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Original Research Article

Influence of Grandmothers on Breast Feeding Promotion Practices in an Urban Slum Area

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Abstract:

Background: Despite numerous public health campaigns to promote breastfeeding, exclusive breastfeeding rates are low. Considering the culture of respecting and obeying the family senior citizens, grandmother plays a vital role in decisions regarding what, when, how, how much to feed a baby in India.

Objectives: To analyse the influence of grandmothers on the breastfeeding practices based on their knowledge & attitude towards time of initiation, pre-lacteal practices, formula feeding and exclusive breast feeding.

Methods: A cross sectional observational study conducted in a Maternity hospital attached to the Urban Health Centre of the parent medical college among 106 grandmothers of newly delivered infants using a semi-structured interviewer administered questionnaire by focus group discussion (FGD).

Results: In this study, of the total 106 grandmothers, 82 (77.35%) were illiterate&50 (47.17%) belonged from class IV socio-economic status. Majority of the grandmothers, 74(69.80%) support colostrum feeding, 82(77.35%) promotes complementary feeding more than 6months of age, 101(95.30%) preferred homemade complementary food over packaged food and 55(51.90%) advocates breastfeeding during mother's illness. Most grandmothers, 83(78.30%) promoted initiation of breastfeeding after 1 hour of birth, 68(64.14%) advocated prelacteals practices, 87(82.10%) were preferred bottle feeding and 54(50.90%) not recommended breastfeeding during child's illness. There is a significant association (<0.05) between education and socioeconomic class with exclusive breastfeeding promotion practices.

Conclusions: We concluded that unfortunately a large proportion of grandmothers did not practice desirable child feeding behaviors. However, education and better economic condition had positive influence on breastfeeding promotion practices. This information could be useful in the planning of strategies for promoting breastfeeding.

Keywords: Grandmother, Breastfeeding practices, FGD.

Introduction

Exclusive breastfeeding for the first six months of a child's life has the topmost eventuality to reduce mortality of all preventive interventions with an estimated eventuality to forestall over 800,000 deaths, or 13 % of all deaths in children under five in the developing world [1-3]. Not only does exclusive breastfeeding have the eventuality to directly forestall deaths in children under-five, but substantiation also suggests that it has an indirect defensive effect against gastrointestinal infections, respiratory infections, allergic diseases and non-transmissible chronic diseases [4]. Despite the clear benefits and numerous public health campaigns to promote breastfeeding, exclusive breastfeeding rates are low. According to UNICEF, the global normal of exclusive breastfeeding in babies under six months of age is 41 %, with the lowest rate in low- and middle-income countries being 25 % in the West and Central Africa region and in India it is 46.40 % [5]. High income countries have indeed lower rates of exclusive breastfeeding: in the United States, only 16 % of babies are exclusively breastfed at six months [6] and, in Australia, only 15 % at five months [7].

Breastfeeding rates are influenced by a myriad of factors gauging from socio cultural to economic. Literature suggests that the aged generation, particularly the child's grandmothers (either the maternal mother or the paternal mother), play a central part in various aspects of gestation decision-making and child rearing within the family unit [8-10]. This is particularly true in low- and middle-income countries.

Considering the culture of esteeming and adhering the family elderly citizens in India, when a baby is born in the family there are all kinds of grandmothers (mother and mother-in-law) who are ready to advice the new mother. Grandmother plays a vital role in decisions regarding what, when, how, how much to feed a baby and all queries which mother may have asked a doctor but listened and behaved in accordance to her. In this study we aim to assess the influence of the grandmother's knowledge and attitude on a mother's breastfeeding practices.

Methodology

This study was conducted by focus group discussion (FGD) with grandmothers of newly delivered infants, in a Maternity hospital attached to the Urban Health Centre of the parent medical college. Among 157 deliveries conducted during the month of September to November 2022, data were collected from106 babies who were living with their grandmother. It included a total of 106 grandmothers in ten focus groups, who were traced and interviewed using a semi-structured questionnaire. After explaining study' sobjectives and taking informed consent, the focus group discussions (FGD) were conducted in various settings chosen by the participants, including their home, common meeting place in the community, in a room at Maternity hospital itself. Each group was comprised of 9-11 grandmothers and discussion lasted for 45 minutes to 1 hour.

The overall project focused on exploring the grandmother's knowledge about breastfeeding practices and their positive and negative influence on breastfeeding promotion factors (initiation of breastfeeding, pre-lacteal and colostrum feeding) and economic factors, also beliefs and practices of mothers and grandmothers related to the infant and young child feeding (IYCF) practices. And also relate the association between grandmother's knowledge and socio-demographic characteristics.

