Research Article,

Sociodemographic Determinants Affecting Exclusive Breastfeeding Practices

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Abstract:
Introduction: Breastfeeding is very critical for the physiology, growth, and overall well-being of neonates and women. The exclusive breastfeeding and continued breastfeeding with complementary feeding are major factors in child survival, growth and development. Breast-feeding in India is universal and, a lot of the customs and practices have their effect on it like familial change, societal and cultural differences, absence of elders informing the tradition of breastfeeding. Breastfeeding is having so many advantages for mother and infant, but still the standard recommended practices are not followed. Hence, the researcher felt the need to assess the various sociodemographic factors determining the current breast feeding practices.

Methods: A cross-sectional descriptive study was carried out amongst all the mother-child pairs attending immunization session during 1st October 2014 to 31st September 2015. The structured questionnaire was used to record the data. Collected data was used to assess the sociodemographic factors determining the current breast feeding practices.

Results: In the present study majority 163(50.2%) mothers practiced exclusive breastfeeding for 6 months. It was found that association between practice of exclusive breastfeeding and mothers education ($\chi^2$- 20.50, p-0.00), occupation ($\chi^2$- 10.48, p-0.01), religion ($\chi^2$-8.907, p-0.03), type of family ($\chi^2$-120.84, p-0.00) and socio-economic status ($\chi^2$-35.62, p-9e-8) was statistically significant with.Conclusion: It was concluded that lack of adequate information, maternal education level, socioeconomic factors, etc. Influences the early breast feeding practices.

Key words: Exclusive Breast feeding, sociodemographic, mother’s education, mother’s occupation

Introduction:
Breastfeeding is an age-old practice that is very critical not only to the physiology, growth, and overall well-being of neonates but also the physiology and health of women as well.¹ The Lancet Series on Child Survival 2003 underscored that exclusive breastfeeding (EBF) and continued breastfeeding with complementary feeding are major factors in child survival, growth and development.² There are certain barriers preventing early initiation and colostrum feeding to the new born babies like lack of knowledge about the importance of early initiation of breastfeeding and the benefits of colostrum feeding, prolonged labour and surgical deliveries, neonatal illness, bathing baby and mother after birth, lack of family support, discouragement for early initiation of breastfeeding by traditional birth attendants, decision made by family members to give other fluids are some important barriers to colostrums feeding.³ High rate of infant deaths is largely attributed to very high share of neonatal deaths (66% of infant deaths in 2007, in India). Accelerated reduction in the incidence of neonatal deaths alone can contribute substantially towards achieving Under 5 Mortality Rate (U5MR) and IMR targets of the Millennium Development Goals.⁴ According to the WHO (2003), less than
35% of infants worldwide are exclusively breastfed during the first four months of life; supplementary feeding either begins too early or too late, and liquid and solid foods given to infants and children are often nutritionally inadequate and unsafe. Breast-feeding in India is almost universal, a lot of the customs and practices have their effect over health including infant feeding practices, race, maternal age, maternal employment, level of education of parents, socio-economic status, insufficient milk supply, infant health problems, maternal obesity, parity, method of delivery, maternal interest and other related factors. Income is a binding constraint to proper nutrition; however, income is only one of the many determinants of poor feeding practices. Some of the main influences are familial change, societal and cultural differences, absence of elders informing the tradition of breastfeeding, associations made between the chosen method of feeding and socioeconomic status (i.e. The belief that only poor women breastfeed their babies), and the woman’s changing economic role in support of her family. Complacency, widespread promotion of breast-milk substitutes, belief that infants need water, lack of support for breastfeeding at home, in the community, in health care facilities and in workplaces, lack of commitment and resources for behaviour change programmes needed to support optimum breastfeeding and poor understanding of the role of breastfeeding in advancing human and health rights. It many countries mothers have to follow social norms of mixed feeding since they often face pressure in the community and from husbands and other family members. The key to successful breastfeeding is Information, Education and Communication (IEC) strategies aimed at behavior change. The main source of information to mothers is through family and friends, which is often in-adequate. Breastfeeding is having so many advantages for mother and infant, but still the standard recommended practices are not followed due to many sociodemographic factors. Hence, the researcher felt the need to assess the various sociodemographic factors determining the current breast feeding practices.

