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# Gender – Based Discrimination in Under – Five Mortality Rate in West Bengal: An Inter-District Analysis

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***Abstract:*** *In Indian society the female are society excluded and discriminated from a thousand of year, basically after entering 'Aryaja' at the land of India. The 'Aryaja' have framed the rule against Indian female and also for 'Sudhra' which means untouchable. The Indian women have denied more less all basic amenities in our society. They are subjugated under male. This gender discrimination prevails in the access to health care facilities in our country. In the present paper the under-five mortality rate (U5-MR) has taken as a proxy of 'healh status' for both female and male. We have examined the discrimination of under-five mortality for ten selected districts of West Bengal. And we have run multiple regression models (robust) of both under-five mortality for female (U5-MRF) and U5-MR for male (U5-MRM) on chosen explanatory variables in our models. Using DLHS data of IIPS and censes data of 2011 we found that in West Bengal the male children is discriminated in terms of the health indicator U5-MR which a divergence from our general hypothesis since it is expected that female child in our society faces discrimination in the access to health. These results are no doubt paradoxical and interesting as it diverges from our general assumption.*

***Key Words:*** *Under-five mortality rate of female, under-five mortality of male, gender discrimination, West Bengal, Interdistrict Analysis.*

## I. Introduction

The gender discrimination in India is defined by the vertical social order like castes system in India from a thousand of years. This system is born by cultural phenomenon of 'Hindu' from "Manusmriti" which is written by 'Manu' (Muri, j., 1972) before thousands of years (200 B.C.) and also from "Srimatavagabata Gita". The women are excluded from major social opportunities and freedom. Basically women of a society or a country is said to discriminate if that society or country have lower members of women per 1000 men and do not enjoying the right of liberty, independence and equal opportunity like their counterpart of male. Some socially excluded women have bound to be "missing women" (Sen, A.K., 1999). These socially excluded women have died before their life expectancy of birth. If a country have more and more number of socially excluded women leads to increase in 'missing women' of that country. The developed country like USA, United Kingdom and French the female male ratio is 105: 100 in late nineties. This ratio is 95: 100 in Pakistan where as in India there is 93 women per 100 men in late 1990's. For the country look like China, Bangladesh and West Asia there are 94 women per 100 men. For the country Mishear this ratio is 95: 100.All these statistics covered the period of late nineties. We found that there are 941 women per 1000 men in 2011 in India. Therefore, for the developing country like India there is clear picture of gender discrimination and obviously it is born by social norm and practice. It is also point out that the economic conditions of sub-saharan countries are more pathetic than Pakistan but there are 102 women per 100. In South Asia, China, West Asia follow the trend of the sex ratio like the country sub-saran African's country and additional ten crore women alive in these countries. The main reason for the missing of these ten crore women in these countries is the mortality rate of these countries are higher than the mortality of the developed country. Due to the fact of gender discrimination the mortality rate of female child is excessive in India as well as other developing country.

In our present paper we seek to examine the differential of under-five mortality rate among female and male child by using the definition of UNICEF of under-five mortality as the probability of dying between birth and exactly five years of age expresses per 1000 life birth in ten selected districts of West Bengal. These districts are Kolkata, Hoora, Uttar dinajapur, Purba Medinipur, Malda, Koachbihar, Barddhaman, Nadia, South

* I am indebted to my father Bodhisattva Makhan Lal Sikder and my mother Srimati Labanya Prova Sikder for guiding me all walks of life and giving me freedom and courage to myself.
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24 Parganas and North 24 Parganas which were selected on the basic of lowest concentration of women among twenty districts in West Bengal which constitutes 50% districts in West Bengal assuming it reflects the scenario while West Bengal.

## II. Review Of Literature In Brief

In this section, we would like to review the available literature on the gender – based discrimination in access to health care facilities. If it not easy task to prepare a theme wise chronology of the all type of literature available while doing this review, it has been kept carefully only such works gat highlighted which have direct a indicate relevance on purpose and perspective of the present paper.

The Indian women have high mortality rates, particular during childhood and in their reproductive year. The health of Indian women is intrinsically linked to their status in society. Research on women's status has found that the contributions Indian women make to families after are overlooked and instated they are viewed as economic burden.