Results:

Distribution of study subjects by Education and Socio-Economic Status (Table No. 1)

Of the total 106 grandmothers, 82 (77.35%), were illiterate, 17 (16%) did complete their Primary School education while only 7 (6.65%) completed till secondary education. Among 106 participants, 50 (47.17%) belonged from class IV, 34(32.07%) from class III, 12(11.33%) and 10(9.43%) from class II and class V respectively.

Table 1: Distribution of study subjects by Education&Socio-Economic Status

		Frequency	**Percentage**
Education (n = 106)	Illiterate	82	77.35%
	Primary	17	16%
	Secondary	7	6.65%
Socio-Economic Status (n = 106)	Class II	12	11.33%
	Class III	34	32.07%
	Class IV	50	47.17%
	Class V	10	9.43%

Knowledge of grandmothers about breastfeeding practices (Table No. 2)

Positive Knowledge: Majority of the grandmothers had an average knowledge about correct breastfeeding promotion practices. Out of 106 grandmothers, 74(69.80%) supported colostrum feeding, 82(77.35%) promotes complementary feeding more than 6months of age, 101(95.30%) preferred homemade complementary food over packaged food, 55(51.90%) advocates breastfeeding during mother's illness.

Negative Knowledge: Majority of the participants knew the correct practices but they didn't apply due to their own cultural beliefs and taboos in the community. Out of 106, 83(78.30%) promoted initiation of breastfeeding after 1 hour of birth, 68(64.14%) advocated pre-lacteals practices, 87(82.10%) were preferred bottle feeding and 54(50.90%) not recommended breastfeeding during child's illness.

Table 2: Knowledge of grandmothers about breastfeeding practices

Sr. No.	**Variable**	**Frequency**	**Percentage**
1. Feeding Colostrum	Yes	74	69.80%
	No	32	30.10%
2. Type of Complementary food	Packaged	05	4.70%
	Homemade	101	95.30%
3.Breastfeeding during Mother's illness	Yes	55	51.90%
	No	51	48.10%
4.Initiation of Breastfeeding	Within 1 hour	23	21.70%
	After 1 hour	83	78.03%

5. Feeding Pre-lacteals	Yes No	68 38	64.15% 35.85%
6. Exclusive Breastfeeding	Up to 6 months Age More than 6 months Age	24 82	22.65% 77.35%
7.Bottle feeding preferences	Yes No	87 19	82.10% 17.90%
8.Breastfeeding during Child's illness	Yes No	52 54	49.10% 50.90%

Association between grandmother's Education & factors related with breastfeeding (Table No. 3)

There is significant association (<0.05) and direct relation seen between education and factors related with breastfeeding promotion practices. Among grandmother with secondary education, 100% promoted mother's milk as first feed to child, exclusive breastfeeding and not giving pre-lacteals for 6 months and active feeding of homemade complementary foods. The illiterate grandmothers, majority 79.30% promoted prelacteals, 84.10% advocated less than 6 months exclusive breastfeeding and 72% supported introduction of formula/cow's milk before 6 months of age.

Table 3: Association between grandmother's Education & factors related with breastfeeding

Sr. No.	Variable	Illiterate	Primary	Secondary	Chi-square	'p' value
1.	1st feed to child Mother's milk Pre-lacteals	20.70% 79.30%	86.40% 13.60%	100% 00.00%	36.138	0.0001
2.	Exclusive breastfeeding For 6 months Less than 6 months	15.90% 84.10%	40.90% 59.10%	100% 00.00%	13.182	0.001
3.	Formula/Cow's milk before 6 months Yes No	72.00% 28.00%	59.10% 40.90%	00.00% 100.00%	5.634	0.06

Association between grandmother's Socio-Economic Status& factors related with breastfeeding (Table No. 4)

Table 4: Association between grandmother's Socio-Economic Status& factors related with breastfeeding

Sr. No.	Variable	Class II	Class III	Class IV	Class V	Chi square	'p' value
1.	Colostrum Good Bad	75% 25%	76.9% 23.10%	69.90% 30.10%	16.70% 83.30%	7.956	0.047
2.	Exclusive breastfeeding For 6 months Less than 6 months	75% 25%	61.50% 38.50%	15.70% 84.30%	00.00% 100.0%	21.554	0.00001
3.	Formula/Cow's milk before 6 months: Yes No	025% 75%	30.80% 69.20%	75.90% 24.10%	66.70% 33.30%	14.050	0.003

There is significant association (<0.05) and inverse relationship seen between socioeconomic class with some factors of breastfeeding promotion practices. Those from higher social class, Class II were promoting breastfeeding practices such as introduction of colostrum (75%), exclusive breastfeeding (75%) and not giving formula/cow's milk (75%), while from Class V status, only 16.70% were in favor of introduction of colostrum, majority 66.70% advocated giving formula/cow's milk (75%) and 100% promoted non-exclusive breastfeeding.

