HEALTH INEQUALITY AMONG RURAL PEOPLE IN EASTERN INDIA

BRAJ RAJ KUMAR SINHA*

Key-words: health inequality, developing countries, rural population, social groups, occupational categories.

Abstract. Despite a significant gain in the field of health in the past, health issues still continue to be a serious threat in every part of the world. It is more alarming especially in the territories of the developing countries like India due to the concentration of a massive population, poor socio-economic conditions, less health awareness, less health facilities and investment in it. Health greatly varies across regions, demographic characteristics, society, culture, economy and it remains a challenging issue even in the 21st century. Published sources data and some health related studies indicate that the general health condition of the people, particularly in the rural part of Eastern India, is not good on account of the uneven distribution of medical facilities, the almost stagnant situation regarding the improvement of health related infrastructure and services and the poor socio-economic condition. Such a condition creates gaps in health status of the rural residents. In light of this the author makes an attempt to use an appropriate health index and to assess the health inequality of the surveyed rural people across their different age groups and genders, social groups, educational levels, income and occupational categories. Some important suggestions were also made for abridging health disparities within the surveyed rural population. The evaluation of health inequality was made using primary data obtained via a personal field survey.

1. INTRODUCTION

Health inequality is one of the challenging issues in a globalized regime of the 21st Century. It is a very complex phenomenon but an important qualitative aspect of the population of an area. In fact, it is one of the important topics of research in the field of Geography because the happiness, the beatitude, the growth of wealth, the prosperity, the exaltation, the peace and comfort in life of the people rely primarily on it. The core concept of social well-being lies in someone's health, as it helps in maintaining and achieving the social mobility or social order by liberating him/her from poverty, illiteracy, illness and other socio-economic bindings. It is so vital, that it leaves its mark on all human activities. It contributes directly to human welfare. Smith (1977) rightly pointed out that the physical and mental health of a person is one of the most important indicators of social well-being, because the happiness, quality of living and general well-being depend, to a great extent, on the health status of the concerned person. It is vital in itself and has a bearing on his/her earning capacity and other related aspects. The World Bank Sector Strategy (1997) emphasized that good health contributes to overall working efficiency and productivity as well as to the quality of life of the people of an area. Health, in this sense, is not only a society product, and is worthwhile in its own way; it is also a collective asset, a resource in the form of energy, vigor, ability and other physical and mental resources of normal functioning. Health is, however, not a static phenomenon because it varies in space and time, according to age, gender, caste, education, income, occupation etc. This variation is the result of the cumulative impact of social inequality as it pertains to the distribution of social, cultural, economic, political and physical resources. Agrawal *et al.* (1990) suggest that the health levels are a vital input for economic development and a pre-requisite for making it desirable. According to Jane (1997) health is valued both for itself and because it enables individuals to take advantage of opportunities that improve life in general. Moreover, health is an important value not just because it is an end in itself, but because it is also a means to an end – a pre-requisite for equal opportunity to participate in the benefits of organized society. Abusaleh (1999) rightly stated that health is an indicator of well-being that has direct

* Professor, Department of Geography, Institute of Science, Banaras Hindu University, Varanasi-221005 (U.P.) India, e-mail: Sinha_brk@yahoo.co.in.

implications not only for the quality of life but also an indirect impact on the production of economic goods and services. Giovanni (1996) noted that for each individual health represents his/her working capacity and, thus, the means to a better life for himself or herself or for the family. Pandey (2002) took into account health as one of the important factors of sustainable development of farming. According to Eyles (1987) health is the functional ability or capacity to work. Conyne and Clack (1981) noted that health is a measure of the population's capacity to function in a given environment. Dumitrache *et al.* (2016) have worked on 'contrasting clustering in health care provision in Romania' and emphasized the health care delivery system, the uneven distribution of health care resources and the social inequalities as key factors for public health. They stated that an improved health of the people depends on a stronger health care system, hence, health and the health care system remain important issues for everyone. Similarly, Zamfir *et al*. (2015) considered health an aspect of sustainability and this along with education, as well as other dimensions, work as pillars for development. The uneven distribution of health care resources between rural and urban areas has a negative impact on the health status and on the quality of life, especially those of rural people.

Health of the people is, without a doubt, a precious wealth of the nation as any sort of development of the concerned nation depends on the level of the status of health of the people and their efficient and proper use as far as productivity goes. According to Madan (1983) also, health of the people is fundamental to national progress in any sphere. It is the measure of energy and productive capacity in any country. Health is also the positive state of well-being of the people. Kupuswamy. (1976) has observed that "the differences in health of the labour force result in productivity differentials. Sound health gives greater stamina to stand the odds of occupation and to work overtime". Furthermore, according to Kamble (1984), the standard of living of a nation's people is affected by the health conditions of the people that make it up. Health is an important factor of economic and social development because disease creates vicious circles by depleting human energy, leading to low productivity and earning capacity, deteriorating the quality and quantity of consumption and the standard of living. According to this author, health is an asset of a community and healthy communities are the foundation of a strong nation. Therefore, a nation ought to give adequate attention to the health care of its people. (Park and Park, 1991) considered health as an important integral part in achieving overall socio-economic, cultural and political development and in creating a social order. Others believe health to be an indispensable human capital, which plays a significant role in enhancing almost all aspects of human life in a society. Chalam and Francis (1997) considered health as an important indicator of human resources development because an improvement in health promotes learning, reduces absenteeism, improves stamina, and increases energy output. Therefore, the status of health of the people plays a vital role in a community's development and a country's progress.

