

GENDER DISPARITY IN HOUSEHOLD EXPENDITURE ON HEALTH CARE OF CHILDREN IN JHARKHAND: A CASE STUDY OF CHATRA DISTRICT

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This paper explores the gender disparity in household expenditure on health care of school going children (class I to Xth) in Chatra District of Jharkhand. The study was based on primary data. For this study multistage random sampling technique was applied for selecting the samples and the total samples size was 210 [SC 31, ST 55 and "others" (OBC & General) 124]. The schedule method was used for data collection and it was administered through a predesigned questionnaire. The descriptive statistics like average and average difference, and inferential statistical tool like Z-test at 5 % level of significance were applied. The results of the study revealed that gender disparity exists in household expenditure on health of school going children in the study area (Chatra District), between male and female child, in type of nuclear family and In household, where mothers level of education is concerned from class I to Xth. These variables were statistically significant for causing gender disparity in household expenditure on health care between male and female child, but no disparity was found in case of illiterate mothers and mothers whose education level is above the 10th.

Keywords: Gender disparity, Household expenditure, predesigned questionnaire

INTRODUCTION

Gender disparity in health care refers to the discrimination and differential treatment of men and women (boys and girls in this study) in a way that is unfair, avoidable, unjust, and unnecessary (Whitehead 1992). Khandhaker and Mizanur (2013) defined gender disparity in health care as the process by which people (man and women) are treated unequally, with unequal access to health treatment in case of illness, vaccination, and immunization of children. According to Geeta Gandhi Kingdon (2008), gender disparity in household expenditure on health lies in difference of nature in consulting a doctor and treatment during the time of illness between male and female. In the view of WHO (2011), the gender disparity in household expenditure on health is a differential allocation among the children during sickness or illness.

Thus, this proposed research gender disparity in household expenditure on health care of school going children (class I to X) is, when within the household unequal money is spent on male and female child, different nature of consulting doctors (traditional, local and specialist) and health care facilities (Government and private) during the period of illness or sickness.

The gender disparity in household expenditure on health is commonly found in the developing countries like India, Pakistan, Kenya etc. In developing countries, girls are discriminated against the boys in medical treatment within the household. The gender disparity in health leads to high mortality during childhood, skewed sex ratio, and lower educational attainment (Garg and Morduch 1997). Gender disparity in health has adverse impact on development goals as it reduces economic

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growth by lowering the labour productivity and it also hampers the overall well-being of the society (BarsharaniMaharana 2010). Husain J's. (2010), study found that health is a key determinant to achieve economic development, poverty reduction and reduction of the burden of diseases and increase in the life expectancy of future generation. According to Schultz T.W. (1972) not only the population size matter for the production activities but healthy population helps increase in production because quality and knowledge facilitates longer life spans and are additional incentives. Investing more on health capital increases the productivity of worker. Bloom and Williamson (1998), found that healthy people earn high income and have more saving. More saving leads to more investment and more investment leads to more capital accumulation; it means health promotes the capital accumulation of the countries. According to Harvey leibenstein (1957), poorly nourished workers have lower productive capacity than those who consume more calories, as health and income affect each other directly. Fogel (1993), elucidates that better diet, shelter and reduction in the infectious diseases can significantly affect the work efficiency. Thus, it may be summarized that gender disparity in health care leads to negative impact on economic growth as well as well-being of society because women comprise 50% of population. A few previous studies found that role of social institutions; social norms, law and practices are root causes of gender disparity in health care (Somali, Corise and Francesesca 2012 and Narayan, et al, 2000). Kishor and Roy (2002) found in their study that in India son preference has been increasing over the period of time and most girls died due to lack of medical care, improper nutrition, and infanticide. Zarar R. et al, (2017) found that illiteracy, rigid customs and traditions, patriarchal society and influence of religious personalities were the main causes of gender discrimination in Quetta. Bhuiya A. and Peter K. Streatfield (1991) found that lack of mother's education is a main cause of gender disparity in health care in Bangladesh.

