

## ASSESSMENT OF GENDER BIAS AND MATERNAL FAVORITISM REGARDING NUTRITION, HEALTH CARE UTILIZATION AND EDUCATION IN SLUMS OF MUMBAI, INDIA

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### ABSTRACT

**Introduction:** Preference of son over daughter is a growing culture in the patriarchal society of India. Favoritism can be defined as real or perceived preferential behavior and treatment to one or more of a mother's child at the expense of that mother's other children. Preference for son is often manifested as discrimination against the daughters. It can lead to many discriminatory practices against the girl child, like in relation to feeding, health care, education, distribution of intra family food distribution. This study was conducted in a slum of Mumbai, India to understand and assess the presence of gender bias and maternal favoritism. **Materials and Method:** It is a quantitative cross sectional Descriptive study. By simple random sampling 4 sectors out of 11 sectors of the Slum were selected followed by systematic random sampling for the selection of the respondents, thereby making a sample size of 153. Method of data collection was interview schedule using structured questions. Five domains have been considered are housing characteristics, nutrition, health care, education and work and play. Data analysis was done using SPSS 20. Percentage frequency was calculated and cross tabulations were made. **Results:** Gender bias favoring the son was found in relation to nutrition, education, health seeking behavior etc. **Conclusion:** Mother's educational level was found to be significantly associated with the duration of breast feeding both in case of son and daughter. Thus a system of home visits should ensure that the knowledge about breast feeding spreads.

**KEYWORDS:** Gender bias, maternal favoritism, Nutrition, Education, Health.

### INTRODUCTION

Gender bias is the systematic, unfavorable treatment of individuals on the basis of their gender, which denies them their rights, opportunities or resources. Across the world, women are treated unequally and are less value is placed on their lives because of their gender. Women's differential access to power and control of resources is central to this discrimination in all institutional spheres, i.e. the household, community, market, and state.

Millennium Development Goals highlight the priority accorded to gender equality. However preference of son over daughter is a growing culture in the patriarchal society of India.<sup>[1]</sup> India exhibits wide variations in the degree of sons' preference, with stronger son preference found in northern India than in the south.<sup>[2]</sup>

Favoritism can be defined as real or perceived preferential behavior and treatment to one or more of a mother's child at the expense of that mother's other children. It can be based on the birth order, sex of the

child.<sup>[3,4]</sup> Child's health reflects the future of the country. Still, preference for son is often manifested as discrimination against the daughters.<sup>[5]</sup> It can lead to many discriminatory practices against the girl child, like in relation to feeding, health care, education, distribution of intra family food<sup>[6]</sup> and ultimately may lead to higher female child mortality rates. Boys are viewed as future breadwinners since they remain with their parents even after marriage. Girls, on the contrary, are mainly viewed as "guests" in the household, since they depart parents' homes when they marry. Son preference also leads to sex selective abortion, thereby disturbing the natural law of reproduction and gender balancing and can also be considered as one of the reasons for the declining sex ratio.

Difference in daily routine can also be noted like there is a difference in the amount and kind of work done by the girls and boys, time available for recreation and enjoyment, activities allowed to be pursued by each of them etc.

There have been studies in rural India about selective sex differences in childhood,<sup>[7]</sup> male bias in health care utilization,<sup>[8]</sup> gender bias in intra household allocation for educational expenditure etc.<sup>[9]</sup> However gender bias in the context of slum areas, cultural impacts have been little explored. This study makes an attempt towards understanding gender bias in nutrition, education, health care and maternal favoritism in the slums of Mumbai.

In the 2005-06 National Family Health Survey (NFHS-3), the definition of the slum is, a compact area of at least 300 population or about 60 to 70 households or poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities. According to census 2011, any compact housing cluster or settlement of at least 20 households with a collection of poorly built tenements which are, mostly temporary in nature with inadequate sanitary, drinking water facilities and unhygienic conditions will be termed as slums. According to UN-HABITAT (2003),<sup>[10]</sup> a slum is a heavily populated urban area characterized by substandard housing and squalor".

From above it can be seen that gender bias exists in rural India and even it has been explored in Punjab, Haryana, however gender bias is still little explored in the slum areas. Slum constitutes crowded dwellings, large number of children, limited income, high expenses etc. thus there can be presence of gender bias. Therefore this study attempts to explore the gender bias in health care utilization, nutrition, education and maternal favoritism from a mother's perspective.