2. OBJECTIVES

From the viewpoint of the significance of studying health inequality in the concerned developing territory, attempts have been made in this paper to use the category of health index as a convenient tool to evaluate inequality in health of the surveyed rural people across different age groups and sex, social groups, educational levels, income and occupational categories. This study undertaken across such population characteristics will set a new direction for the researchers in geography, and other allied subjects, both at national and international level.

3. STUDY AREA

Rural health in any rural location is an interdisciplinary subject of research as location of a place has profound effect on health. To fulfill the above objective the 'Bolpur-Sriniketan Community Development Block', the southernmost part of Birbhum district, West Bengal, has been selected as the study area (Fig. 1). Location is the relative position of a place with reference to other geographical

attributes in space and is generally divided into three categories. These are geographical, regional and economic. In regional context, the study area is a small segment of Birbhum district and is situated in the Lower Ganga Plain, Eastern India. It is especially situated on the inter-riverine tract of Kopai and Ajoy Rivers, both tributaries of the Ganga River. Weather conditions of the study area remain harsh, with excessive heat during Summer and excessive cold during Winter.

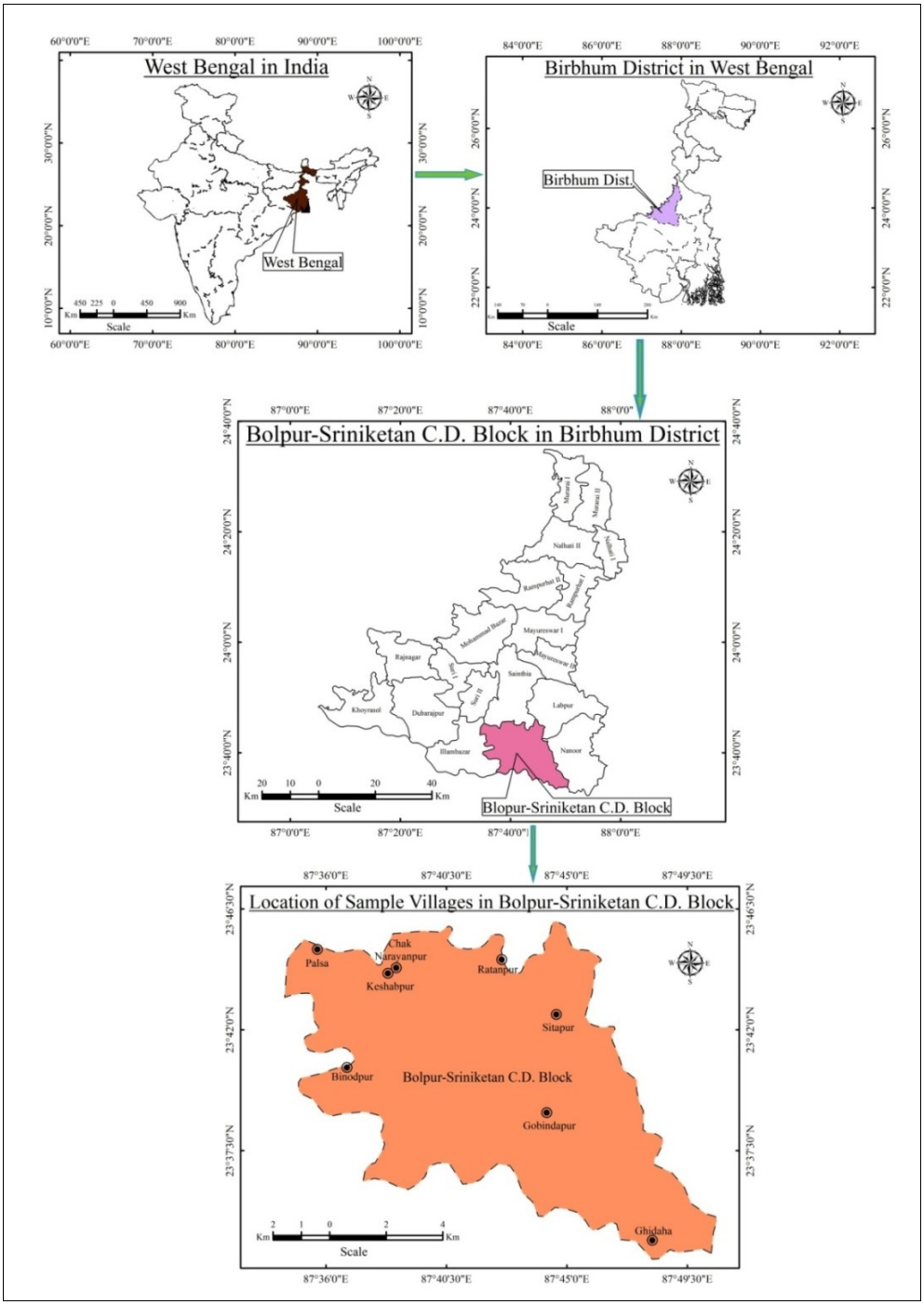

Fig. 1 – Location map of Birbhum District and Selected Sample Villages in West Bengal, India.