In the view of the above literature, the present paper explores the gender disparity with the help of the following variables in household expenditure on health care among the children. These are, gender of child, type of household (Nuclear and Joint), gender of household head (Male and Female headed), type of health care treatment (Private and Government), age of children (up to 10 and above 10), level of mother's education, and level of household income. The health care expenditure was computed as annual average expenditure on the following components; doctor's fees, total amount spent on medicine, transportation cost, hospital charge, diagnostic tests and other expenditure (blood, oxygen, attendant charges etc.).

OBJECTIVE OF THIS STUDY

The objective of this study is to explore the gender disparity in household expenditure on health care among school going children (from class I to X) in the study area as a whole (n=210).

RESEARCH HYPOTHESES

To test, whether the gender disparity exists in household expenditure on education among children in the study area as whole and across the social groups, following hypotheses are formulated.

H₀: There is no gender disparity in household expenditure on health care among the children in the study area as whole.

H₁: There is gender disparity in household expenditure on health care among the children in the study area as whole.

METHODOLOGY

This paper was based on the primary data, which was collected during January 2018 to July 2018. The sample size is 210. The sample size of SC, ST and “others” social groups are 31, 55 and 124 respectively, reflecting the composition of Jharkhand population (Census 2011), where ST comprises 26.2%, SC 11.8% and “others” 62 %. The subjects (mothers of children) of this study were selected through the multistage stratified random sampling method. In this study only those mothers were selected, who had both male and female children. Chatra district has two sub-divisions, Simaria and Chatra. In the first stage, two blocks were selected randomly from each sub-division of Chatra district. In the first stage Simaria and Tandwa block were selected from Simaria sub-division and Chatra and Itkhori blocks were selected from Chatra Sub-division. In the second stage, two panchayats were selected randomly from each selected block (Dhangada, Dhahu, Banasadi, Dadi, Sima, Damdoia, Pitij and Shaharjam). After that, two villages were selected randomly from each selected panchayat and the household list of selected villages was obtained. From the sampled household, one respondent, the mother of children was selected because mothers look after the education and health of their children. As far as education level of selected children's mothers is concerned in the study area, 50% are illiterate, 19.04% were educated between class I to V, 22.38% between class VI to Xth and 8.57% were educated above the Xth class. The schedule method was used for data collection and it was administered through a predesigned questionnaire, which consisted of 51 questions related to the objectives. Among the 210 households, 30% were female headed households and 70% were male headed households. While 18 % household belonged to joint household and 82% belonged to nuclear household. The number of boys and girls was 310 and 296 respectively, who suffered from illness or sickness in a year.

For descriptive statistics, tools like average and average difference and inferential tools like Z_ test and Chi_square test at 5% level of significance were carried out. The descriptive result of gender disparity was measured by taking difference between health expenditure on boys minus health expenditure on girls.

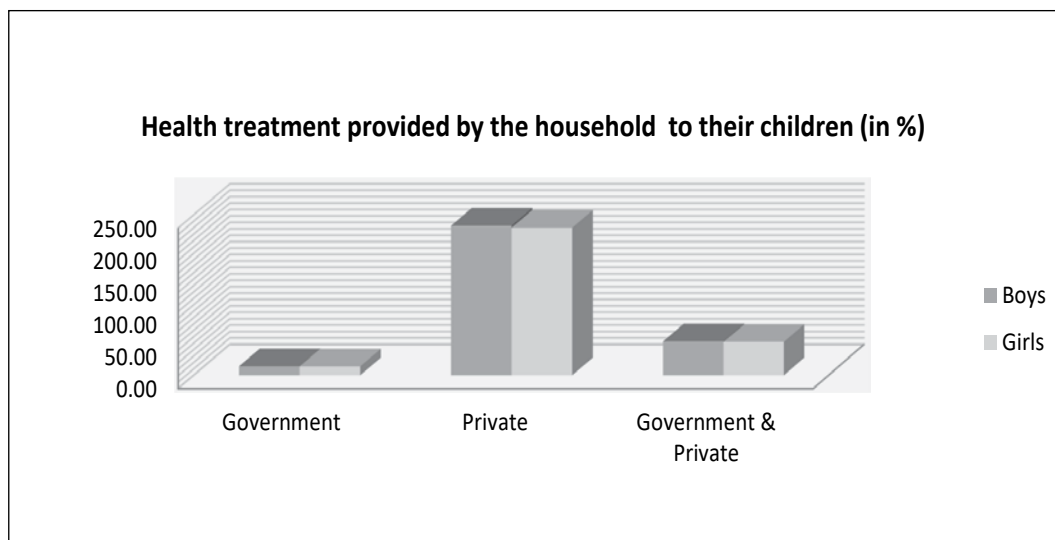
Choices of Treatment During Sickness of Children

