Strongly agree             | 22 (22.0)                    | 38(38.0)                    | 60 (30.0)      |
|   | Agree                      | 76 (76.0)                    | 57 (57.0)                   | 113 (56.5)     |
|   | Neither agree nor disagree | 2 (2.0)                      | 5 (5.0)                     | 7 (3.5)        |
| Breast feeding negative effect on marital relationship                  | Strongly disagree          | 1 (1.0)                      | 1 (1.0)                     | 2 (1.0)        |
|   | Disagree                   | 89 (89.0)                    | 97 (97.0)                   | 186 (93.0)     |
|   | Neither agree nor disagree | 10 (10.0)                    | 2 (2.0)                     | 12(6.0)        |
| Breast feeding prevents going back to work                              | Strongly disagree          | 1 (1.0)                      | 1 (1.0)                     | 2 (1.0)        |
|   | Disagree                   | 93 (93.0)                    | 93 (93.0)                   | 186 (93.0)     |
|   | Neither agree nor disagree | 6 (6.0)                      | 6 (6.0)                     | 12 (6.0)       |
| Feeding infant formula keeps the baby well shaped & Prevents overweight | Strongly agree             | 0 (0.0)                      | 1 (1.0)                     | 1 (0.5)        |
|   | Agree                      | 42 (42.0)                    | 19 (19.0)                   | 61 (30.5)      |
|   | Disagree                   | 17 (17.0)                    | 27 (27.0)                   | 44 (22.0)      |
|   | Strongly disagree          | 41 (41.0)                    | 53 (53.0)                   | 94 (47.0)      |
| Colostrum is bad for child's health                                     | Agree                      | 6 (6.0)                      | 7 (7.0)                     | 13 (6.5)       |
|   | Disagree                   | 94 (94.0)                    | 93 (93.0)                   | 187 (93.5)     |
| Breast feeding should be avoided during Sickness of baby                | Strongly agree             | 3 (3.0)                      | 7 (7.0)                     | 10 (5.0)       |
|   | Agree                      | 31 (31.0)                    | 24 (24.0)                   | 55 (27.5)      |
|   | Disagree                   | 66 (66.0)                    | 69 (69.0)                   | 135 (67.5)     |
| Breast feeding should be avoided during sickness of the mother          | Agree                      | 52 (52.0)                    | 37 (37.0)                   | 89 (44.5)      |
|   | Disagree                   | 48 (48.0)                    | 63 (63.0)                   | 111(55.5)      |

Exclusive breast feeding practice (EBF) was mostly done by multiparous (68%) than primiparous (53%). Overall, 86 (43%) of the study subjects were correctly done breast feeding practices while 52% multiparous were found more correctly practicing than primiparous (34%) and also observed statistically significant (P value= 0.01).

**Knowledge of respondents about breastfeeding**

The mean knowledge score on breastfeeding (out of total 15) for the primiparous mothers was 8.4 ±1.8 and multiparous was 9.5±2.2. It was found highly significant (P value= 0.000). Our study revealed that multiparous had more knowledge (70%) than primiparous (54%) regarding initiation of breast feeding after delivery and found statistically significant (P value = 0.02). Majority of the multiparous (77%) had more knowledge about advantages of colostrums than primiparous (59%) and it was statistically significant (P value = 0.006) (Table 1). The level of adequate knowledge among multiparous and primiparous were 71% and 47% respectively and found statistically significant (P value= 0.001). Out of 200, 118 (59%) study subjects had adequate knowledge and 82 (41%) mothers had inadequate knowledge about breastfeeding. Majority of the primiparous and multiparous were known about breastfeeding from health personnel 40% and 42% respectively.

**Attitude of respondents towards breastfeeding**

The mean attitude score for the primiparous mothers was 47.27±3.09 and 48.38±2.7 for the multiparous mothers. Almost all the mothers (100%) were agreed that “Breast feeding is healthiest for infant” and “Breast feeding helps in mother and child bonding” and also 100% mothers were disagreed about the fact that “Breast feeding is embarrassing” (Table 2). In the present study, out of 200 mothers, 166 (83%) had positive attitude towards breastfeeding (82% primiparous and 84% multiparous) and 34 (17%) mothers had neutral attitude towards breastfeeding (18% primiparous and 16% multiparous) and both the respondents did not have any negative attitude towards breastfeeding. But it was not found statistically significant (P value = 0.352).