Economically, it is located in the paddy, wheat and oil seed dominated agricultural area. Socio-economically, the study area is poor and inhabited by ethnically different communities having different socio-cultural and economic backgrounds. The total population of the study area according to the 2011 census year was 202 553, out of which 50.71% were male and 49.29% female. Out of the total population 11.43% were children below the age of 7 (below school enrollment age). Similarly, 30.59% were Scheduled Castes, 19.06% Scheduled Tribes, and the rest were General and Other Backward Caste people. The total percentage of literate and educated individuals as per the 2011 census was only 62.59%, of which 55.47% were male and 44.53% female. Out of the total male or female population 59.77% male and only 24.38% female were employed in different economic activities within and outside the study area. Women, in huge majority (75.62%), were found engaged in non-economic activities. All these elements indicate that both socio-economically, as well as demographically, the study area is vulnerable.

4. MATERIALS AND METHOD

This section focuses on the collection of the types of data and their related methodology, and is divided into two parts - data base and concept base.

Data Base. The study is exclusively based on the primary data related to various qualitative and quantitative variables of health, collected through a questionnaire by conducting field surveys (in 2012) at household level in eight villages randomly selected from Bolpur-Sriniketan Community Development Block, Birbhum District, West Bengal (Fig. 1). The study based on such sample data is the representative of the study area as a whole as well as of other similar areas in eastern India.

Concept of Measuring Health. Several scholars such as Raza (1990), Trewartha (1967), Smith (1977), Basu (1992), Pacione (1988), Madan (1983), Mukherjee (1986), African Development Report on Human Capital Development (1998), Singh (1983), Human Development Report (1998) have used different quantitative and qualitative indicators such as body height and weight, body temperature, blood pressure, count of red blood cells and white blood cells, infant mortality rate, general mortality, hair, eyes, lips, gums, teeth, skin, gland problems, life expectancy, number of doctors, hospital and beds per unit population, safe water supply, literacy, education, per capita income, expenditure on health, diseases of various types, food and nutrition, calorie intake, the capacity to do manual work during standard working hours, clear eye sight and regular memory etc. in measuring human health, but the data relating to all such quantitative and qualitative indicators is not available for measuring health at individual level. In fact, some data concerning some indicators is available and applicable only at district, state and country level.

Indicators Selected for Calculating Health Index

On account of the above limitation, the author has taken into account only those quantitative and qualitative parameters that are directly or indirectly related to the mental and physical health of an individual and that are used in calculating the health index. These are different types of diseases such as diabetes, hypertension, cancer, coronary heart diseases, asthma, bronchitis, jaundice, HIV/AIDS, paralysis, tuberculosis, kidney problems, liver problems/ulcer, gastric/acidity problems, epilepsy/hysteria, anemia, polio, arthritis and spondylitis, fever/typhoid/pox, malaria, gynecological diseases, gallbladder stone/hernia/hydrocele, skin diseases/leprosy, amebiasis /ascariasis, and other specific diseases; the loss of appetite, digestive problems, memory capacity, mental tension, eye problems; ear, nose and throat problems (E.N.T.), dizziness, physical and mental problems while working continuously for 6-8 hours standard working day, problems arise during working period in sun, rain and cold, problems in supporting one's normal head load, a general state of sleep, the feeling of weakness and tiredness, lethargy, presence or lack of enthusiasm for work, timely meals, the number of visits to government

and private hospitals or clinics, the per head total medical cost in the past year, the types of drinking water, the number of days of pulse (edible seeds), green and other vegetables consumed by an individual in a week, the number of days per week that an individual consumes ghee/butter, milk, eggs, meat, fish etc., the frequency of smoking, consuming tobacco, alcoholic drinks, whether the required medicines are purchased timely or not and whether the food is adequately available or not at household level, whether the house is ventilated or unventilated, whether one's breath is sweet or not, an individual's educational achievements including training and skills, occupation and income. An individual's level of information concerning these indicators was collected from the field by using a single questionnaire for each respondent's family.

After collecting information relating to such selected variables at individual level the master data sheets were manually prepared, and while preparing them, each variable was assigned certain positive or negative connotations (depending on its positive or negative nature) as per a rationally fixed scale or group or class or range made after normalizing and standardising the data.

Thereafter, firstly, the total positive and negative scores (depending on the positive or negative nature of the above selected variables) were separately worked out for each individual, after which the **total composite score** (the sum of the total positive and negative score of each individual) was separately calculated for each person. The **total composite score of each person was considered as 100%.** Finally, the percentage of only positive score for each person from the total composite score (i.e. the sum of positive score + negative score = 100 per cent) was calculated. Finally, the **Positive Health Index** of each person was calculated separately by dividing the percentage of the total positive score of each person by 100.

Thus, on the basis of variation in **Positive Health Index** among all the surveyed people under investigation, five levels of health at equal class interval were framed for tabulation, cartographic representation and interpretation.

