Knowledge, attitude, practices and role of social support in breastfeeding among women: A cross-sectional study

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Abstract
Timely initiation of breast-feeding is critical to every infant's nutritional growth and development. There are various factors which influence successful breastfeeding in their own way. The Indian culture is diverse and there is an important role of social support by the near and dear ones of the breastfeeding mother to help her during lactation.

Material & Methods: 100 women attending OBGYN OPD in a tertiary hospital and medical college from June 2016 to December 2016. Pearson’s correlation was used to calculate the association between knowledge, attitude, practices and role of social support.

Results: In our study, 53% women knew that exclusive breastfeeding is for 6 months. Majority (96%) of the women knew that Colostrum is important to the baby and that it should be given. Only 41% had knowledge or had heard of mother support groups. Out of 39% women who gave their child top feeds revealed that the idea was advised to them by relatives (35%). Breastfeeding was discussed with 41% women antenatally, only 22% postnatally while 37% revealed that it was not discussed at all. From our study we understood that upon questioned 61% of the women feel that they needed help from family and friends to make breastfeeding easier.

Conclusion: It is essential to ensure that the healthcare system provides efficient antenatal and postnatal breastfeeding education and support. Mothers should be made aware of mother support groups which hold key to promoting maternal and child health. The findings of our study will help regularise and bring about change in the health care system for promoting breastfeeding.

Keywords: Breastfeeding, Social support for breastfeeding, breastfeeding practises, KAP and SS in breastfeeding, Importance of breastfeeding.

Introduction
Breastfeeding is a blessing for the newborn child from the mother. There is plenty of literature in medicine highlighting the benefits of breastfeeding. However, there isn’t much research studies on the Indian population which is a land of varied customs and traditions more so with respect to breastfeeding. In India, breastfeeding is universal and prolonged both in urban and rural areas of the country and continues into early childhood years[1]. However,
Initiation is delayed because of the perception that mother’s milk flows two to three days after childbirth\cite{2}. Indian mothers do not exclusively breastfeed in India due to traditional practices; the exclusive breastfeeding rate in India was 46% at less than six months in 2005–2006\cite{3}. The varied cultural practices associated with lactation and breastfeeding in India include anything from exclusive feeding to varied amounts of prelacteal and supplemental feeding with infant formula and other types of animal milk\cite{4}. Initiation and continuation of breastfeeding is influenced by a complex mixture of culture, family support, and socioeconomic status. Many cultures (Africa, South Asia, Latin America) have a 30-40 day postpartum rest periods for new mothers, where family as well as Community members step in to help mother with other household tasks so that she can focus on breastfeeding and caring for the new baby\cite{5}. Breastfeeding is associated with both social and household benefits in the long run. Social and household benefits of breastfeeding include economic savings—reducing consumption for health care and formula food, for instance—and a reduction in infant mortality\cite{6}. The successful lactation relationship between mother and child is mediated in part and, in some circumstances, primarily by social support or disapproval. Social support is an important tool in encouraging breastfeeding, especially as the number of available lactation support professionals is low. As more and more women are left without breastfeeding support from female relatives, the health professionals and trained personnel should come forward to bridge this gap. The mother support group program is based on the concept that peer support is an optimal model for effective education and social empowerment, and that mothers are particularly well-suited to provide support to other mothers\cite{7}. In 1991, Breastfeeding Promotion Network of India (BPNI) was born to protect, promote and support breastfeeding. Followed which India came up with the National Rural Health Mission to reach out to every woman and children upto adolescents to promote their health, education and hygiene. However the awareness of these programs is still lacking. This study is intended to study the knowledge, attitude, practices of breastfeeding among women. It brings to light to health professionals about the lack of awareness of support groups amongst patients, poor counselling of breastfeeding antenatally and the mother’s need for support from family during breastfeeding.

Materials and Methodology

This questionnaire based cross sectional study was conducted over a period of 6 months from June 2016 to December 2016. 100 women selected by random sampling, attending OBGYN OPD in a tertiary hospital and medical college for various complaints were recruited in the study. After obtaining the permission from hospital authorities, all these were explained the purpose of the study. Written informed consent was obtained from those who were willing to participate in the study. Researcher based structured questionnaire was prepared testing the knowledge, attitude and practices of breastfeeding and the implications of social support on breastfeeding. It included demographic details of the patient and her spouse. The questionnaire was classified into sections which had questions assessing the knowledge, attitude, practices and social support of breastfeeding. Data was collected through face-to-face interview, in a private room at the treatment facilities. Confidentiality was maintained. Those who met the inclusion criteria were included in the study. Inclusion criteria included: 1. All women with history of breastfeeding or currently breastfeeding. 2. Women who volunteered to participate. Primigravidae and those women who had serious medical/social conditions that prevented them from breastfeeding were excluded from the study. SPSS was used for statistical analysis. Significance was set at $P<0.05$ for linear by linear association by Pearson correlation. Descriptive statistical analysis were performed. Student t-test and analysis of variance (ANOVA) was used as test of significance at 95% confidence interval.
Results
100 women were recruited in this study for a period of 6 months from June 2016 to December 2016.

