



## Gender Preferences in the Distribution of Food among 6 - 24 Months Children in an Urban Community of Kolkata

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### Abstract

**Background:** From ages, gender differences were common in education, food distribution, healthcare, and in several other resources. In our society, people had put more preferences for sons than their daughters. In this context, the study was conducted to explore the extent of gender differences for access to breastfeeding and complementary feeding among young children in an urban area in Kolkata.

**Methods:** The study was conducted in a small urban slum area in Kolkata Municipal Corporation, India. The qualitative study was conducted using in-depth interviews among 13 mothers having children of 6-24 months. The study was carried out based on purposive and convenient sampling. Respondents were heterogeneous, as much as possible, to capture maximum variations of the opinions. Areas considered for the study were exclusive breastfeeding, complementary feeding, commercial infant food and health drinks, and normal family diet provided.

**Results:** It has been observed that daughters were fed breast milk for less duration compared to boys. Parents had a preference for sons in providing food items like commercial infant food, fish, health drinks or similar items those were perceived to be better. Important determinants those influenced son preference were the profile of parents, knowledge of parents, norms of the community, peer influence and communication skills of the services providers of different government schemes. For nutrition care, daughters were neglected more compared with the boys.

**Conclusion:** This qualitative study indicated that there was gender preference for the provision of food and nutrition care for children of 6-24 months. The outcome of the study may guide to formulate a quantitative study in urban areas to estimate the extent of the influence of determinants of the gender preference.

**Keywords:** Gender; Breastfeeding; Supplementary Feeding; Urban Slum

### Introduction

Son preference or the privileging of sons over daughters in accordance to a patriarchal system is a growing phenomenon in India [1]. Even in the era of Millennium Development in India, the son is often described as an insurance, e.g. as an old age support as the parents get older. Moreover, the son is considered as the bearer of traditions and symbolizes a ritual aspect. For example, the son lights the funeral pyre when the parents die. It is perceived that a family without a son is incomplete and a social embarrassment. Daughters by comparison are seen as a burden. The notion is that, raising daughters is a waste of time and money. Married into her

new family, a girl will leave her parents with a fragile economic situation after paying the inevitable dowry. Daughters are therefore equal to investments with little return [2]. Since ancient ages, from education to healthcare, our society had put more preferences for sons than the daughters including food distribution at household level. Gender differences in nutritional status are documented during infancy, with discriminatory breastfeeding and supplementation practices. Infant girls are breastfed less frequently, for shorter duration, and over shorter periods than boys [3]. Whether the family is rich or poor, food with the lower nutrition is confined to a girl child only [1]. The excess of female infant mortality observed in South East Asia has been typically attributed to gen-

der discrimination in intra-household allocation of breastfeeding, complementary feeding, supplementary food and medical care [4]. Gender difference in malnutrition is adequately attributed to unequal distribution of food and nutrition at the household level in respect of the amount and quality of food [4]. However, there is paucity of information looking into the area. Most of these facts are more normative than empirical. The proposed study is an effort to explore the difference of nutrition distribution among a male and female child at the household level in a slum area, Surendra Nath Pyne Lane in Kolkata Municipal Corporation, India. The aims of the present study were therefore, to understand the preferences of nutrition habits of male and female children of 6 months to 2 years at the household level, and to identify determinants attached to the gender difference, if any, in food items provided to the children.

**Methods**

**Sampling**

The study setting for this cross-sectional and community based qualitative study, was Surendra Lal Pyne Lane in an urban slum in the ward 40 of Kolkata Municipal Corporation (KMC). This project field of Medical College, Kolkata has around 300 households. The study included all mothers having at least 2 children of different gender (younger’s age between 6 months to 2 yrs and elder’s age not exceeding 10 years). The study had 13 mother respondents. Mothers residing in that locality for at least 1 year and who provided consent were included. We conducted purposive and convenient sampling. Respondents were heterogeneous, as much as possible, to capture maximum variations of the opinions.