Mehrotra, M.A and Chand, S. (2012) have studied about focused on various determinants of health care facilities such as residence, media exposure, female's and partner's education and females and their partner's employment, religion of household head and female's economic status. Their study revealed that health and employment status of women is much better in urban areas, compared to their counterparts in rural India. Urban women are highly educate, employed in high profile services, are consciously aware of media and included in higher economic groups. But the percentage of women in these groups are very small, a large percentage of women residing in rural India are still for behind. They are not even availing basic necessities so for large percentage of women availing health facilities has become a luxury. Their lack of knowledge of family planning measure and sexually transmitted diseases has caused a major cause of concern as more and more women getting infected to deadly disease. Therefore, it is necessary to make health facilities cheaper and easily access able to women. As UN Secretary Kofi Anan had stated, "Gender equality is more than a goal in itself. It is precondition for meeting the challenge of reducing poverty, promoting sustainable development and building a good governance". Transforming the prevail social discrimination against women must become top priority. This must happen at war footing before it gets very late to improve the social and economic status of women. Their study also said that no policies on campaign would be successful without public support, awareness, and proper implication. There is a need to raise the voice against gender discrimination in health care facilities and to improve the status of women at every possible level and should not be support until and unless this problem is totally removed.

Sikder, U.K. (2012) studied the access to health and medical service of rural poor in West Bengal empirically in respect of availability of nutritious food, living in hygienic environment to rural poor and vulnerable sections in the Indian society namely, scheduled castes, scheduled tribes, women and children. The results of the study show that households have to face health and healthcare related constraints given their social characteristics and various economic constraints. Most of the households are deprived of government health interventions and appropriate infrastructure. The conditions of children and females point to a relatively high degree of vulnerability recognizing the fact that there is a large gap between demand for and supply of state provided health services.

Sikder, U.K. (2012) studies the access to health care facility of rural poor in West Bengal which was the village based analysis of the Birbhum district on the basic of primary data collected through direct field survey this paper explained the role of health in economics development of any country like India and keeping in this view of role of health in economic development the government of India in her eleventh five year plan emphasized the concept of inclusive growth which implies that mass of her people must have access to basic facilities such as health, education, women empowerment etc. Government at different level must ensure the provision of these services. In the context of panchayet Raj led process of rural development in West Bengal there are scopes of experiment with such inclusive growth in general and in particular in the sphere of health security programme. The study reveals that conditions of children and women across different social groups i.e. SCs, STs and Hindu including OBCs indicates a high degree of vulnerability.

In India, members of gender, castes, class and ethnic identity experience structural discrimination that impact their health and access to health care. Women faces double discrimination being members of specific caste, class or ethnic group apart from experiencing gendered vulnerabilities.

This idea was also supposed by Borooah, V.K. et al. (2012).

Women have low status as compared to men in Indian society. They have little control on the resources and on important decisions related to their lives. In India, early marriage and childbearing affect women health adversely. About 28 percent girls in India get married below the legal age and experience pregnancy (Reproductive and child health district level household survey 2002-04, August 2006) these have serious repercussion on the health of women.

Borooah, V.K. et al. (2012) stated that in his famous paper this is evidence by the fact that, compare to higher caste women, human development outcome are for more inferior for 'Dalit'(SCs&STs) women. In 2001, a lower proportion of 'Dalit' women (41 percent) in rural areas were literate as compared to 58 percent 'non-Dalit' women. While nationally (across rural India) about 40.5 percent women were under weight, the incidence of under nutrition was 8 percent for 'Dalit' women. Moreover, 'Dalit' mothers and their children had relatively poor access to public health services as compared to other social groups. For example, 'Dalit' children from these excluded group had an immunization rate which was 20 percent lower than that for non-'Dalit' non tribal children. The author of his paper provides evidence on discrimination as additional cause of inequalities in health outcomes among women in India through statistical techniques and field – based studies.

Their studies have found some important features on morbidity and healthcare of women in India among different social groups. It shows that the average age at death for 'Dalit' women (39.5 years) is 14.6 years les than the average age at death for so-called higher castes women (51.1 years). The analysis establishes that 'Dalit''s women's life expectancy is lower as result of higher exposure to mortality inducing factors. However, even in cases where the so-called castes and Dalit women groups have similar mortality – inducing factors, 'Dalit' women are found to have lower life expectancy. The analysis also shows that access to health care services is lower for SCs women as compared to so-called higher caster women. While 15% so-called higher caste women did not receive prenatal care, such care was not received by 26 percent 'Dalit' women. Similarly, as compare to 27 percent so-called higher caste women who did not receive post natal care, such care was not received by 37 percent 'Dalit' women. While establishing that economic position and level of women's education are closely linked with receiving both prenatal and post natal care it was evident that even after controlling income, occupation, education, religion, age, place of residence (rural-urban) and state type (for ward – backward) the social group to which women belonged had a significant effect on their probabilities to receive prenatal and post natal care. Compared to so-called higher caste women (control group), 'Dalit' women were less likely to receive pre natal and post natal care by 1.9 points and 3.3 points respectively.