These are:

(i) > 0.80 (Very Good Health), (ii) 0.61 – 0.80 (Good Health),
(iii) 0.41 – 0.60 (Average Health), (iv) 0.21 – 0.40 (Poor Health), and
(v) < 0.21 (Very Poor Health).

Such a sequential arrangement of Health Index has been used for explaining the health status of the population surveyed at individual level by age group and gender; social group; educational level, income and occupational categories. The methodology details concerning the selection of variables, the allocation of a positive or negative connotation for the variables selected, and the calculation of composite scores and health index are all explained in 'A Methodology of Measuring Human Health' (Sinha, 2015).

5. RESULTS AND DISCUSSIONS

This section deals with inequality in the health status of rural people by age group and sex, social group, education level, income and occupational categories in a territorial segment (Bolpur-Sriniketan Community Development Block) of Birbhum District, West Bengal of Eastern India. Before having a detailed discussion on health inequality, it becomes imperative to take a glimpse into the general health infrastructures. As previously mentioned, the study area falls in the socio-economically depressed region in the Eastern part of India. The general health infrastructure and services in the study area, as well as in its surrounding region is quite poor. When one glances at the detailed picture of medical facilities one may observe that medical institutions such as hospitals, community health centers, primary health centers, dispensaries, clinics etc. have not had a significant increase in numbers in the past decades. Similarly, the number of beds has also not had a significant increase in a long period of time. There is a sharp decline in the number of doctors between 2008 and 2012. This

situation points towards an insufficient medical infrastructure and the scarcity of doctors. The number of patients treated has dropped to an undesirable degree due to the severe shortfall in the medical infrastructural facilities in the region. Most of the patients suffering from chronic diseases seek treatment outside the region. The overall picture shows that there is scarcity of medical and health related resources in the region of the study area. All these are indicators of the poor availability of health infrastructure and the insufficient supply of medical services in correlation to the demand of the population, which in turn creates inequality in health status for the people of the area.

5.1. Health Inequality of the Rural People by Age Group and Sex

Figure 2 clearly exhibits variation in the pattern of health status across different age groups and sexes. This figure shows clearly that the percentage of both male and female infants (0–4 years) was the highest in terms of the good health category (0.61 – 0.80 health index) which in descending order of relative dominance is followed by the infants of average, very good and finally poor health categories except female in poor health category. It indicates that the majority of infants have a good and average health status. This may be because of concerned parents taking more care in the area of health.

The 5–14-year age group shows that the majority of children fall in the average and good health categories, after which the percentage changes in the very good and poor health category. When one compares the health status of infants and school-going age group children, one finds that the majority of infants fell in the good and average health categories whereas the majority of school-going age group children fall in the average and good health categories. This indicates that the infants' health is slightly better than that of the school-going age group children.

The younger working age group (15–34 year) shows a similar pattern of variation as in the case of school-going age group children. However, the percentage of 15–34-year age group individuals in the average health category is higher than that of school-going age group children of this health category and the percentage of those in the good health category is lower than that of school-going children.

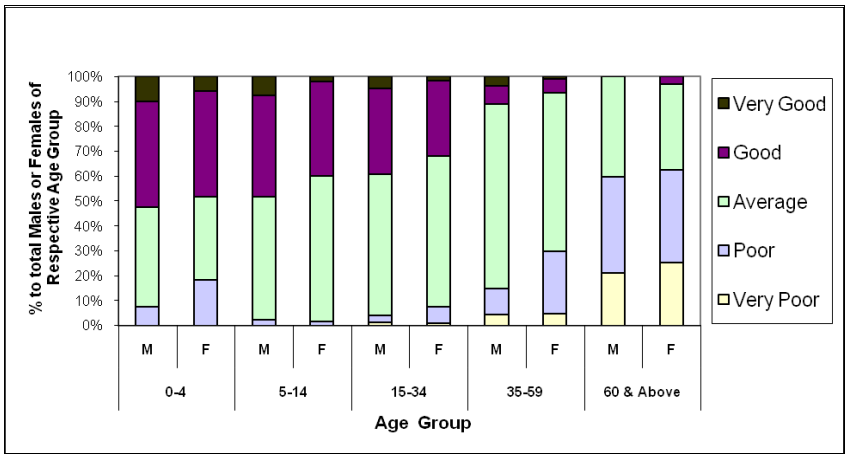

Fig. 2 – Health inequality of the rural people by age group and sex in a territorial segment of Eastern India.
Source: Personal field survey (2012).

The interesting picture is that certain individuals in this age group belong to very good and also to the very poor health categories indicating poorer health in comparison to infants and school-going age group children.

The majority of both male and female between 35–59 years are in the average and poor health categories. However, a substantially good percentage of them are in the very poor and very good health categories. When we take a look at the 60 and above year age group we can see that the

percentage of male is highest in the average health category whereas the percentage of female is highest in the poor health category. In other words, one may affirm that the majority of them belong to the average, poor and very poor health categories in descending order of relative dominance. This pattern indicates that the health of individuals belonging to the 60 and above year age group is poorer than that of the older working age group (35–59 year) people.

