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Household economy influences the health condition among the santal tribes of Odisha: An anthropological study

Rajeswar Maharana, Irshad Khan

Ph. D Scholars, Department of Anthropology, Central University of Orissa, Koraput, Odisha, India

Abstract

Despite India's recent economic growth, health and human development indicators of scheduled tribes lag behind national average. There are 1.2 billion people have been achieved in recent growth and development. Out of the total populations of India around 8.6% constitutes the tribal people (2011 Census of India). They are found in most parts of the country and are generally economically deprived. The health troubles of rural areas especially of the tribals region need a unique concentration, because the tribal people have typical health problem, which generally governed by their traditional belief, practices and ecological condition. The tribes those are residing in Odisha are leading the poor health status due to these following factors like; remoteness, poverty, insufficient annual income of the family member, lack of education, malnutrition, absence of safe drinking water and sanitary condition, poor maternal and child health services, infective coverage of national health and nutritional services, available communication and transportation medias and less genetic knowledge affects the Santal to great extent. However, the household income is strongly correlates to health status and access to health care services. Greater wealth is allows a household to maintain its standard of living and the standard health. Income is also related to the amount of preventive care received, which is associated with health out-comes. Household with less education and low level of income are spending less on health care expenditure and vice versa. The present study is based on fieldwork and 131 Santal households were taken interviewed of from the Bantali Rakhasahi village of Mayurbhanj district of Odisha. The study tries to find out the influence the household income of the pattern of health condition and its expenditure.

Keywords: health condition, household economy, influence, expenditure, santal tribe, mayurbhanj

Introduction

Health is the major pathways to human development. The importance of the good health has been well known over time. But many times a section does not have much access to health facilities and suffers from ill health. Improvements in health would translate into higher incomes, higher economic growth, and accelerated declines of poverty. Tribal communities are mostly forest dwellers. They lived in varied habitats, climatic conditions and ecological niches. Because of the isolation, poverty, remoteness and being largely unaffected by the development process going on in India, the health status of tribal populations is very poor and worst in Particularly Vulnerable Tribal Groups. The tribal people across the world experiences more health related problems as compared to the population at large. It is only because of their traditional belief system, practices and ecological condition. Illiteracy, unawareness, poor economy, unfamiliarity and uneasiness like hesitation are sometimes stopping them to go to the local dispensaries and health centers. They have their own life styles, food habits, beliefs, traditions and socio-cultural activities.

The health and nutritional problems of the vast tribal populations are varied because of bewildering diversity in their socio-economic, cultural and ecological settings (Balgir, 2000). Therefore, in order to remove the imbalances and provide better health care and family welfare services to scheduled tribes, the population coverage norms of establishment of rural infrastructure have been relaxed. Werner's research has done to examine the extent to which to the money that poor families spend on health care affect their nutritional status and thereby health and survival particularly of women and children (1995). Household economy is the main factors and great responsible for the various type of health problems/ hazards among the tribal of Odisha as well as India are discussed in the following.

House Hold Economy

Income affects health status of tribal peoples directly and indirectly. Income disparities lead to marginalization, limiting access to education, employment, good housing and nutritious food. The Inuit discussion paper reflects that "*Inuit view of income distribution as a key determinant while Health Canada describes income as the most important determinant of health*" (Mowbray 2007) [12]. It has been seen the tribal family income is lower than the non-tribal family income (Altman 2003; Frohlich *et al*. 2006) [2, 6]. Some Study also demonstrates that unequal distribution of income is connected with stress. People with lower income live and work in more stressful environments and conditions. For example, economic strain, insecure employment, low control at work, and so on (cited in Frohlich *et al*. 2006) [6].

Diez (2001) [5] related individual health outcomes to socio-economic characteristics of the community (e.g., levels of economic development) and the community health infrastructure. However, such works on our native tribes are scanty in reality. Whereas, the employment rate of tribal people is lower than the non-tribal people (Altman 2003; Frohlich *et al*. 2006) [2, 6]. Tribal people are classified as unskilled and belong at the bottom end of the occupational hierarchy, which is partly a reflection of their low educational

status (Altman 2003; Smith *et al*. 2008) [2, 14]. Similarly, Maitil *et al*. (2005) [9] found that the non-tribal were better than the tribal in terms of standard of living, education and other socio-demographic indicators. Considering at the continuity of employment, indigenous peoples are involved in irregular employment throughout the year than non-indigenous peoples. They also occupied in seasonal employment (2009). A recent study among the Mru indigenous people in Bangladesh shows that more than 90 percent people are involved in agricultural or household works rather than professional jobs or business (Islam, 2010) [7]. These earlier studies reveal that due to the proper getting of opportunities and financial support tribal people were facing difficult to manage their day to day livelihood. Their family would not get any extra nutritious food.