Bharati, P. et al. studies on the estimation of infant and child mortality rates and identification of its determinants on the basic of district level analysis. The variation in the socio economic demographic factors and availability of health care facilities are responsible for differential rates of mortality among various states of India. Further, within states, these rates vary between different districts and between rural and urban areas. It is essential to assess and monitor their levels in different parts of the state and to identify high-risk problem areas and high-risk population groups within areas so that health services may be directed to where they are most needed Assessment of the level of mortality helps in

a) Understanding the causes of neonatal, post-neonatal, infant and child mortality,
b) Valuating the impact of various programmes being implemented to reduce these mortality rates, and
c) Identifying the risk factors and formulates programmes for reduction of these mortality rates.

The sample registration system (SRS) is the primary source of data on infant mortality. SRS provides National and State level estimates of neonatal, post-neonatal and overall infant and child mortality by rural or urban sectors. State level estimates conceal large variation among districts within a state. The district level estimates of infant and child mortality rates as well as the factors affecting these mortalities can be obtained from sample surveys. This may help in improving and understanding the determinates of mortality and the regional variations in the rates and in assessing the relative importance of socio-economic developmental programmes and required health services. In view of this, a district level sample survey in rural areas of North 24 Parganas, West Bengal was conducted to determine the factors that go together to cause prevailing and anticipated high rates of infant and child mortality in some rural areas of West Bengal. The main objectives of the study are: (i) to estimate the neonatal, infant and child mortality rates by household survey based on the occurrences of such deaths found in the sample in rural sector of the North 24 Parganas, West Bengal, (ii) to learn the causes of infant mortality and its associated socio-economic and other influencing factors and (iii) to investigate the regional variations in mortality in relation to health facilities available in village and blocks.

## III. Data, Methodology And Econometric Models

In this section we shall provide a detailed description of Research Methodology follows to carry out the present paper. This includes an exposition of study areas, sources of data, description of various statistical tables, computational technique and econometric frameworks selected to study functional relationship.

The present study is entirely based on the secondary sources of data. We used the data for several health related indictors from district level household and facility survey – 4 (DLHS-4) – 2012-13 of International Institution of population science (IIPS). The data source for under-five mortality both male and female is obtained from sample registration system and million death study / from 12. The present study is entails based on cross section data where ten selected districts of West Bengal treated as cross sectional units.

We shall examine the disparities between under-five mortality among male and female in 2012-13 by method of simple difference in arithmetic scale. Then we examine the inter correlation profile among under-five morality rate of male and female and chosen set of our explanatory variables separately both gender. After this we will be regressed under-five mortality rate male and female on several explanatory variables separately.

The functional relationship (Multiple regression models) is described below.
U5-MRM = f (X1, X2,X3,X4,X5,X6,X7, U) &
U5-MRF = F (X1,X2,X3,X4, X5, X6, X7,V)
Where
U5-MRM : under five mortality rate of male
U5-MRF : under-five mortality rate of female

X1 : percentage of population literate 7+ years
X2 : percentage of population with improved sources of drinking water
X3 : currently married women who are illiterate
X4 : percentage of women who hard full antenatal care
X5 : delivery attended by skilled health personnel
X6 : any delivery complication of women
X7 : received full vacation by the children
U : error term of U5-MRM model
V : error term of U5-MRF model.

## IV. Results And Discussions

In this section we will summarize the results of disparities in under-five mortality rates among male and female, inter correlation profile among under-five morality rate and chosen explanatory variables both for male and female and finally we shall analyze the disparities of the determinants of under five mortality rate among male and female. Table 4.1 depicts the scenario of disparities of under-five mortality rate among ten selected districts of West Bengal in 2012-13.