The study examined the choices of types of treatment by the household in case of children suffering from illness or sickness in the study area (Chatra District). This study included such children, who actually suffered from illness or sickness in a year, excepting extreme diseases or accidents like Cancer, severe physical damage by accident and other major accidents.

Table 1 : Treatment Provided to the Girls and Boys by Household During the Illness

Choice of medical treatment	Boys	Girls	% of Boys	% of Girls
Government	13	15	4.33	5.06
Private	236	227	78.66	76.68
Government & Private	51	54	17	18.24
Total	300	296	100	100

Sources: *Compiled from survey data*



Sources: From the above table

The above graph shows that Out of 296 girls in this study, 76.68 % of girls got private treatment, 18.24 % of girls got both government and private and 5.06% girls got only government health treatment. Whereas out of 300 boys, 78.66% got private treatment, 17% of boys got both government and private treatment and 4.33% got only government treatment. The primary data revealed that there is minor difference between boys and girls in choice of health care treatment by the household.

To test, whether gender disparity exists in household decision to health treatment during the illness among the boys and girls in the study area, Chi-square is carried out at 5% level of significant. The result of chi-square is shown in the table no. 2.

Table 2 : Comparison of Choices of Treatment by Household in the Study area Using Chi-Square test ($\alpha=0.05$)

Choice of medical treatment	Actual Value			Expected Value		
	Boys	Girls	Total	Boys	Girls	Total
Government	13	15	28	14.09	13.91	28
Private	236	227	463	233.05	229.95	463
Government & Private	51	54	105	52.85	52.15	105
Total	300	296	596	300	296	596

Note: The analysis has been done with the help of Excel [chi-square's P-value=0.82]

The Chi-square analysis of household decision of medical treatment during the illness or sickness of children, the calculated chi-square's P-value is 0.82 and the level of significance is 0.05. It clearly shows that the P-value of Chi-square is more than its level of significant "[P-value 0.82 > $\alpha=0.05$]". Thus, the null hypothesis is not statistically significant. Therefore, there is no gender disparity in household decision while providing health treatment during the illness or sickness of children (male and female child).

Gender disparity in household expenditure on health care among the boys and girls

This section deals with the gender disparity in household expenditure on health care among boys and girls in the study area (Chatra District). The gender disparity is examined by gender of children (studying in class I to Xth), by types of household, by type of household head, by level of household income and by level of children's mother education.

Table 3 : Gender Disparity in Annual Average Expenditure on Health Care, caused by Different Factors in the Study Area (Samples Size =210)