Lantz *et al*. (1998) [8] also suggested that income is perhaps the strongest and most robust predictor of health because to some degree the impacts of other Socio Economic Status (SES) variables are mediated through it. Cochrane reveals that Per capita income is the mostly wide discussed socio-economic determinants of mortality (1980) [4]. Tribal people's health status and outcomes are surrounded within the specific socio-economic, political and cultural context, which they are brought up in. Poverty is the major factors of the low health standard (Abel-Smith and Leiserson, 1978) [1]. This paper is broadly an attempt to highlight the determinants associated with tribal household economy and its effect on health condition among the Santal. Both can directly and indirectly influence to each other, *e.g. "poor health condition may affect or reduce their income. More long term ill health in childhood may influence the educational outcomes which in turn affects employment opportunities and, learning potential later in life"*.

Improving the income of the poorest members of society is often proposed as a way of improving their health, and dropping health inequalities. However, there is much debate about the specific causal pathways that link people's income and health and the two key concept- household incomes and the health are both defined and measured in a wide range of ways. Given this complexity, a systematic theoretical review has been conducted to develop a better understanding of how income and health are related over the life course. The earlier studies have reported that how does money influence the health, including:

- Money buys health promoting goods and the ability to engage in a social life in ways that enable people to be healthy.
- The stress of not enough money may affect health.
- Being in poor health may affect education and employment opportunities in ways that affect subsequent health.
- Low incomes have low quality type home, which ultimately leads poor health.

The present paper is completely deals on how does the household economy may influence the health condition of the household.

Objectivity of the study

1) To analyses the household economy among the Santal of Bantali Rakhasahi Village.
2) To study the household economy influences their health condition among Santal of Bantali Rakhasahi Village.

The Area and People

Considering the background, the present work was undertaken among the Santals, a homogeneous scheduled tribe inhabiting the Bantali Rakhasahi village in Mayurbhanj district of Odisha. The village is about 80 km. away from the district headquarter town of Baripada in East and 75 km. from Jamshedpur city of Jharkhand in North side. Rairangpur Township is very close to the studied area. The Santal are the 3rd largest tribal communities of India after the Gond and the Bhils respectively, with a population over 4.26 million. They are residing in the state of Bihar, Jharkhand, West Bengal, Odisha, and Tripura and other few parts of India. In Odisha, the Santal are largely distributed in the district of Balasore, Keonjhar, Mayurbhanj and Sundergarh. Over fifty percent of the tribal populations of the Mayurbhanj district constitute Santals. Though the Bantali Rakhasahi is a multiethnic village, out of the total population the Santals are predominating i.e. 687 Santals (M: 373, F: 314) than other communities. Racially the Santals are an Austro-Asiatic tribe with dark brown to black skin colour, grey to brown hair colour, medium to flat nasal form and medium height. They speak Santali dialect, which is their mother tongue besides Larka, Odia and Hindi.

Methodology

Sample Selection

During the time of collection of information, basic data pertaining to ethnography and general aspects of the people and area were gathered. In short, for quantitative data, fully interview scheduled was used and for qualitative data, in-depth interviews and observation were carried out in the field. However, the secondary data have collected from various books, journals and Govt. records. The sampled subjects were drawn randomly from 131 households from different four small hamlets, located at Bantali Rakhasahi. Out of 131, 43 households located at *Bantali tolla*, 31in *Bagma tolla*, 47 in *Marang tolla* and 10 are in *Dollan tolla* (Building sahi) respectively.

Result and Discussion

i) Analyses the Household Economy among the Santal of Bantali Rakhasahi Village

The economic life of the Tribal Groups revolves round the forest. Basic needs are fulfilled by forest trees and plants. Forest nurtures their life. The Santal tribes were involved in various types of jobs like services, caste occupation, and cultivation as their traditional occupation. Moitra and Chaudhuri found that agriculture and forest products were the principal source of income in Santal of Rajmahal hill in Bihar (1991) [10]. The Santal who lived in the Bantali Rakhasahi village of the Bijatola block of Mayurbhanj district, who are depending largely on agricultural activities, agricultural labour, daily wage labour, eco-activities like forest collections and simple form of contract basic lobour. The major income of the Santal comes out from the agriculture; the sense of Agriculture is paddy farming and kitchen garden. The income also comes from the stone breaking from nearby the hill, and the forest collection. The daily wage labourer or earning is considered to be a derogatory economic pursuit by the Santal as they claim to be the descendants of the rich people in their periphery area. Their wages also vary from male to female, normally male are getting Rs. 250 per day, whereas female

Rs.170 per day.