Material and Methods:
Research Approach: In view of the problem selected for the study and the objectives to be accomplished, personal interview approach was considered to be appropriate.
Research Design: The research design selected for this study is descriptive, cross sectional.
Settings of the Study: This study was conducted at tertiary care medical College in Aurangabad district (M.S). Period of Study: The study was conducted during 1st October 2014 to 31st September 2015. Study Population: The population for this study includes the mother – child pair attending the immunization clinic of tertiary care medical College in Aurangabad district (M.S) coming for Immunization of child. Sampling Technique and Sample size: All the mother-child pairs attending immunization session which fulfilled the inclusion criteria and those gave consent were included in the study. A total of 325 Mother-child pairs were included in the study. Inclusion Criteria: Mother – Child pair with child age of more than 6 months and less than 2 years Exclusion Criteria: Children with breastfeeding difficulty (e.g - cleft lip / palate) and Child never breastfeed.

Complementary feeding: defined as the process starting when breast milk is no longer sufficient to meet the nutritional requirements of infants, and therefore other foods and liquids are needed, along with breast milk. The target range for complementary feeding is generally taken to be 6 to 24 months of age, even though breastfeeding may continue beyond two years.

Tool Used: A structured questionnaire having open and closed ended questions was used.

Results:
Table 1: Association between Exclusive Breastfeeding and Mother’s Education:

| Socio-demographic Factor | Exclusive Breastfeeding | Total (%) |
|--------------------------|-------------------------|-----------|
|                         | Practiced (%) | Not Practiced (%) |
| Mother’s Education      | | |
| Middle                  | 36 (22.08)   | 32 (19.75)   | 68 (20.92) |
| Higher                  | 40 (24.53)   | 22 (13.58)   | 62 (19.07) |
| Intermediate            | 16 (9.81)    | 46 (28.39)   | 62 (10.07) |
| Graduate                | 55 (33.74)   | 46 (28.39)   | 101 (31.07) |
| Post graduate           | 14 (8.58)    | 10 (6.17)    | 24 (7.38)  |
| Illiterate              | 02 (1.22)    | 06 (3.70)    | 08 (2.46)  |
|                         | 163 (100)    | 162 (100)    | 325 (100)  |

χ²- 20.501,  p < 0.05 , Significant

Table 1 shows that 163(50.15%) mothers practiced exclusive breastfeeding for six months. Out of 101 graduate mothers, 55(54.45%) mothers and out of 24 postgraduate mothers 14(58.33%) practiced.
exclusive breastfeeding while out of 8 illiterate only 2(25%) mothers practiced exclusive breastfeeding.

**Table 2: Association between Exclusive Breastfeeding and Mother’s Occupation:**

| Socio-demographic Factor | Exclusive Breastfeeding | Total (%) |
|--------------------------|-------------------------|-----------|
|                          | Practiced (%) | Not Practiced (%) |
| Own Business             | 20 (12.26)    | 08 (4.93)       | 28 (8.61) |
| Employed                 | 19 (11.65)    | 32 (19.75)      | 51 (15.69) |
| Farming                  | 18 (11.04)    | 08 (4.93)       | 26 (8.00) |
| Housewife                | 106 (65.03)   | 114 (70.37)     | 220 (67.69) |
|                          | 163 (100)     | 162 (100)       | 325 (100) |

$\chi^2$ - 10.48,  $p < 0.05$, Significant

**Table 2** shows that out of 163 mothers, majority 106(65.03%) of mothers were housewives who practiced exclusive breastfeeding as compared to working mothers 57(34.95%) for six months.