Discussion

Breast-feeding is sensitive to somatic, hormonal, behavioural and psychological components of maternal capital. However, through grand mothering, older women may also impact breastfeeding by transferring informational resources to their daughters.

Of the total 106 grandmothers, 82 (77.35%), were illiterate, 17 (16%) did complete their Primary School education while only 7 (6.65%) completed till secondary education. Among 106 participants, 50 (47.17%) belonged from class IV, 34(32.07%) from class III, 12(11.33%) and 10(9.43%) from class II and class V respectively.

In this study out of 106 grandmothers, 74(69.80%) supported colostrum feeding, 82(77.35%) promotes complementary feeding more than 6months of age, 101(95.30%) preferred homemade complementary food over packaged food, 55(51.90%) advocates breastfeeding during mother's illness. In a study conducted by Chandni et al [11], found that the odds

of optimal breast-feeding practices were advanced (early breast-feeding initiation: 2·2 times, *P*=0·002; colostrum feeding: 4·2 times, *P*<0·001) in households where grandmothers had correct knowledge *v*. those with incorrect knowledge. In a similar study conducted by Adriana et al [12], women with family support were more likely to have received grandmaternal advice during pregnancy/infancy on exclusive breast-feeding duration (60% vs. 37%, $p = 0.033$) and the type of first complementary food (81% vs. 47%, $p = 0.001$).

Majority of the participants knew the correct practices but they didn't apply due to their own cultural beliefs and taboos in the community. Majority 83(78.30%) promoted initiation of breastfeeding after 1 hour of birth, 68(64.14%) advocated pre-lacteals practices, 87(82.10%) were preferred bottle feeding and 54(50.90%) not recommended breastfeeding during child's illness. In a study conducted by Kohlhuber et al [13], found within a sample population in Germany, if a maternal grandmother had a negative attitude towards breastfeeding, the mother was up to 3.62 (95 % CI 2.26,5.81) times more likely not to initiate breastfeeding after birth. Similarly, Susin et al [14], found that when the maternal grandmother advised giving the infant water or tea, the mother was 2.22 (95 % CI 1.5, 3.30) times more likely to abandon exclusive breastfeeding by the end of the first month. In a similar study by Li et al [15] found that if the grandmother was the primary caretaker of the infant, the mother was up to 4.3 (95 % CI 1.85-10.10) times more likely to practice non-exclusive breastfeeding.

In a study conducted by Negin et al [16], a grandmother's positive breastfeeding opinion had the potential to influence a mother up to 12 % more likely to initiate breastfeeding. Conversely a negative opinion has the capacity to decrease the likelihood of breastfeeding by up to 70 %.

There is direct and significant association (<0.05) between education and inverse association with socioeconomic class and breastfeeding promotion practices. Among grandmother with secondary education, 100% promoted mother's milk as first feed to child, exclusive breastfeeding and not giving prelacteals for 6 months and active feeding of homemade complementary foods while illiterate grandmothers were not advocating these practices. Similarly, those from higher socioeconomic class such as Class II were promoting while Class V did not promote breastfeeding practices. Such as introduction of colostrum (75%, 16.70%), exclusive breastfeeding (75%, 0%) and not giving formula/cow's milk (75%, 25%), by Class II and Class V socioeconomic class respectively

In a study conducted by Liu et al [17], compared grandmothers with a formal education compared to no formal education and found that mothers were significantly less likely to exclusively breastfeed if the grandmothers were educated. Liu suggests that the fact that highly educated grandmothers were associated with decreased exclusive breastfeeding may reflect the relationship between better family socioeconomic status and preference to formula feed due to formula being seen as indicative of higher socioeconomic status.

Conclusion

From our study, it is concluded that: A large proportion of grandmothers did not practice desirable child feeding behaviors. Some of the grandmothers had positive influence on feeding practices like continuing exclusive breastfeeding for 6 months, not giving pre-lacteals and active feeding of homemade complementary foods but majority had negative influences. They also had negative influence on breastfeeding during child's illness or mother's illnesses etc. Education and better economic condition had positive influence on breastfeeding promotion practices.

Recommendations

Including only mothers in behaviour change interventions seems to have limited effect on exclusive breastfeeding practices, as mothers of newborns are mostly influenced by their mothers and mothers in law.

Health education sessions in the community on regular basis focus on promotion of breastfeeding practices keeping apar their cultural beliefs and taboos.

Grandmothers' participation in such interventions to improve maternal and child survival, health and nutrition status needs to be encouraged.

Grandmother's and Family's education about breastfeeding along with the mother should begin early during the course of pregnancy. So that, the grandmother can motivate the mothers for correct breastfeeding and complementary feeding practices, its benefits and future outcome.

Grandmothers should be included in public health interventions promoting breastfeeding.

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