**Table 4.1: Disparities of under five mortality rate among male and female**

| Sl. No. | Districts | Under-five mortality rate | | Difference/Disparities (male-female) |
|---|---|---|---|---|
| | | Male | Female | |
| 1. | North 24 Paragana | 37 | 26 | 11 |
| 2. | South 24 Paragana | 45 | 43 | 02 |
| 3. | Nadia | 14 | 14 | 00 |
| 4. | Barddhaman | 42 | 34 | 08 |
| 5. | Koahbihar | 51 | 36 | 15 |
| 6. | Malda | 53 | 49 | 04 |
| 7. | Purba Midnapur | 11 | 15 | -03 |
| 8. | Uttar Dinajpur | 68 | 68 | 00 |
| 9. | Hoora | 23 | 11 | 12 |
| 10. | Kolkata | 39 | 24 | 15 |

Sources: Sample registration system and million death study form 20112 and UN mortality software: MORTPAK, version 4.0.0.86.

It is seen that from the table there are clear indication of gender discrimination against male in respect of under-five mortality in West Bengal as whole. The element of gender discrimination is absent in the districts of Nadia and Uttar Dinajpur (values of disparity is equal to zero). The only one district namely, Purba Midnapur the female children is discriminated in respect of health compared to remaining districts in our study. The magnitude of the gender discrimination against male varies from 02 to 15 units. Since the overall state scenario reflects the male discrimination in respect of health or more specifically in terms of under-five mortality rate we can easily say that the AITMC led government of West Bengal has failed to overcome the problem. Basically, these results reflect the divergent from general hypothesis. Not only that this trend is similar to other developed country.

From the profiles of inter correlation coefficient (Table 4.2 and 4.3) there is a negative degree of association between U5-MRF and X1 (i.e. percentage of population literate 7+) (-0.06325) at 5% level of significance where it is in significant for male. This can be explained by the fact female literacy rate cannot influence the under-five mortality of female. We also found that there is a negative degree of association between U-5MRF and X2 i.e. percentage of improved sources of drinking water and X5 delivery attained by skilled health personnel at 5% level of significance and these values are respectively –0.6558 and -0.8696 where

as in the case of male X2 is in significant but X5 is statistically significant at 5% level of significance although its value is negative (-0.6757). Only one explanatory variable $x_3$ has a positive association ship with the under five mortality rate in case of female at 5% level of significant on the other ward there is an direct relationship between under-five mortality rate of women and currently married women who are illiterate which is obviously divergent from our general expectation. This phenomenon can be explained by the fact that although this section of women is illiterate institutally but they are educated socially.

Now we observed some degrees of association among the chosen explanatory variables in our models. In the case of U5-MRM model we found that X3 is negative correlated with X1 (correlation coefficient = -0.9779) at 5% level of significance. On the other hand X5 is positively correlated with X1 (0.6913) and negatively correlated with X3 (currently married women who are illiterate) at 5% level of significance.

**Table 4.2: Inter Correlation Profile among the the Depandant Variables and all Other Explanatory variable in Our Model for Male in WB**

```
. pwcorr u5mrm x1 x2 x3 x4 x5 x6 x6,star(5)
```

| | u5mrm | x1 | x2 | x3 | x4 | x5 | x6 |
|---|---|---|---|---|---|---|---|
| u5mrm | 1.0000 | | | | | | |
| x1 | -0.5314 | 1.0000 | | | | | |
| x2 | -0.5878 | 0.5426 | 1.0000 | | | | |
| x3 | 0.5796 | -0.9779* | -0.5642 | 1.0000 | | | |
| x4 | 0.2406 | -0.0078 | 0.0126 | -0.0010 | 1.0000 | | |
| x5 | -0.6757* | 0.6913* | 0.4811 | -0.7252* | 0.1167 | 1.0000 | |
| x6 | -0.1279 | -0.0087 | -0.3380 | 0.1505 | -0.1103 | -0.1960 | 1.0000 |
| x6 | -0.1279 | -0.0087 | -0.3380 | 0.1505 | -0.1103 | -0.1960 | 1.0000* |

| | x6 |
|---|---|
| x6 | 1.0000 |

Sources: Author's own calculation from DLHS data of IIPS, Mumbai, India

**Table 4.3: Inter Correlation Profile among the the Depandant Variables and all Other Explanatory variable in Our Model for female in WB**

```
. pwcorr u5mrf x1 x2 x3 x4 x5 x6 x7,star(5)
```