The overall picture shows that the health status of both male and female varies across respective age group and health categories. Secondly, the health status of infants, school-going age group children is better than that of the younger working age group population as well as older (35–59-year age group) and old (60 and above) individuals. In other words, the health of older and old population is generally poorer in comparison to that of infants, school-going children and younger working individuals because the majority of older and old individuals are, on average, in poor and very poor health. In short, it was found that the majority of both male and female from all age groups, except 0-4-year infants, pertain to the average health category. This is followed by the individuals in good health, poor health and very good health, barring few exceptions.

5.2. Health Inequality of Rural People by Social Groups and Sex

Figure 3 shows that the health status of rural people varies from one social group to another, which may be because of their varied socio-economic conditions. Here we find that the majority (64.88% male and 64.44% women) of the general caste individuals belong to the average health category which is followed by the good, poor and very good health category persons, in that order of its relative significance. There is more or less a similar pattern of variation among the individuals of the Other Backward Cast (OBC) as their majority in terms of percentage is in average health which in descending order of relative value is followed by the good, poor and very good health categories. However, a small percentage of OBC female are also found in the very poor health category. The picture of both male and female in the Scheduled Cast (SC) category is similar to that of the OBC category, which is clear from their highest percentage in average health, the high percentage in good health and the low percentage in the poor and very poor health categories, but the pattern of variation among Scheduled Tribe (ST) male and female is quite different from other social groups, as the majority of ST individuals belong to the average and very poor health categories, which is followed by the good and poor health categories, in that order. The pattern of variation among Muslims is, to some extent, different as their majority belongs to the average then poor and good health categories followed by the very good and poor health categories. Such variations are observed owing to their different socio-economic conditions prevalent in Indian society.

All of the above shows that health status of the General and OBC individuals generally remains better in comparison to that of other social groups as their percentages towards good and very good health categories are higher than those of other social groups. The general health condition of ST individuals is poorer in comparison to that of the population of other social groups. If we take a look at the cross section of health status categories, we can find that in the very good health category the percentage generally decreases from Muslim to OBC individuals and finally to General and Scheduled Caste (SC) (only in women) categories. In the Good health category, the percentage as per relative dominance in descending order is among OBC, SC, General, Muslim and ST categories. In the average health category, the percentage in terms of relative dominance in descending order is among General, Scheduled Caste (SC), Muslims, OBC and ST categories. In the poor health category the percentage is highest among Muslims, then decreases for OBC, General, SC and ST categories in that order of relative dominance, whereas in the very poor health category the percentage of Scheduled Tribe (ST) individuals is highest, and is followed by the percentage of SC, OBC female and Muslims. The above variations are observed owing to their different socio-economic conditions prevalent in Indian society.

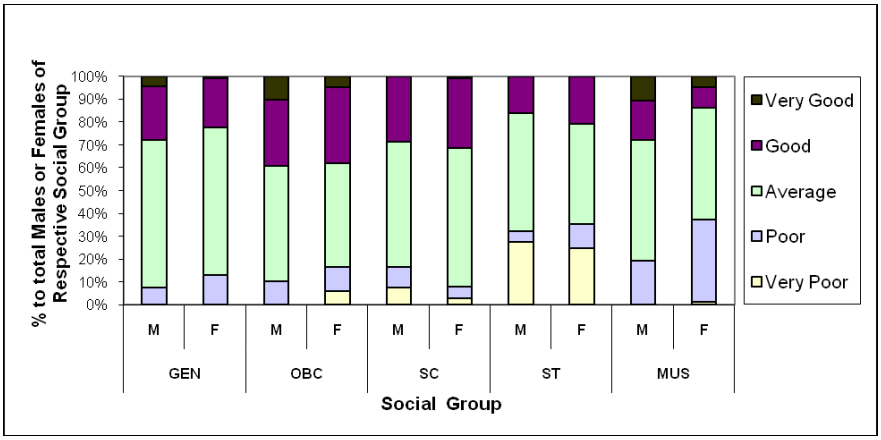

Fig. 3 – Health inequality of the rural people by social group and sex
in a territorial segment of Eastern India.
Source: Personal field survey (2012).

5.3. Health Inequality of Rural People According to Educational Category and Sex

The health status of both the male and female population also varies across different education categories. The detailed picture of variation in health status is clearly seen in Figure 4. The educational category variation shows that the majority of surveyed people in terms of percentage in illiterate and primary educational categories were in the average health category which is followed by the next higher percentage of individuals with a poor health status except female who have benefitted from a primary education. The third order of relative dominance of percentage in illiterate and primary educational categories was in the good health category. The population in the illiterate and primary educational categories had a very poor health status and ranked fourth. Few individuals had a very good health status.