## MATERIALS AND METHODS

It is a cross sectional descriptive study. Method of data collection is interview schedule using structured questions. The questions were about socio-demographic, nutritional, educational, health care and playing characteristics. By simple random sampling 4 sectors out of 11 sectors were selected followed by systematic random for the selection of houses in which the mothers were interviewed. In case the selected respondent doesn't satisfy the inclusion criteria then the next house was selected. If two or more mothers satisfying the inclusion criteria were residing in the same house then only one mother was interviewed selected by simple random sampling. Sample size of 153 respondents was selected and the response rate was 95.6 percent.

In the view of ethical consideration written informed consent was taken prior to the interview and anonymity of the respondent has been strictly maintained. The data has been kept confidential and was used only for research purpose.

**Universe of study:** Slum, Mumbai

**Study population:** Mothers residing in slum, Mumbai

**Respondents:** Mothers residing in slum selected by simple random followed by systematic random sampling.

## Inclusion criteria

- Mothers who were willing to respond.
- Those who are having at least two children but not more than 4 children
- The children should include at least one boy and one girl.
- All the children should be under the adolescent age, i.e. less than 10 years.
- The index child considered for the purpose of the study should be at least more than 1 year of age and family should include one boy and one girl.

## Exclusion criteria

- Mothers who were not present at the time of survey conduction.
- Mothers who were not willing to participate.
- Mothers who were having less than 2 or more than 4 children
- The children don't include at least one boy and one girl.

## Questionnaire

Questionnaire included 4 parts: Demographic details, Nutritional details of children, Health care facilities availed by mother for their children, educational facilities availed by mother.

## Statistical software

Analysis was done using SPSS 20.0. Descriptive analysis was done and Percentage frequency and cross tabulations were made.

## RESULTS

Table 1 shows the percentage of the socio- demographic and housing characteristics considered in the interview schedule. Most of the respondent's (71.2 percent) were less than or equal to 30 years of age. Islam was the predominant religion of the community with 69.9 percent of the respondent's belonging to this religion followed by 25.5 percent Hindus and rest belonged to other religions like Christianity, Parsi etc. 73.2 percent of respondents belonged to general category followed by Other Backward Caste (OBC) and Scheduled Caste (SC), Scheduled Tribe (ST) respectively. Both proportion of illiterate (7.8 percent) and graduates (3.3 percent) are low in the community and most of them i.e. 54.9 percent are educated to a level between 6<sup>th</sup>-8<sup>th</sup> standard.

Both pucca and semi-pucca houses were present in the community but pucca houses were more predominant (86.3 percent) and 25.5 percent of people had in built toilets thus they did not use community toilets. Only 25.5 percent of people treated water in some way to make it safe and also among the various methods applied boiling is most common.

**Table 1: Percentage of Socio-demographic and housing characteristics of Slum, Mumbai (N=153).**

| Characteristics             | Category         | Percentage |
|-----------------------------|------------------|------------|
| Age                         | <=30yrs          | 71.2       |
|                             | >=31yrs          | 28.8       |
| Caste                       | SC/ST            | 9.8        |
|                             | OBC              | 17.0       |
|                             | General          | 73.2       |
| Religion                    | Muslim           | 69.9       |
|                             | Hindu            | 25.5       |
|                             | Others           | 4.6        |
| Educational level of mother | Illiterate       | 58         |
|                             | Literate         | 42         |
| Number of family members    | <=5              | 66.7       |
|                             | >=6              | 33.3       |
| Type of house               | Semi-pucca       | 13.7       |
|                             | Pucca            | 86.3       |
| Toilet use                  | Yes              | 74.5       |
| Water treatment             | Yes              | 25.5       |
| Method of water treatment   | Boil             | 64.1       |
|                             | Use water filter | 35.9       |

Table 2 represents the percentage frequency revealing the difference in the provision of nutrition to the children. It shows that 59.5 percent mothers started feeding their daughters with semi solid food from the age of 3-6 months while only 43.8 percent son received it during that age. When considering how many times in a day does the mother provides food to her children it is found that 26.1percent of mothers provide food more than 4 times a day to their son while only 5.2 percent of the daughters received food more than 4 times a day. Similarly 71.9 percent sons were provided milk everyday by the mother in a week while it was only 58.8 percent in case of daughters. These findings further reveal the presence of gender bias favoring the male sex. Similar were the findings of Amin (1990) showing the discrimination towards the daughter in the provision of food.