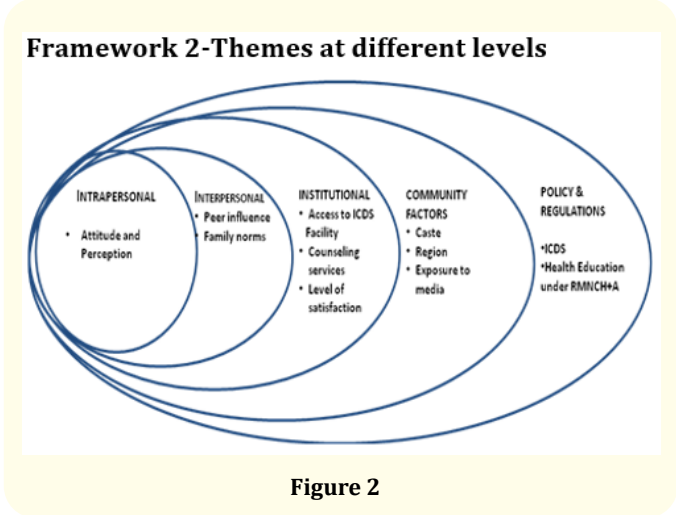
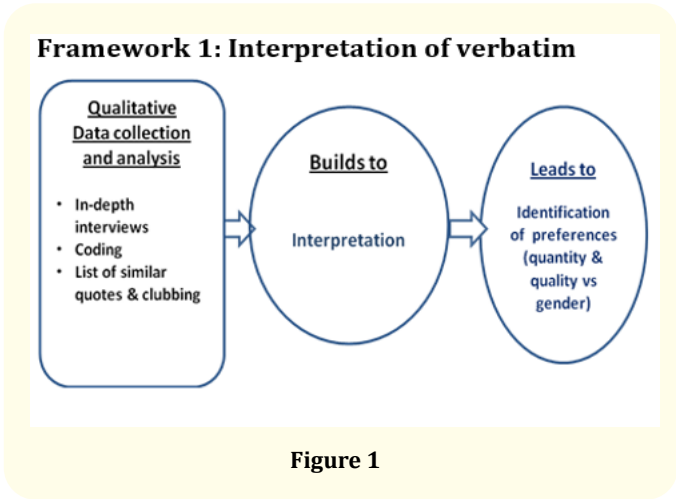
**Data collection**

Information was collected using in-depth interview guidelines. One to one interview was conducted at the household level. Apart from the participant and the researcher, nobody was present during the interview. An interview guide was used while conducting the interview and probing was done when she faced difficulty in understanding or was hesitant in answering. No audio or video recording was done as it was assumed that, by doing this, the participants would not open up. The interview was done in the local language (Hindi/Bengali), and recorded. None of the mothers were below the age of 18 years. We took verbal consent to conduct the study.

**Data analysis and framework**

Broad areas of study were exclusive breastfeeding, complementary feeding, commercial infant food and health drinks, and normal family diet provided to the children 6 - 24 months. To validate the content of the interviews, the recorded transcript was verified with the respondents, if necessary. The transcripts were read and

responses were coded and listed. Commonly occurring codes were identified and then clubbed together. Content from each coded group was then presented with direct quotes from the interviews and led to interpretation [here food item preferences and gender] [Framework of analysis 1 as figure 1]. Interpretations then led to evolving of themes at intrapersonal, interpersonal, institutional, community and policy level [Framework of analysis 2 as figure 2]. Thematic interpretations led to listing out of broad determinants at the different level. The analysis was done manually and no software was used.



**Results and Discussions**

**Exclusive Breastfeeding (EBF) for children up to 6 months**

As a first step of analysis, our study explored the gender perspective of exclusive breastfeeding (EBF) because it is very much critical for infant growth. The World Health Organization (WHO) highly recommended Exclusive Breastfeeding (EBF) of infants up to six months. EBF means feeding only breast milk and nothing else, except for oral rehydration solution or medicine, if pre-

scribed by a qualified doctor. Continuing EBF up to six months is a very simple and cost-effective way to combat malnutrition and to reduce Infant Mortality Rate (IMR) [5-7]. EBF is important for good health and well-being of infants and mothers as well [8]. Children who were not exclusively breastfed for the entire period of six months were prone to suffer from diarrhoea, pneumonia and other morbidities leading to increased mortality [9-11]. Evidence established that non-exclusively breastfed children had more risk of developing atopic eczema [12], allergy, asthma, type II diabetes [9], leukemia and obesity in later part of the life than infants who were exclusively breastfed [10,11]. So in our study we first tried to emphasize on the gender preference of EBF. It has been depicted from the study that daughters were fed with breast milk with less duration compared with boys. Girls were not perceived as valuable as boys. So it reflected a kind of neglect and feeling of poor importance for girls. Different statements of mothers revealed out from the study have been provided in table 1 and their interpretation has been provided.