In the present study, there were observed significant differences in the knowledge, attitude and practices of breastfeeding among primiparous and multiparous mothers. (Table 3)

In Pearson’s correlation coefficient test, moderate Positive correlation was observed between knowledge and practice scores on breastfeeding among participants and found statistically significant (P= 0.000). Weak Positive correlation was observed between attitude and practice scores and also observed statistically significant (P=0.001). (Table 4)

**Table 3.** Association between knowledge, attitude, practice score on breastfeeding among participants (n=200)

| Variables       | Mean difference | Std. error difference | Significance (P value) | 95 % confidence interval |       |
|-----------------|-----------------|-----------------------|------------------------|--------------------------|-------|
|                 |                 |                       |                        | Lower                    | Upper |
| Practice score  | -.660           | .188                  | *0.001                 | -1.030                   | -.290 |
| Knowledge score | -1.050          | .293                  | *0.000                 | -1.627                   | -.473 |
| Attitude score  | -1.111          | .417                  | *0.008                 | -1.933                   | -.289 |

Independent t-test test applied. \*P value = <0.05

**Table 4.** Correlation between knowledge, attitude, practice of breastfeeding among participants (n=200)

| Parameter correlated   | R value | P value |
|------------------------|---------|---------|
| Knowledge and attitude | 0.05    | 0.461   |
| Knowledge and practice | 0.414   | *0.000  |
| Attitude and practice  | 0.227   | *0.001  |

Pearson’s correlation coefficient test applied. \*P value = <0.05

**DISCUSSION**

The present study showed that multiparous mothers had more adequate knowledge about breastfeeding than primiparous but S. Manoj Kumar<sup>5</sup> study reported that the knowledge on breastfeeding among the primi and multipara mothers was similar. Whereas, M.J.Mohamed et. al<sup>6</sup> study revealed that primiparous mothers exhibited a higher knowledge score compared

to the multiparous mothers. This finding is inconsistent with our study findings. L.R. Rushali<sup>7</sup> reported that 61% subjects had correct knowledge of exclusive breastfeeding but among the total multipara, only 35% were correctly practicing it which was observed higher rates in our study.

A study done by Ashwinee et al<sup>8</sup> reported the correct practice of initiation of breastfeeding immediately after birth was not adopted by all mothers and this findings was contrary to what was reported by Manthan Patel<sup>2</sup> but Krishnendu and Devaki<sup>4</sup> study was revealed higher rate (82.5%). In our study, a higher percentage of Primiarous mothers gave prelacteal feeds to their baby in compared to multiparous which is in contrast to study reported by M.J.Mohamed et al.<sup>6</sup> in Wajir County, Kenya. Nearly half of the mothers fed their babies on demand in the present study which was found higher (96.3%) in A. Shandil et al<sup>9</sup> study. In the present study, only a small number of respondents (6.5%) agreed that colostrum is bad for child's health; similar to what was reported from other part of the country and also reported by AI-Binali.<sup>10</sup>

The findings of M.J.Mohamed et. al<sup>6</sup> showed that maternal attitude towards exclusive breastfeeding was positive with no significant differences between the primiparous and multiparous mothers. This finding is consistent with our study report.

The limitations of the present study is that the study was done only in an urban slum of Bhati Abhoynagar, Agartala, therefore the study findings may not be generalizable to other settings and information about breastfeeding was collected according to the respondent answer not by any documentation, so this could have introduced some degree of recall bias.

### Conclusions

The findings of this study demonstrated that multiparous had more adequate knowledge and more correctly practiced breastfeeding than primiparous while maternal attitude was positive towards breastfeeding in both groups. There were observed significant differences in the knowledge, attitude and practices of breastfeeding among primiparous and multiparous mothers. Benefits of good practice should, therefore, serve as potential

themes for educational campaigns and also it is recommended to encourage all the mothers to follow correct infant feeding practices despite of parity, by strengthening health education and community participation.

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### Conflicts of interest

There are no conflicts of interest involved in the study.

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