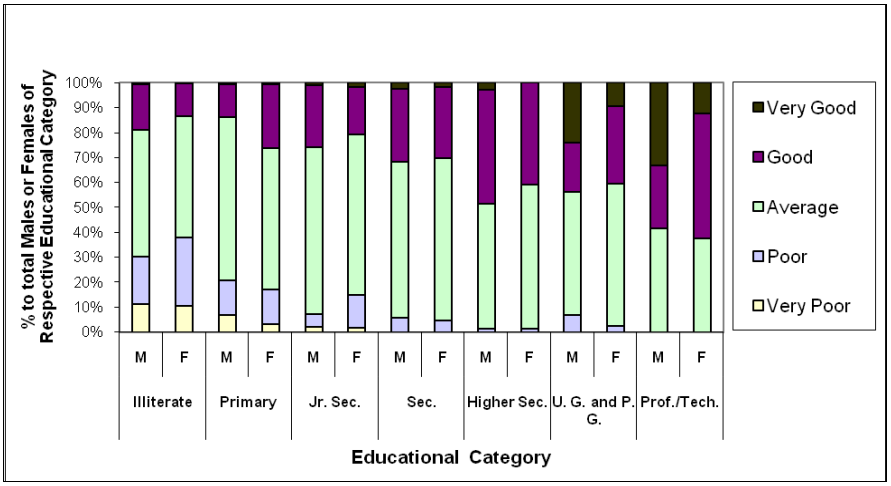

Fig. 4 – Health inequality of the rural people by educational category and sex
in a territorial segment of Eastern India.
Source: Personal field survey (2012).

The picture of individuals having junior secondary, secondary and higher secondary education is different in comparison to those from the illiterate and primary educational category because the

majority (in term of percentage) of both male and female having an average health status is followed by the next higher percentage of people of good health. However, the percentage of both male and female of junior secondary education in good health is 24.68% and 18.90% respectively, which is fairly less than that of the population of secondary and higher secondary education. Some individuals represented by small percentages were in very good health also. Such variation indicates that the health status of the secondary and higher secondary educational category individuals seems to be better than that of those of junior secondary education. This is also proved by comparatively more percentages of individuals having junior secondary education in poor and very poor health than that of the individuals of secondary and higher secondary education.

The pattern of variation in health status of the people of under graduation and post-graduation studies, including professional technical education is different from that of those of lower and middle educational categories ranging from illiterate to higher secondary. It is because of the fact that the percentages of under graduation and post graduation including professional technical individuals were fairly higher in the very good health category in comparison to the individuals of lower and middle educational categories in this health status category. However, the majority (in terms of percentage) of both male and female from under graduation and post graduation including professional technical education leaving aside minor differences in exception were part of the average health category but further details show that the percentage of male of under graduation and post-graduation, including professional technical education, was higher in the very good health status category whereas the percentage of female in these educational categories was higher in the good health status category. Such variation generally points to a better health status for male than for women.

The overall picture shows that, in general, the majority of both rural male and female remain concentrated in the lower educational categories up to junior secondary education, and as per relative dominance in terms of decreasing percentages of them was in average, poor, good and very poor and very good health status. In particular, the health status of individuals having secondary and higher secondary education is comparatively better than that of the lower educational category. Similarly, the health status of those having undergone graduation and post-graduation studies, including professional technical education, is miles better than that of the lower and middle educational category of individuals. In general, such variation in health status can be seen as a result of variation in educational achievements among male and women. In other words, one may infer that health status, as a general rule, increases along with the level of education and decreases along with it. In short, one can say that there is a positive association between health status and education.

5.4. Health Inequality of the Rural People by Income Category and Sex

Figure 5 shows that health status varies according to income and sex. It is clear that the majority of both male and female in less than Rs. 1000 and Rs. 1001–2000 in terms of the relative dominance of percentages were in the average health status category which is followed by the individuals of poor and very poor health in that order of decreasing percentage except those few that find themselves around the good and very good health category.

The health status of both rural male and female belonging to income categories of Rs. 2001–3000 and Rs. 3001–4000 is, to some extent, similar to that of the individuals in the first two income category. The only difference is that there is no one in the very poor health category and a comparatively higher percentage in the good health category in comparison to their counterparts of former income categories in poor and good health status. Such variation points to a slightly better health status of individuals having an income between Rs.2001–4000.

The picture of people in the income categories of Rs. 4001-6000, 6001-8000 and more than Rs. 8000 is different in comparison to that of individuals of lower and middle-income. This is observed by

the greater percentages of both male and female in the good and very good health categories in the case of individuals with the highest income (greater than Rs. 8000). Only few individuals were in the poor and very poor health categories.

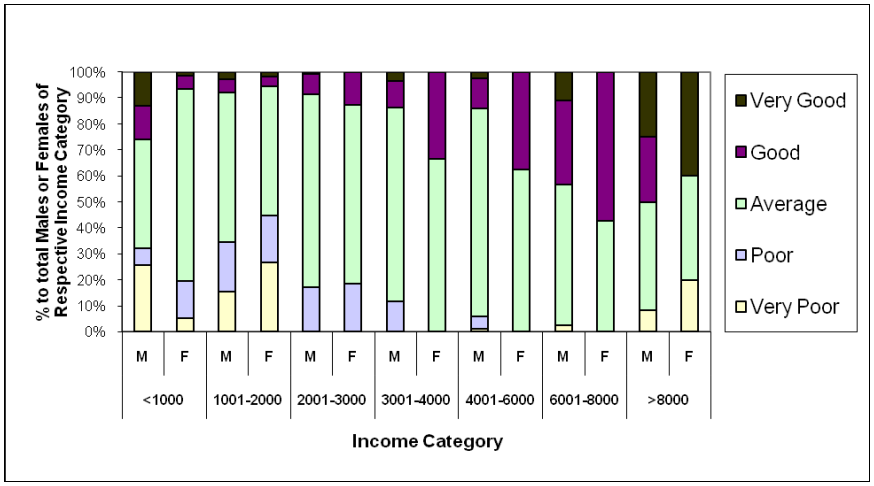

Fig. 5 – Health inequality of the rural people by income category and sex in a territorial segment of Eastern India.
Source: Personal field survey (2012).