- 11 months and 12 - 24 months with additional nutritious snacks offered 1 - 2 times per day, as desired. WHO estimates that 2 out of 5 children are stunted in low-income countries. Complementary feeding should be timely and adequate, and be using a variety of foods to cover the nutritional needs of the growing child while maintaining breastfeeding. Inappropriate feeding practices are often a greater determinant of inadequate intakes than the availability of foods in the households. WHO protocol is used to design interventions for improved complementary feeding, and is included as part of adaptation process of the Integrated Management of Childhood Illness strategy [13]. In our study, we identified that during complementary feeding; parents offered available commercial infant foods. And importantly commercial infant food and smashed fruits were considered to be better than the homemade preparations. When WHO recommends equal importance for both the genders, our study identified neglect for the girl child. Details are provided in table 2.

Statement of mother	Interpretation
'I gave only breast milk for longer duration to my elder son....he was the first child....and for lesser duration for the daughter since there was less milk' [n = 5].	Daughter fed with only breast milk for less duration.
'I gave only breast milk to my son for longer time since my in-laws did all household works. I have lot of works other than household works, no time, in-laws' cooperation less' [n = 4].	Neglect for girl child at household level. Mother could not negotiate.
'Both son and daughter were fed for equal with only breast milk' [n = 2].	Equal preference.
'Elder daughter was with only breast milk for fewer months and the son fed for more time since he was the last child' [n = 4].	Daughter fed with only breast milk for lesser duration.
'I gave only breast milk for longer duration to my elder son.... he was the first child....and for lesser duration for the daughter since there was less milk' [n = 5].	Daughter fed with only breast milk for lesser duration.

**Table 1:** Statements of mothers on exclusive breastfeeding and its interpretation.

**Complementary feeding for children of 6 - 24 months**

As per the recommendation of World Health Organization (WHO), infants should start receiving complementary feeding (CF) at 6 months of age in addition to breast milk, initially 2 - 3 times a day between 6 - 8 months, increasing to 3 - 4 times daily between 9

Statement of mother	Interpretation
'After breast milk, we started with infant food 1, butter and egg yolk with little rice and smashed apple, banana or grapes, orange juice for son and with homemade khichri, dahi rice for daughter' [n = 9].	Infant food 1 and smashed fruit are considered superior to homemade khichri and served to son only compromising daughter since son is liked by parents and in laws and son's health is important issue.
'Father in law loves son so much that he buys infant food 1, apple or grapes for grandson.. even if no money in purse (big smile....then pause)'.	Neglect for girl child at household level. Mother could not negotiate.
'Here in family, son's health is important.. if others do not get food with our little income family.	Male preference.
'We feed infant food to both... daughter and son' [n = 2].	No discrimination in giving formula feed.

**Table 2:** Gender difference of complementary feeding of children of 6 - 24 months.

**Provision of commercial infant food and health drinks**

In our study commercial infant foods, fruit juice and similar food items are preferred. Families opt that these precious items are provided more to male children than the female children. Details of the findings and their interpretations are provided in table 3.

Statement of mother	Interpretation
Both the son and daughter demands infant food 2, but given to son daily and daughter occasionally...cannot afford in little money [n = 7].	Sons demand fulfilled every time but not so for daughters.
When daughter was little, she was fed with mother dairy milk diluted with water, but this cannot be practiced for son ...he must be given Nan [n = 3].	Decision taking by in laws.
Elder son in family....first time... pediasure will give energy...we the poor [n = 1].	Male preference. No compromise for son.