| | u5mrf | x1 | x2 | x3 | x4 | x5 | x6 |
|---|---|---|---|---|---|---|---|
| u5mrf | 1.0000 | | | | | | |
| x1 | -0.6325* | 1.0000 | | | | | |
| x2 | -0.6558* | 0.5426 | 1.0000 | | | | |
| x3 | 0.6798* | -0.9779* | -0.5642 | 1.0000 | | | |
| x4 | 0.0215 | -0.0078 | 0.0126 | -0.0010 | 1.0000 | | |
| x5 | -0.8696* | 0.6913* | 0.4811 | -0.7252* | 0.1167 | 1.0000 | |
| x6 | 0.0490 | -0.0087 | -0.3380 | 0.1505 | -0.1103 | -0.1960 | 1.0000 |
| x7 | -0.1648 | -0.0182 | -0.1167 | 0.0282 | 0.3725 | 0.1357 | 0.3462 |

| | x7 |
|---|---|
| x7 | 1.0000 |

Sources: Author's own calculation from DLHS data of IIPS, Mumbai, India.

Now we turn to analyze the regression models of U5-MRM and U5MRF. In terms of multiple coefficient of determination (R squared) the overall goodness- of -fit of the model U5-MRM is much satisfactory as it is observed to be 97.63% where as this value of the model U-5MRM is 99.45% which is also very much satisfactory and this model is better than the previous model in terms of goodness-of -fit. This implies that the chosen explanatory variables have more influence on less than five mortality of male relative to female. This results indicate the clean picture of gender discrimination against male in respect of health because less variations in under five mortality rate for female can be explained in terms of explanatory variables included in the model compared to the under-five mortality rate of male. The overall F value of the U5-MRM model is more satisfactory than that value of U5-MRF model. But models suffer from sever multicollineai problem as variance inflation factor (VIF) is more than 10.

**Table 4.4: The Linear Regression Model of Under-five Mortality rate of Male Household in West Bengal**

```
. reg u5mrm x1 x2 x3 x4 x5 x6 x7,robust

Linear regression                               Number of obs =      10
                                                F(  7,     2) =  193.60
                                                Prob > F      =  0.0051
                                                R-squared     =  0.9945
                                                Root MSE      =  2.8302
```

| u5mrm | Coef. | Robust Std. Err. | t | P>\|t\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| x1 | 12.03128 | .8389939 | 14.34 | 0.005 | 8.421382 | 15.64118 |
| x2 | -3.981813 | .2792805 | -14.26 | 0.005 | -5.18346 | -2.780166 |
| x3 | 6.84979 | .5294008 | 12.94 | 0.006 | 4.571962 | 9.127618 |
| x4 | .2433283 | .0365655 | 6.65 | 0.022 | .0859995 | .4006571 |
| x5 | -.9258786 | .1303588 | -7.10 | 0.019 | -1.486767 | -.3649902 |
| x6 | -1.606446 | .120379 | -13.34 | 0.006 | -2.124396 | -1.088497 |
| x7 | -.172788 | .1192193 | -1.45 | 0.284 | -.6857474 | .3401714 |
| _cons | -592.2658 | 79.49593 | -7.45 | 0.018 | -934.3092 | -250.2224 |

```
. vif
```

| Variable | VIF | 1/VIF |
|---|---|---|
| x3 | 49.68 | 0.020128 |
| x1 | 49.23 | 0.020312 |
| x6 | 2.95 | 0.338565 |
| x5 | 2.37 | 0.421912 |
| x2 | 1.73 | 0.577049 |
| x7 | 1.68 | 0.596006 |
| x4 | 1.31 | 0.763483 |
| Mean VIF | 15.57 | |

Sources: Author's own Calculation from DLHS data of IIPS, Mumbai, India

In general the incidence of under- five mortality rates is found to be close association with socio demographic variables. Out of these education of household members seems to be a major factor. A priori we expect that under five mortality rate of both male and female to be positively related to X1, X2, X4, X5 and X7 and negatively related to X3 and X6.

Our results present a little divergence from our general expectation as estimated coefficients of X2 and X5 are found to be negative and the estimated coefficient of X3 are found to be positive in case of U5-MRF model. However on the basic of p-value and t-statistics we find that the explanatory variables X1, X2 X5 and X6 are statistically significant at 5% level where as $x_3$ is statistically significant at 105 level.