Gender Disparity by	Boys (Rs.)	Girls (Rs.)	Difference (B-G)	Z_Stat	Z_crit two-tail	Test of statistical significance based on Z-test ($\alpha=0.05$)
Gender	3147.95	2332.83	815.12	2.31	1.96	Statistically significant
Joint household	2705.32	2363.68	341.63	0.75	1.96	Not significant
Nuclear household	3265.61	2325.47	940.14	2.2	1.96	Statistically significant
Female household head	3754.62	2483.89	1270.73	1.6	1.96	do
Male household head	2875.38	2266.83	608.55	1.66	1.96	do
Less than 10 years old	2827.76	2211.18	616.58	1.61	1.96	do
More than 10 years old	3677.81	2457.81	1220	1.83	1.96	do
Government Treatment	1755.77	915.67	840.1	0.74	1.96	do
Private Treatment	3322.11	2505.56	816.55	1.89	1.96	do
Govt. & Private. Treatment	2696.86	2000.37	696.49	1.37	1.96	do
Level of household income (Monthly Rs.)						
3600-10000	3349.08	2397.74	951.34	1.76	1.96	Not significant
10001-35000	2743.03	2271.32	471.71	1.51	1.96	Not significant
35001-60000	3912.5	1927.27	1985.23	1.7	1.96	Not significant
Level of mother's education						
Illiterate	2076.58	2117.85	-41.27	-0.11	1.96	Not significant
Class I to V	4478.23	2188.46	2289.76	2.28	1.96	Statistically significant
Class VI to X	4546.61	2561.72	1984.89	2.09	1.96	Statistically significant
Above X th	3192.25	3552.14	-359.89	-0.42	1.96	Not significant

Source: Compiled from survey data.

The above table shows the pattern of household expenditure on health care of children as a whole (ST, SC & "others") in the study area. The descriptive analysis revealed that gender disparity was found in health care expenditure in the all above mentioned variables except the variable, level of mother education (illiterate and above Xth).

By gender of children, household spent Rs. 3147.95 in a year on boy's health care and Rs.2332.83 on girl's health care and a gender disparity of Rs. 815.83 was found. For the type of household, gender disparity in health care expenditure was found in both nuclear and joint household but greater gender disparity was found in nuclear family (Rs. 940.14) than that of joint family (Rs. 341.63). However, taking into account type of household head, gender disparity in health care expenditure was found in both male headed household and female headed household but more disparity was found in female headed household (Rs. 1270.73) as compared to the male headed household (Rs. 608.55). when, age of children is taken as a variable of gender disparity in health care expenditure, the result revealed that more disparity was found where children's age is above 10 years old (Rs. 1220) as compared to under 10 years old (Rs.616.58). When type of treatment is examined during the illness or sickness of children, the gender disparity in health care expenditure was found much higher, when household provided both private and government treatment in a year (Rs. 696.49) as compared to only private treatment (Rs. 816.55), and government treatment (Rs. 840.1). On the basis of the level of household income, gender disparity in health care expenditure was found much more (Rs. 1985.23) with higher level of income of the household (35001-60000) than with income level of 3600-3500, Rs. 951.34) and Rs. 471.71 was found with income level of 10001-35000. Similarly, when children's mother level of education is concerned, a disparity was found when mother's education is between class I to Xth but no disparity was found in case of illiterate mothers and mothers whose education level is above the 10th. Moreover, more gender disparity was found where mother's education is between class I to V (Rs. 2289.76) than between class VI to Xth (Rs. 1984.89).

To test whether the gender disparity exists in household expenditure on health care of school going children in the study area, Z-test at 5% level of significance was carried out. It was found that gender of children [$Z_{cal}(2.31) > Z_{crit}(1.96)$], nuclear household [$Z_{cal}(2.2) > Z_{crit}(1.96)$] and mothers whose education level is between class I to V [$Z_{cal}(2.28) > Z_{crit}(1.96)$] or class VI to X [$Z_{cal}(2.09) > Z_{crit}(1.96)$] are significant variables for causing gender disparity in household expenditure on health care expenditure of children.

CONCLUSION

The study concluded that gender disparity exists in household expenditure on health care of school going children, by types of household (nuclear) and by level of mother's education (class I to X), and these variables are causative factors for gender disparity in health care expenditure in the study area (Chatra District).

SUGGESTIONS

Gender disparity in household expenditure on health care is not a good sign for the future of country because girl will comprise half of the workforce and their role is of paramount importance as mother of future generations. To keep the girl child in poor health is to keep half the country backwards. To eliminate the gender disparity in expenditure on girl's health care a greater awareness on the need of girl's health is needed at the household level then only households will give equal attention to the health of girls as of boys. The government should also intervene to provide better quality of health for all people at free or affordable cost and improve health infrastructure. Government must also make arrangement for medical faculties on the basis of proportion of population.

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