Demography: Majority of the participating women were in between the age group 36-50(89%).(Table 1) 32% were graduates(Table 2) while 37% were housewives(Table 3).61% of the husbands were employed(Table 4).58% lived as nuclear families (Table 5).95% of the women were registered for ANC during their pregnancy(Table 6) and 91% had an institutional delivery.(Table 7) The frequency of normal deliveries was more than Cesarean section (73%). (Table 8)

Knowledge Scores: 53% women knew that exclusive breastfeeding is for 6 months.50% women were of the opinion that breastfeeding is to be continued for 1 yr while 37% answered as 2 yrs.65% women were of the opinion that a baby should not be given top feeds in first six months of age.100% women knew that breastfeeding is necessary and that it is advantageous to the baby and mother. 59% were aware that breastfeeding can be initiated within half an hr while the rest responded that it should be initiated after 24 hours. Majority (96%) of the women knew that Colostrum is important to the baby and that it should be given. Only 41% had knowledge or had heard of mother support groups.

Frequency Tables

**Table 1: Age (Years)**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| 18-25  | 7         | 7.0     | 7.0           | 7.0                |
| 26-35  | 29        | 29.0    | 29.0          | 36.0               |
| 36-50  | 53        | 53.0    | 53.0          | 89.0               |
| > 50   | 11        | 11.0    | 11.0          | 100.0              |
| Total  | 100       | 100.0   | 100.0         |                    |

**Table 2: Education**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Illiterate | 12     | 12.0    | 12.0          | 12.0               |
| < SSC    | 14      | 14.0    | 14.0          | 26.0               |
| SSC     | 8       | 8.0     | 8.0           | 34.0               |
| HSC     | 12      | 12.0    | 12.0          | 46.0               |
| Graduate | 32      | 32.0    | 32.0          | 78.0               |
| Post-graduate | 22 | 22.0 | 22.0 | 100.0 |
| Total   | 100     | 100.0   | 100.0         |                    |

**Table 3: Occupation of Self**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Employed | 51      | 51.0    | 51.0          | 51.0               |
| Self Employed | 12   | 12.0    | 12.0          | 63.0               |
| Housewife | 37      | 37.0    | 37.0          | 100.0              |
| Total   | 100      | 100.0   | 100.0         |                    |

**Table 4: Occupation of Spouse**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Employed | 61      | 61.0    | 61.0          | 61.0               |
| Self Employed | 34 | 34.0    | 34.0          | 95.0               |
| Unemployed | 5      | 5.0     | 5.0           | 100.0              |
| Total   | 100       | 100.0   | 100.0         |                    |

**Table 5: Type of Family**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Joint | 42        | 42.0    | 42.0          | 42.0               |
| Nuclear | 58      | 58.0    | 58.0          | 100.0              |
| Total | 100       | 100.0   | 100.0         |                    |

**Table 6: Whether Registered for ANC**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Yes | 95        | 95.0    | 95.0          | 95.0               |
| No | 5         | 5.0     | 5.0           | 100.0              |
| Total | 100      | 100.0   | 100.0         |                    |

**Table 7: Delivery took place at**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Hospital | 91     | 91.0    | 91.0          | 91.0               |
| Home | 9         | 9.0     | 9.0           | 100.0              |
| Total | 100       | 100.0   | 100.0         |                    |