**Table 4.5: The Linear Regression Model of Under-five Mortality rate of Female Household in West Bengal**

```
. reg u5mrf x1 x2 x3 x4 x5 x6 x7,robust

Linear regression                               Number of obs =      10
                                                F(  7,     2) =   42.87
                                                Prob > F      =  0.0230
                                                R-squared     =  0.9763
                                                Root MSE      =  5.8412
```

| u5mrf | Coef. | Robust Std. Err. | t | P>\|t\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| x1 | 8.081712 | 1.767439 | 4.57 | 0.045 | .4770364 | 15.68639 |
| x2 | -3.246908 | .5628791 | -5.77 | 0.029 | -5.668781 | -.8250341 |
| x3 | 4.452409 | 1.112978 | 4.00 | 0.057 | -.3363485 | 9.241166 |
| x4 | .0549348 | .0745234 | 0.74 | 0.538 | -.2657137 | .3755832 |
| x5 | -1.377847 | .2732737 | -5.04 | 0.037 | -2.553649 | -.202045 |
| x6 | -1.10577 | .252001 | -4.39 | 0.048 | -2.190043 | -.0214971 |
| x7 | .0537955 | .2315312 | 0.23 | 0.838 | -.9424027 | 1.049994 |
| _cons | -275.1111 | 166.7465 | -1.65 | 0.241 | -992.5636 | 442.3413 |

```
. vif
```

| Variable | VIF | 1/VIF |
|---|---|---|
| x3 | 49.68 | 0.020128 |
| x1 | 49.23 | 0.020312 |
| x6 | 2.95 | 0.338565 |
| x5 | 2.37 | 0.421912 |
| x2 | 1.73 | 0.577049 |
| x7 | 1.68 | 0.596006 |
| x4 | 1.31 | 0.763483 |
| Mean VIF | 15.57 | |

. Sources: Author's Own Calculation from DLHS data of IIPS, Mumbai, India

The positive relationship between U5-MRF and X3 is explained by the fact that although the current married women are illiterate institutationally but they are educated socially, on the word the informal education have play powerful role in determining U5-MRF.

The negative association between U5-MRF and X5 may be explained by the fact that although the pregnancy delivery is assisted by skilled health they may have some negligence to provide the service. Next we turn to our analysis about the U5-MRM model. In this model the estimated sign of the coefficients X2, X3, X5and X6 are different from our general hypothesis. The negative relationship between U5-MRM X1and X2 may be the fact that we have doubt about the sources quality of water. On the other ward there is a question of quality of water i.e. whether it comes from improved sources or not. The positive association between U5-MRM X1and X3 deviates from our general assumption the reason is same as explained in earlier m U5-MRM model.

The negative association between and X7 is explained by the fact that it is doubtful about the quality qualities of differ types of immunization doses received by the children.

In the explanatory variables X1, X2, X3 and X6 are statistically significant at 1% level whereas $x_4$ and $x_5$ are statistically significant at 5% level.

It is found that in U5-MRM rate model of male have more one explanatory variable, namely X4 is statistically significant than the U5-MRF model where X4 is insignificant. Not only that the all estimated coefficients of the model of U5-MRM is greater than that of U5-MRF except the coefficient of X5. All these results reveal that there is a clear gender discrimination against male in West Bengal which is the divergent from our general hypothesis where it was expected female are discriminated in the society.

## V. Conclusion

Our analysis based on DLHS and census data clearly points to the discrimination against male in our selected districts of West Bengal in particular and West Bengal in general which is a divergence from our general expectation that women were discriminated from historical era. The multiple regression model (robust) results gives better performance in case of the under-five mortality rate of male relative the under-five mortality rate female except few cases. Within this scenario it is clear the male group of children who are found to be most deprived. This results point to the fact that the left fount as well as AICMC led government is failure to overcome this gender based discrimination is respect of health. The state as well as the central government should come into picture to eradicate the gender-based discrimination to the access to health care service facility through the implementation of existing governmental policy.

Although our study reveals the gender-based discrimination against male as a special case in West Bengal. If we consider all districts in West Bengal we will get the same scenario as the data sat of all districts reveals the same trend. But we have firm belief that the gender discrimination against women persists in micro as well as macro level in India. Actually our study is based on cross section data, the time series or pooled data may revealed the another picture. We shall seek the gender discrimination against women in India and its major states which is the agenda of our future research. Without gender equality of a country we do not claim the economic development of that nation. If we want to make an egalitarian Indian society (Sikder, U.K. 2014, IOSR-JHSS, pp.1-5) we should annihilate caste and gender discrimination from our country.

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