**Table 3:** Gender difference in infant food and health drinks among children of 6 - 24 months.

### Normal family diet during the age of 11 - 24 months of the children

In the study, we explored different food items other than breast milk and infant foods. During later part of the age (11 - 24 months) of the children, items like fish, egg, chicken, vegetables, cow milk, pulses were introduced in small amounts. It was found in our study that favorite items were mostly preferred for the male children in most of the cases. Details of such findings are provided in table 4.

Statement of mother	Interpretation
'We give fish, egg daily to son, daughter takes sabji and rice like us ...no demand...elder' [n = 5].	Son must get nutrition; daughter may get...if refused by son.
'Son is elder,...should get egg and milk daily for strength...daughter is younger....remains happy with dal rice' [n = 2].	No compromise for son.
Daughter will go to others house....not good to make habit of good food...may not get good food there' [n = 3].	Daughters must learn to compromise. Daughter is an investment with no return.
'Daughter is very clever, snatches if not given' [n = 1].	Compelled to give equal, not a preference.

**Table 4:** Gender difference in food items among children of 11 to 24 months.

### Determinants attached to the gender difference in food and nutrition support for children

From the statements and their interpretations, we explored several determinants those could influence gender difference in the preference of EBF, CF and other food items. At different levels, important determinants were the perception of the parents, com-

munity norms, negotiation skill of mother and skills of service providers. At different levels like intrapersonal, interpersonal, institutional, community and greater policy level; identified determinants are provided in table 5.

Level	Determinants
Intrapersonal	Perception and practice of mother. Communication and negotiation skills of mother.
Interpersonal	Family and peer influence. Poor negotiation skill of mother.
Institutional	Counseling skill of service provider. Facilities and manpower available to provide health education.
Community	Community norms and gender. Media policy.
Policy and regulation	Gender sensitive approach in ICDS scheme and RCH program.

**Table 5:** Determinants at different levels for gender difference in nutritional preferences.

At the intrapersonal level, in our study, profile of the mother and her perception influenced gender difference. Whereas, it was both parents' food parenting practices were associated with their children's nutrition status. Chirande, *et al.* suggested that fathers should be included in food parenting practices interventions [14].

At the interpersonal level, the influence of peers and family members were found to affect gender difference in our study. In a study in Haryana, boys were breastfed for a slightly longer period of time than girls as a whole. The duration of breastfeeding was much shorter for girls than for boys in Haryana, Rajasthan and Madhya Pradesh. One reason for the shorter period of breastfeeding for girls was the parents' desire to have another child sooner after the birth of a girl than after the birth of a boy, in the hope of having a boy for the next birth. Although the intent of parents may not always be to provide less adequate nutrition to daughters by weaning them earlier, the effect is the same [15]. The parental paths include modeling, responses to children's behavior, assistance in helping children self-regulate, and motivating children through rewards and punishments. Additionally, sources of variation in parental influences on regulation are examined, including parenting style, child temperament, and child-parent attachment security [16].

At the institutional level, in our study, the skill of service provider, and facilities and manpower available to provide health education were influencers. Food preferences, personality type, and parenting styles should be taken into account when measures are developed to improve the health of these children [17].

At the community level, in our study, community norms and media influence affected the gender difference in nutritional preferences. In Haryana, people prefer sons to daughters. Also, nutritionally girls have lower ratings than boys. The living status of a family does not matter in the biased preference for a boy child; whether the family is rich or poor, the lower nutrition food is confined to a girl child only [1].

At the policy and regulation, our study identified some issues at the level of ICDS (Integrated Child Development Services) or Reproductive and Child Health (RCH) program. They are lacking definite strategies or skills related to the promotion of EBF and CF among parents. The programs should focus on that. In the literature review, we could not find out similar findings. And therefore, our study added a new area for future.

## Conclusion

The areas of this study are under-researched. Hence, this qualitative study has identified that at the household level, there is gender preference for food provision for children of 6 - 24 months in the identified areas. The determinants identified by us in this study will help to design a comprehensive quantitative study within this community. The findings from that study perhaps will measure the extent of different determinants influencing the gender difference. At the program and policy level, our study has identified future directions of research. The existing ICDS or RCH program can be made more sensitive to address the gender preference of nutrition for children of 6 - 24 months.

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