**Table 3: Association between Exclusive Breastfeeding and Mother’s Religion:**

| Socio-demographic Factor | Exclusive Breastfeeding | Total (%) |
|--------------------------|-------------------------|-----------|
|                          | Practiced (%) | Not Practiced (%) |
| Buddhists                | 6 (3.68)       | 12 (7.40)     | 18 (5.53) |
| Hindu                    | 117 (71.77)    | 116 (71.60)   | 233 (71.69) |
| Muslim                   | 20 (12.26)     | 28 (17.28)    | 48 (14.76) |
| Others                   | 20 (12.26)     | 06 (3.70)     | 26 (8.00) |
| Total                    | 163 (100)      | 162 (100)     | 325 (100) |

$\chi^2$ - 8.907,  $p < 0.05$, Significant

**Table 3** shows that out of 163, majority of mothers 117(71.77%) were Hindus who practiced exclusive breastfeeding followed by Muslims 20(12.26%).

**Table 4: Association between Exclusive Breastfeeding and Mother’s Socioeconomic Status:**

| Socio-demographic Factor | Exclusive Breastfeeding | Total (%) |
|--------------------------|-------------------------|-----------|
|                          | Practiced (%) | Not Practiced (%) |
| I                        | 59 (36.19)     | 22 (13.58)    | 81 (24.92) |
| II                       | 40 (24.53)     | 60 (37.03)    | 100 (30.76) |
| III                      | 42 (25.76)     | 92 (56.79)    | 104 (32.00) |
| IV                       | 22 (13.49)     | 18 (11.11)    | 40 (12.30) |
| Total                    | 163 (100)      | 162 (100)     | 325 (100)  |

$\chi^2$ - 35.622,  $p < 0.05$, Significant

**Table 4** shows that out of 163 mothers, 59(36.19%) mothers from socioeconomic class –I practiced exclusive breastfeeding while 92 (56.76%) mothers of class –III out of 162 did not practiced exclusive breastfeeding. This shows that economic status do have impact on exclusive breast feeding practices.

**Table 5: Association between Exclusive Breastfeeding and Type of Family**

| Socio-demographic Factor | Exclusive Breastfeeding | Total (%) |
|--------------------------|-------------------------|-----------|
|                          | Practiced (%) | Not Practiced (%) |
| Nuclear                  | 39 (23.92)     | 135 (88.33)   | 174 (53.53) |
| Joint                    | 34 (20.85)     | 18 (11.11)    | 52 (16.00)  |
| Extended                 | 90 (55.21)     | 09 (5.55)     | 99 (30.46)  |
| Total                    | 163 (100)      | 162 (100)     | 325 (100)   |

$\chi^2$ - 120.84,  $p < 0.05$, Significant

**Table 5** shows that out of 163 mothers, 90(55.21%) mothers were from extended family who practiced exclusive breastfeeding for six months while 135(88.33%) mothers out of 162 from nuclear family did not practice exclusive breastfeeding. This shows that joint and extended families help to follow the exclusive breast feeding practices.
**Table 6: Reasons for introduction of complementary food during the period of exclusive breastfeeding: (multiple responses)**

| Reasons for introduction of Complementary food | Number of Mothers | %   |
|----------------------------------------------|-------------------|-----|
| Working mother                               | 70                | 21.53 |
| Baby is more hungry                          | 70                | 21.53 |
| Child is thirsty in summer                    | 52                | 16.00 |
| Mother in law insisted                        | 40                | 12.30 |
| Inadequate milk                              | 36                | 11.07 |
| Good for babies health                        | 31                | 9.50  |
| Mothers illness                              | 29                | 8.90  |
| Custom                                       | 19                | 5.80  |

Table 6 gives the reasons for not practicing exclusive breastfeeding were working was mother 70 (21.53%), baby more hungry 70 (21.53%), child is more thirsty in summer 52 (16%) followed by insisted by mother in law 40 (12.3%), inadequate milk 37 (11.07%), good for babies health 31 (9.5%), mothers illness 29 (8.9%) and as a custom 19 (5.8%).