**Table 2: Percentage of Nutrition provision to the children in a Slum, Mumbai (N=153).**

| Nutrients                     |                     | Son  | Daughter |
|-------------------------------|---------------------|------|----------|
| Semisolid food started        | 3-6 months          | 43.8 | 59.5     |
|                               | 7-10 months         | 41.2 | 37.9     |
|                               | More than 10 months | 15.0 | 2.6      |
| Fruits and vegetables started | <=10 months         | 18.3 | 21.6     |
|                               | 11-14 months        | 30.7 | 29.4     |
|                               | 15-18 months        | 32.0 | 29.4     |
|                               | >18 months          | 19.0 | 19.6     |
| Food provided in a day        | 2 times             | 0.0  | 1.3      |
|                               | 3 times             | 22.9 | 35.9     |
|                               | 4 times             | 51.0 | 57.5     |
|                               | More than 4 times   | 26.1 | 5.2      |
| Milk provided in a week       | Everyday            | 71.9 | 58.8     |
|                               | Sometimes           | 19.6 | 30.7     |
|                               | Rarely              | 8.5  | 10.5     |

Table 3 represents the percentage frequency of healthcare utilization. It clearly reveals the difference in immunization with MMR and Hepatitis B immunization being higher for the sons than for the daughters. Even in the provision of vitamin syrup 90.8 percent son were provided with vitamin syrup compared to 87.6 percent daughters. In considering for the treatment of common illness like diarrhea, common cold etc. 69.9 percent of sons are taken to the private doctor compared to 52.9 percent daughters. Even home remedies for such common diseases are also given more to son as compared to the daughter. Similarly Wyon and Gordon (1971) have also found that among children less than three years old, girls received less and worse medical care than boys. Even Ghosh (2004) found that treatment seeking is higher in the private sector for boys than for girls.

**Table 3: Percentage of Health care utilization for children by the mothers in a Slum, Mumbai. (N=153).**

| Health Care Utilization      |                       | Son  | Daughter |
|------------------------------|-----------------------|------|----------|
| Immunization                 |                       | 100  | 100      |
| OPV                          |                       | 100  | 100      |
| DPT                          |                       | 100  | 98.7     |
| BCG                          |                       | 100  | 100      |
| MMR                          |                       | 88.2 | 73.9     |
| Hepatitis B                  |                       | 86.3 | 67.3     |
| Place of immunization        | Municipality hospital | 78.4 | 89.5     |
|                              | Camp                  | 6.5  | 5.9      |
|                              | Private dispensary    | 11.8 | .3       |
|                              | Outreach program      | 3.3  | 1.3      |
| Vitamin syrup                |                       | 90.8 | 87.6     |
| Suffered from common illness |                       | 100  | 100      |
| Private doctor               |                       | 69.9 | 52.9     |
| Municipality hospital        |                       | 38.6 | 50.3     |
| Home remedy                  |                       | 24.2 | 19.6     |
| Over counter medicine        |                       | 2    | 1.3      |

Table 4 shows the difference in percentage frequencies in the various educational variables considered. It can be seen that 85.6 percent mothers wanted to send their son to an English medium school while in case of daughters it was 60.8 percent. Sending a daughter to Urdu or Tamil medium school was also considered satisfactory. Similarly 43.8 percent and 34.6 percent mothers desired their son to study uptill junior college and graduation level respectively but for daughters' education up till senior secondary (SSC) i.e. 10<sup>th</sup> standard was considered enough. Even Drez and Kingdon (2001) have found evidence of gender bias in school participation in rural areas of Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan. Further it can be seen, in case of daughters 70.6 percent of mothers are willing to marry their daughters after completion of SSC but this is not the case when son is being considered. 89.5 percent mothers were willing to send their son outside Mumbai but still in India for earning money but in the case of daughters this reduced to 20.9 percent and further reduced to 8.5

percent when considering their desire of sending daughter outside India for earning money.