**Table 8: Type of Delivery**

| Valide | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Normal | 73        | 73.0    | 73.0          | 73.0               |
| LSCS | 27        | 27.0    | 27.0          | 100.0              |
| Total | 100       | 100.0   | 100.0         |                    |
### Table 9: KAP and SS scores for Joint and Nuclear families with P value

| Type of Family | N   | Mean   | Std. Deviation | Std. Error Mean | Significance (P value) |
|---------------|-----|--------|----------------|-----------------|------------------------|
| Total Knowledge Score |     |        |                |                 |                        |
| Joint         | 42  | 4.5000 | 1.40122        | .21621          |                        |
| Nuclear       | 58  | 4.3621 | 1.37264        | .18024          | .312                   |
| Total Attitude Score |     |        |                |                 |                        |
| Joint         | 42  | 6.5714 | .83060         | .12816          |                        |
| Nuclear       | 58  | 6.6207 | .97022         | .12740          | .395                   |
| Total Practice Score |     |        |                |                 |                        |
| Joint         | 42  | 1.3095 | .51741         | .07984          |                        |
| Nuclear       | 58  | 1.2931 | .53010         | .06961          | .439                   |
| Total Social Support Score |     |        |                |                 |                        |
| Joint         | 42  | 4.8571 | 1.69031        | .26082          |                        |
| Nuclear       | 58  | 4.8448 | 1.34819        | .17703          | .484                   |

### Table 10: KAP and SS scores for Whether Registered for ANC with P value

| Whether Registered for ANC | N   | Mean   | Std. Deviation | Std. Error Mean | Significance (P value) |
|---------------------------|-----|--------|----------------|-----------------|------------------------|
| Total Knowledge Score     |     |        |                |                 |                        |
| Yes                       | 95  | 4.4632 | 1.36086        | .14024          |                        |
| No                        | 5   | 3.6000 | 1.51638        | .67823          | .087                   |
| Total Attitude Score      |     |        |                |                 |                        |
| Yes                       | 95  | 6.6000 | .91559         | .09394          |                        |
| No                        | 5   | 6.6000 | .89443         | .40000          | .5                     |
| Total Practice Score      |     |        |                |                 |                        |
| Yes                       | 95  | 1.3053 | .52741         | .05411          |                        |
| No                        | 5   | 1.2000 | .44721         | .20000          | .331                   |
| Total Social Support Score |     |        |                |                 |                        |
| Yes                       | 95  | 4.8316 | 1.50639        | .15455          |                        |
| No                        | 5   | 5.2000 | 1.30384        | .58310          | .296                   |

### Table 11: KAP and SS scores for Delivery Place with P value

| Delivery took place at | N   | Mean   | Std. Deviation | Std. Error Mean | Significance (P value) |
|------------------------|-----|--------|----------------|-----------------|------------------------|
| Total Knowledge Score  |     |        |                |                 |                        |
| Hospital               | 91  | 4.5495 | 1.31033        | .13736          | .001                   |
| Home                   | 9   | 3.1111 | 1.45297        | .48432          |                        |
| Total Attitude Score   |     |        |                |                 |                        |
| Hospital               | 91  | 6.6593 | .85920         | .09007          | .018                   |
| Home                   | 9   | 6.0000 | 1.22474        | .40825          |                        |
| Total Practice Score   |     |        |                |                 |                        |
| Hospital               | 91  | 1.3077 | .53109         | .05587          | .321                   |
| Home                   | 9   | 1.2222 | .44096         | .14699          |                        |
| Total Social Support Score |     |        |                |                 |                        |
| Hospital               | 91  | 4.8901 | 1.51621        | .15894          |                        |
| Home                   | 9   | 4.4444 | 1.23603        | .41201          | .198                   |

The difference is significant in yellow marked.

### Table 12: Correlations Table

|                          | Total Knowledge | Total Attitude | Total Practice | Total Social Support Score |
|--------------------------|-----------------|----------------|----------------|---------------------------|
| Pearson Correlation      | .272**          | .003           | .0025          | .281**                    |
| Sig                      | .008            | .045           | .0025          | .0025                     |
| N                        | 100             | 100            | 100            | 100                       |

|                          | Total Knowledge | Total Attitude | Total Practice | Total Social Support Score |
|--------------------------|-----------------|----------------|----------------|---------------------------|
| Pearson Correlation      | .272**          | -.170          | 1              | .032                      |
| Sig                      | .003            | .045           | .0025          | .0025                     |
| N                        | 100             | 100            | 100            | 100                       |

|                          | Total Knowledge | Total Attitude | Total Practice | Total Social Support Score |
|--------------------------|-----------------|----------------|----------------|---------------------------|
| Pearson Correlation      | .062            | .045           | .0025          | .0025                     |
| Sig                      | .0025           | .0025          | .0025          | .0025                     |
| N                        | 100             | 100            | 100            | 100                       |

|                          | Total Knowledge | Total Attitude | Total Practice | Total Social Support Score |
|--------------------------|-----------------|----------------|----------------|---------------------------|
| Pearson Correlation      | -.170           | 1              | .032           | .032                      |
| Sig                      | .0025           | .0025          | .0025          | .0025                     |
| N                        | 100             | 100            | 100            | 100                       |
Attitude and Practice