**Discussion:**

The present study was carried out to assess the various socio demographic factors determining current breastfeeding practices. In the present study 255 (78.5%) mother’s belonged to urban area and 70 (21.5%) mothers were from rural area, with an average age of 27 years (±4.21). The present study showed that out of 325 only 86 (26.5%) mothers received health education for breastfeeding during ANC period. Content of health education was about initiation, maintenance, duration and advantages of breastfeeding. These findings can be compared with the study by Ekambaram M et al where majority of the mothers 52% did not receive any advice on breastfeeding and only 17% received advice from health care workers.\(^2\) In the present study majority 163 (50.2%) mothers practiced exclusive breastfeeding for 6 months as per recommendations. Association between practice of exclusive breastfeeding was found statistically significant with mothers education ($\chi^2$- 20.50, p- 0.00), occupation ($\chi^2$- 10.48, p- 0.01), religion ($\chi^2$- 8.907, p- 0.03), type of family ($\chi^2$- 120.84, p- 0.00) and socio-economic status ($\chi^2$- 35.62, p- 9e-8). These results are consistent with a study done by Syed E et al a multivariate analysis by logistic regression which demonstrated no association between exclusive breastfeeding and maternal age, religion, socioeconomic status, parent's education, birth order, type of family, place of delivery, number of antenatal visits, whether the birth weight was measured, or feeding advice given.\(^11\) In their study Brand E et al. (2011) found that the most common reason for cessation of breastfeeding was the perception that milk did not come in, the baby preferred the bottle and sore breast or nipples.\(^12\) Also, Bandyopadhyay M et al found in her study that 343 (89.8%) mothers introduced complementary feeding during first six months.\(^13\)

Sachdev HPS et al found out that the exclusive breastfeeding and timely first suckling rates were 44.9% and 10.4% respectively.\(^14\) The present study revealed that the reasons for not following exclusive breastfeeding were mother had to work 70 (21.53%), baby was more hungry 70 (21.53%), child was thirsty in summer 52 (16%) followed by mother in law insisted 40 (12.3%), inadequate milk secretion 37 (11.07%), good for babies health 31 (9.5%). In a study by Sachdev HPS et al they found that amongst the 214 responses in 158 mothers who had supplemented breast milk, the commonest stated reason (52.3%) was insufficient breast milk production. Amongst the 50 responses in 36 mothers reason cited was breast rejection by the baby (28%).\(^14\) In the present study the various difficulties to carry on breastfeeding faced by mothers were inadequate milk secretion 36 (11.07%), breast engorgement 21 (6.4%) while 7 (2.15%) mothers had cracked nipple. Similar studies were conducted by Brand E, et al where the cited reasons for cessation like decreased milk supply or sore nipples.\(^12\) In the present study effect of work on breastfeeding was also evaluated and majority of mothers 260 (80%) mothers said that work doesn’t prevent them from breastfeeding since majority of mothers 154 (47.4%) have to take care of their babies on their own followed by 127 (39.1%) are supported by mother in law. In the present study the association between effect of daily work and type of family ($\chi^2$- 14.427, p- 0.00) on breastfeeding was found to be statistically significant. A study was conducted by Ong G, et al in which they found that working status had no effect on initiation of breastfeeding, but had an effect on breastfeeding duration. The median breastfeeding duration for non-working and working mothers was 9 weeks and 8 weeks, respectively. About 31% of non-working mothers breastfed for up to 6 months as
compared to 20% of working mothers. Working mothers were more likely to stop breastfeeding than non-working mothers after adjusting for potential confounders. Reddy S revealed that in their study father (36%) was most commonly help in feeding while 31.33% don’t get any domestic help. In the present study the various sources of information about breastfeeding were asked for and it was found that 222(68%) of the mothers received information from their mothers followed by their mother in law 187 (57.53 %) and third being television 132(40.61%) and then newspaper 82 (25.23%). Reddy S found that out of 150 mothers, 58.67% mothers have been counseled by doctor about feeding. (Pre-natal) 78.67% women consult doctor for feeding problems. From the above discussion it is apparent that mother’s education, occupation, socioeconomic status, type of family and mode of delivery has a significant influence on their work and breastfeeding practices. Even though health education system is present in health facilities to facilitate breastfeeding but it is not satisfactory.

Conclusion:
Lack of adequate information, maternal education level, socioeconomic factors, etc. Influences the early breast feeding practices which can be overcome by proper support, care and counseling provided by health care staff. Faulty rearing practices need to be corrected in order to improve the health status of infants.

Limitations: - Without observing the practices and only taking verbal interview may give biased information, however this is the only method available. - As the information from past was inquired, there may be a chance of recall bias.

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