After looking at the detailed picture, one finds that the majority of both male and female (67.03% and 62.70% respectively) are in average health category as found in case of age, social, and educational categories but an interesting feature is that the majority of individuals in descending order of relative dominance as measured by percentage to the total number of male and female of a particular income category up to Rs. 2000 were in the average, poor, very poor, good and very good health status categories. But the health status of the middle-income category, between Rs. 2001 and 4000, appears better as normally shown by the relatively greater percentages in the good category and lesser percentage in the poor category, as well as no percentage in the very poor health category after their majority in average health categories compared to their counterparts of the respective health category in lower income. However, the health status of the upper income individuals is found better as shown by greater percentages in good and very good health categories. All this is the reflection of the impact of income on the health status of rural people in the developing society of the lower Ganga Plain in India.

5.5. Health Inequality of the Rural People by Occupational Category and Sex

When we look at the detailed picture of variation in the health status of rural people by occupational category and sex as shown in Figure 6 we find that the majority of individuals from among the total number of male and female of average index of health status are as cultivators and agricultural labourers. This is only because the rural area is dominated by agricultural activities. Occupation-wise variation shows that the health of the majority of cultivators and agricultural labourers (74.65% male and 63.79% female cultivators and 71.53% male and 64.66% female agricultural labourers) out of the total number of male or female cultivators and agricultural labourers is average, which is followed in descending sequence by the percentage of individuals from good,

poor, very poor and very good cultivators category, whereas in the case of agricultural labourers it is followed by the percentage of individuals from poor, very poor, good and very good categories of health status. Such variation is indicative of the relatively poorer health of agricultural labourers as compared to that of cultivators. This is observed as a result of comparatively better socio-economic conditions of cultivators owing to the possession of landed property and the landless status of agricultural labourers.

Those engaged in construction, household industrial activities, transportation and communication have, largely, average and poor health because of their poor socio-economic condition. Those engaged in trade and commerce have a better socio-economic stance and have, to some extent, better health than those engaged in construction, household industries and transportation and communication.

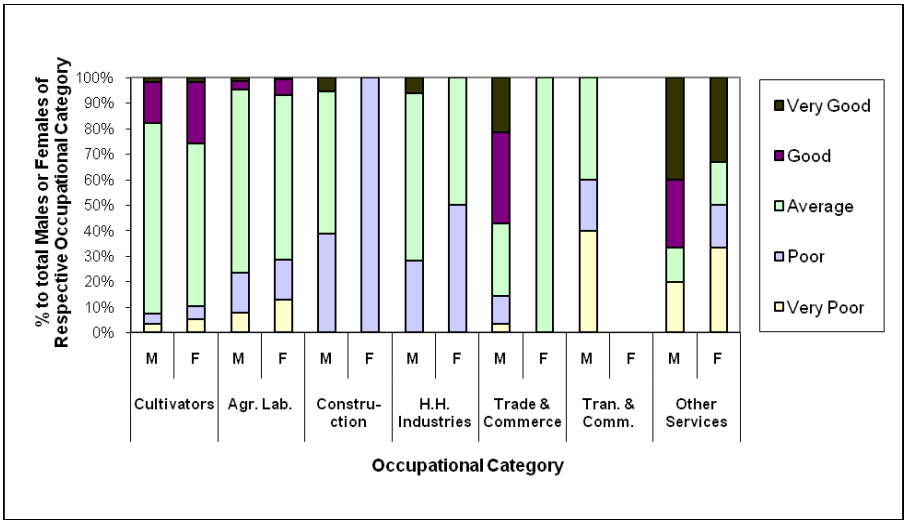

Fig. 6 – Health inequality of the rural people by occupational category and sex in a territorial segment of Eastern India.
Source: Personal field survey (2012).

Those engaged in other services (particularly men) have relatively better health due to having better education, a better source of earning in a developing rural society.

In short, it can be said that, generally, the percentage of individuals having poor, very poor and average health is prevalent in agriculture, construction, household industrial activities and in transportation and communication and those having slightly better health are in trade and commerce, as well as in other services owing to relatively better socio-economic conditions.

5.6. Health Inequality of Rural People by Sex

Health inequality by sex, as shown in Figure 7, exhibits the overall picture of variation in the pattern of health of rural people in a territorial segment of Eastern India. From this figure it is quite evident that the majority of both male (58.33%) and female (57.54%) are in the average health category which, in descending order, is followed by the percentage of individuals from the good (23.63% male and 23.18% women), poor (9.29% male and 13.83% women), very good (4.78% male and 1.68% women) and very poor (3.97% male and 3.77% women) category of health status. Such variation in health status among the rural people of the study area is normally due to the variation in demographic, social, cultural and economic conditions of the rural people of the study area.