All 100 women fed their child voluntarily. 74% women did not give any prelacteals to their child. 61% women were of the opinion that top feeds should not be given to the child while exclusive breastfeeding. Out of 39% women who gave their child top feeds revealed that the idea was advised to them by relatives (35%). 33% women stopped breastfeeding at 1yr, 31% breastfed for more than 2 yrs, 25% for 2 yrs while 11% stopped breastfeeding at 6 months itself. Majority of the women (70%) gave the reason of it being a natural process. 12% women stopped breastfeeding at 6 months itself. Majority of the women (70%) gave the reason of it being a natural process. 12% women stopped breastfeeding at 1yr, 31% breastfed for more than 2 yrs. While 11% stopped breastfeeding at 6 months itself. Majority of the women (70%) gave the reason of it being a natural process.

Social Support

Breastfeeding was discussed with 41% women antenatally, only 22% postnatally while 37% revealed that it was not discussed at all. In our study it was found that breastfeeding was discussed by the health-givers (obstetrician and paediatrician) in 42% cases while in 16% cases it was discussed by the relatives. They revealed that the major problems they faced while breastfeeding was mental (25%) and physical stress (25%) while 1% had social stress. The family members helped them with this stress in 16% cases, 9% stress was resolved by the health givers while majority (75%) dealt with it alone without any support. 15% women were disappointed that they had no help from their family. From our study we understood that upon questioned 61% of the women feel that they needed help from family and friends to make breastfeeding easier.

Discussion

Our study had a 100% breastfeeding rate, this finding was similar to the study by Poreddi Vijayalakshmi, et al[8] who found that majority (88.5%) of the mothers were breast feeding their infants. Majority of the women stopped breastfeeding by the natural process. Our finding is in contrast to a study by Odom et al. in 2012, their findings indicated that the major reasons why mothers stop breastfeeding before they desire included concerns about maternal or child health (infant nutrition, maternal illness or the need for medicine, and infant illness) and processes associated with breastfeeding (lactation and milk-pumping problems)[9]. Maximum participants said the information provided about breastfeeding was by health care givers in our study. This was in contrast to study by Mogre et al where the relatives first information providers.[10]

Successful breastfeeding depends not only on physiological factors but also on the mother’s social and psychological conditions[11]. 37% of women in our study were not counselled regarding breastfeeding. In a study by Choudhary RN et al[12], many mothers felt that they had not received enough support and guidance about breastfeeding during prenatal period.

In our study we found that there is significant association between the place of delivery and knowledge and attitude. (P value for Knowledge is 0.02 and that of Attitude is 0.037). There is significant correlation between knowledge and practices of breastfeeding with level of education. Formal education always improves the knowledge levels and the women re exposed to a wide range of communication systems and right information access. This fact is revealed in studies of[13]. The end result of the study showed that Total knowledge and Attitude are correlated positively. (P value <0.05), Knowledge and Social Support are correlated positively. Attitude and social support are correlated positively. (table 12)

Limitations of the Study

This study has certain limitations such as a small sample size, short duration, cross sectional and variation in the number of questions in the questionnaire. However the result is truthful and has an impact to begin change in the area of promoting breastfeeding.

Conclusion

Higher education, nulliparity, hospital delivery, urban living does affect the knowledge, attitude and practices towards breastfeeding. Healthcare workers...
play a role in educating, promoting and initiating breastfeeding but social support especially from the family is imperative for successful continuation of breastfeeding. Although medics and paramedics may be the first contact person for information on breastfeeding, maximum knowledge is acquired from family and friends. Hence it is crucial to conduct counselling and teaching sessions for the mother along with her husband and family. Support needs to be continuous and ongoing right from home to workplace and from antenatal to upto 2 years postpartum.

WHO has advocated for minimum enabling conditions such as paid maternity leave, part-time work arrangement, facilities for expressing and storing breast milk and breastfeeding breaks for women in paid employment. Hence while implementing policies on breastfeeding we need to keep in mind the role of social support in particular and training and education in general. Government policy of Baby friendly hospitals and breastfeeding support groups holds a key to successful breastfeeding.

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Conflict of Interest
There is no conflict of interest to be declared.

Authors’ Contributions
All authors contributed to this project and article equally. All authors read and approved the final manuscript.

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