**Table 4: Percentage of mother's educational desire for her children in a Slum, Mumbai, 2013 (N=153).**

| Educational desire              |                        | Son  | Daughter |
|---------------------------------|------------------------|------|----------|
| School going                    |                        | 100  | 100      |
| Kind of school                  | Government             | 20.9 | 19.0     |
|                                 | Private                | 79.1 | 81       |
| School medium                   | English                | 85.6 | 60.8     |
|                                 | Tamil                  | 4.6  | 5.9      |
|                                 | Urdu                   | 9.8  | 33.3     |
| Out of Mumbai for studies       |                        | 89.5 | 35.3     |
| Out of Mumbai for earning money |                        | 89.5 | 20.9     |
| Out of India for earning money  |                        | 83.0 | 8.5      |
| Marriage                        | During schooling       | 0.0  | 19       |
|                                 | After completing SSC   | 2.6  | 70.6     |
|                                 | After junior college   | 0.0  | 10.5     |
|                                 | After starting to earn | 97.4 | 0.0      |

## DISCUSSION

The present study was conducted to assess the Gender Bias and Maternal Favoritism regarding Nutrition, Health seeking behavior and education in a slum of Mumbai. Not many studies have been conducted in this area.

In the present study about 58% of Mothers were illiterate as compared to study by Sharma et al.<sup>[1]</sup> in which 49.5% of Mothers were Illiterate. Further, only 25.5% of mothers were Hindu as compared to study by Sharma et al done in Haryana in which 85% of mothers were Hindu also, 73.3% of mothers belongs to General caste category as compared to study by Sharma et al in which 75.5% of mothers were of General caste.

In the present study Girl child was provided less nutrition as compared to boy, same results were shown by Fotso (2006)<sup>[11]</sup> in which it was found that in both urban and rural areas, children from the poorest households are at a greater risk to be undernourished, as compared to their counterparts in the most privileged households. Malnourishment is higher in case of girl child than in case of boys.<sup>[5,12,13]</sup> Even in case of breast feeding infant girls are fed less and for a lesser duration as compared to boys.<sup>[14]</sup>

In the present study Health care utilization was better for boys than girl. Same results were seen study done by Ganatra and Hirve, 1994<sup>[8]</sup> in which it was found that parents expend more on boys, are willing to travel to a longer distance for getting their boy treated as compared to their girl child. Similarly Singh (1962)<sup>[15]</sup> found that girls in rural Punjab received less and worse medical care than boys in the treatment for fatal illness. Aziz (1977)<sup>[16]</sup> finds that, of boys and girls who perish of illness in Bangladesh, girls are less likely to receive medical care. While Ghosh, (2004)<sup>[17]</sup> has found that gender differentiation in health seeking behavior is affected by

the educational level of the mother. There is less of gender discrimination in case of the higher educated mother. Dreze, 2001<sup>[18]</sup> and Sen, 1983<sup>[12]</sup> have found that literacy can reduce gender bias irrespective of the level of poverty. Studies across India have found that boys are much more likely than girls to be taken to a health facility when sick<sup>[19,20,21]</sup> Boys had higher immunization rates than did girls in all except Goa and Karnataka, although the extent of this difference varied by states. However, the national family health survey indicated some variable evidences where boys and girls are equally likely to be stunted, and underweight, but boys were slightly more likely than girls to be wasted.<sup>[22]</sup>

In the present study all the male and female children were vaccinated with BCG vaccine as compared to study by Sharma et al in which only 88.9% boys and 89.3% were vaccinated with BCG vaccine.

## CONCLUSION

Thus the above findings reveal the presence of gender bias and maternal favoritism in the slums Mumbai. This bias favoring the son can be seen in provision of nutrition to the children with the daughters being fed less as compared to son. Similarly the bias was seen in the health seeking behavior with daughters being immunized less and were also not provided with vitamin syrup equivalent to sons. For treatment seeking for common ailments the daughters were generally taken to municipality hospital while the son was taken to a private practitioner revealing the presence of bias.

## Limitations of the study

The study did not take into account the various other factors that might influence the mother's perception like family pressure, role of in laws etc. Further the role of socialization and cultural pressure also needs to be considered therefore further research is required in this arena to explore and gain a deep understanding of gender bias and maternal favoritism.

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