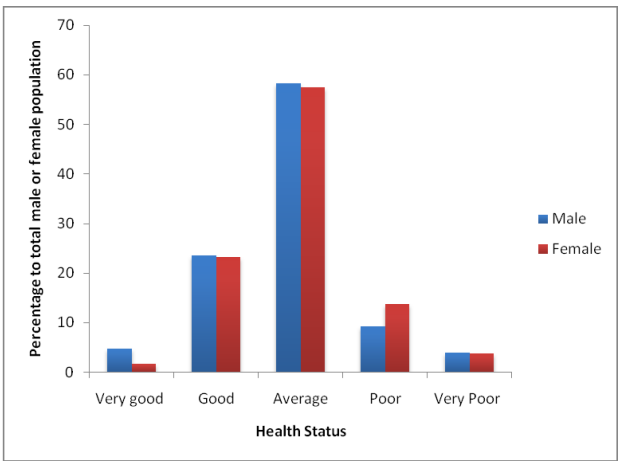

Fig. 7 – Health inequality of the rural people by sex in a territorial segment of Eastern India.
Source: Personal field survey (2012).

6. CONCLUSIONS

Findings relating to the variation in health status of rural people across different age groups, social groups, education, income and occupational categories by sex in a territorial segment (Birbhum District) of Eastern India are as follows:

The health status of infants between 0–4 years of age, school-going age group children (5–14 year age group) is comparatively better than that of younger working (15–34 year age group) individuals as well as older (35–59 year age group) and old (60 and above) individuals. In other words, the health of older and old people is generally poorer in comparison to that of infants, school-going children and younger persons because the majority of older and old individuals are in average, poor and very poor health categories. Finally, the majority of both male and female belonging to all age groups except the 0-4 years one, belong to the average health category. This is followed by those of the good health, poor health and very good health categories, barring few exceptions.

Generally, the health status of General and OBC individuals in comparison to that of other social groups is better, as their percentages regarding the good and very good health categories are higher than those of other social groups. The general health condition of ST persons is poorer in comparison to that of those of other social groups. It is also found that in the very good health category the percentage generally decreases from Muslims to OBC and finally to General and SC categories (only in women). In the Good health category, the percentage in order of relative dominance decreases from OBC, to SC, General, Muslim and ST categories. In the average health category, the percentage in terms of relative dominance in descending order is among General, SC, Muslims, OBC and ST categories. In the poor health category, the percentage in order of relative dominance normally decreases from among Muslims to OBC, General, SC and ST categories, whereas in the very poor health category the percentage of ST individuals is highest, and is subsequently followed by the percentage of SC, OBC female and Muslims. The above variations are observed owing to their different socio-economic conditions prevalent in Indian society.

In terms of the educational category, variations show that, in general, the majority of both male and female are found as belonging to lower education categories, especially up to junior secondary education. In order of relative dominance, the percentages of them had, on average, a poor, good, very poor and very good health status. In particular the health status of persons having secondary and

higher secondary education is comparatively better than that of the lower education category. Similarly, the health status of the individuals having undergrad and postgrad degrees including a professional technical education was miles better than that of those with a lower and middle education. In general, such variation in health status can be considered as a result of variation in education achievement. In other words, one may state that the health status generally increases and decreases along with one's level of education. This, in short, indicates a positive association between the health status and education.

Regarding the income, variation shows that the percentage of both male and female in relation to the total number of male and female of the respective income category (up to Rs. 2000) in descending order had an average, poor, very poor, good and very good health status, but the health status of those in the middle-income category between Rs. 2001 and 4000 appears to be better, as shown by the relatively greater percentages in good and lesser percentage in the poor health category, and no percentage in the very poor health categories after their majority in average health categories compared to their counterparts of respective health category in lower income. However, the health status of the upper income category persons is better, as shown by the greater percentages in the good and very good health categories. All this is a reflection of the impact of income on the health status of rural people in the developing society of the lower Ganga Plain in India.

Similarly, the percentage of individuals having poor, very poor and average health is more present in agricultural, construction, household industrial and transport and communication activities, whereas those having slightly better health are in trade and commerce as well as in other services owing to relatively better socio-economic conditions.

On the whole, we found that the majority of both male and female are in the average health category which, in descending order, is followed by the percentage of people from the good, poor, very good and very poor categories of health. Such variation in the health status of rural people in a developing Indian society is the reflection of variation in age, education, income and occupation among both the male and female of different social groups.

Therefore, it is suggested that essential health facilities alongside essential education facilities, food and nutrition and other health related facilities should be made available in all the villages of the district, and while allocating or distributing such infrastructures, priority should be given to female of different age groups, to older and old people, S.C., S.T. and other backward caste people. The children below the age of 15 should be taken care of in terms of physical and mental health with the provision of compulsory education and health. Once health related measures are adopted and essential facilities properly utilised, then the men-women, age group, social group and village gaps in health will be reduced. Such efforts will enable rural people to live a life of peace and comfort.

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