They rather prefer to work for the members of their own community either or nominal payment or on labour exchange basis. Amongst them, there are no employee feelings. They treat each other as equally. As such no one for payment based on employer employee relationship. Some of the Santal people go to the forest and bring some dry wood, and sell in the market and getting money. The people at a time collect and load it on a bicycle. The cost of the full bicycle loaded firewood is varying from Rs.350-450. Some of the Santhal people sell the charnel of hog-palm (*Ambdaa*) in the Rairangpur market. The cost of per bucket of the charnel is Rs.55-70.

Table 1: Primary Occupations of the Santal

S. No.	Primary Occupation	Male		Female	
		Frequency	%	Frequency	%
1	Agriculture	126	45.98	102	40.63
2	Labour/Wage Earning	73	26.64	135	53.78
3	Lawyers	02	0.72	----	----
4	Govt. Service	07	2.55	02	0.79
5	Anganwadi Worker	---	-----	02	0.79
6	Company Job	46	16.78	----	------
7	Medicine Men	03	1.09	-----	------
8	Other	17	6.20	------	------
Total		274	100	251	100

The above table shows the distribution of subject of according to the primary occupation. Maximum (45.98%) of male subjects were found to be agriculture field followed by labour and daily wage earning (26.64%), company job (16.78%). Minimum (0.72%) of male were found in the case of Lawyers. Whereas in the case of female, the maximum (53.78%) were found as a labourer or daily wage earning, followed by agriculture (40.63%). In addition, very few percentages of females were found in Government services and Anganwadi (0.79%) respectively.

Table 2: Distribution of Family According to the Total Annual Income of the Subject.

S. No.	Annual Income (Rs.)	No.	%
1	Below Rs. 20000	06	4.59
2	Rs. 20000-50000	29	22.13
3	Rs.50001-80000	46	35.11
4	Above Rs.80000	50	38.17
Total		131	100.00

The above table shows that the distribution of family according to the total annual income of the subjects. Maximum (38.17%) of the families were having an annual income of Rs. 80000 and above followed by Rs.50000-80000 (35.11%). Whereas (4.59%) of the families were having an annual income of Rs. 20000-30000.

Table 3: Distribution of per day Wage of the Subject based on Occupation

S. No.	Name of the Work	Wages Per Day in Rs.
1	Men agricultural work (agricultural labour)	Rs.70
2	Women agricultural work (agricultural labour)	Rs.60
3	Men in construction work	Rs.100-120
4	Women in construction work	Rs.70-90

Table: 4 shows that the per day wage of the subject according to occupation. The male Santhal workers were earning only Rs.70 per day, whereas the female workers were earning Rs.60 per day. As per the male construction labourer was getting Rs.100-120, but the female only getting Rs. 70-90 per day.

Table 4: Distribution of Family According to Monthly Expenditure.

S. No.	Monthly expenditure (Rs.)	NO.	%
1	Less than 1000	45	34.35
2	Rs.1001-2000	56	42.74
3	Rs.2001-3000	19	14.50
4	Rs.3001+	11	8.39
Total		131	100.00

The above table shows that the distribution of family according to monthly expenditure. Maximum (31.29%) of families were having monthly expenses of Rs.1500-2000. Whereas, (8.39%) of the families were having monthly expenses of more than Rs.3000.

ii) To study the household economy influences their health condition among Santal of Bantali Rakhasahi Village

As we discussed that poverty and low income is the major cause of the poor health standard. Health expenditure of the household members of rural as well as tribal India is sensitive to changes in household income levels and the elasticity of health expenditure with respect to income is largest for high-income groups (Mathiyazhagan, 2003). People say health is wealth, and good wealth responsible for good health. Health status is the matter of economic power. More the capacity of persons to purchase the health and medical care services, the more likelihood of better health status to emerge. While the poorer section of the population suffers badly in the maintenance of this health and treatment of diseases because of poor financial status. Thus, world bank reported overall economic growth- particularly poverty- reducing growth and – education are central to good health (1993).

In many developing countries government are facing increasing pressure to improve the efficacy and financial viability of health service delivery system, particularly in the light of renewed commitment to improve the living condition of the poor (World Bank, 1993) [16]. Whereas, in the case of Odisha, the tribal people live in the poor socio-economic condition, and divergent cultural and behavioural practices. These tribal groups have limited access to health care due to the poor storage of financial assistant. The challenge is therefore, relatively greater in tribal dominated district. To improve the health status of the tribal people of Mayurbhanj district in particular and Odisha in general that state government has initiated a number of policy reforms. However, more needs to be known about the household role in financing health care.

There are some other socio-economic variables which mainly measured and mostly responsible for the health condition of the Santal people of the studied village. Pareek and Trivedi

(1964) measured the variables like, House typed and Family size and Family typed to study the health status of the tribe. These are as bellow:

House Type

The possession of a house and the nature of the house are important indicators of socio-economic status. This is also responsible for the good health of the people. The scores were for Hut: 28.34%, Katcha house: 23.67%, Mixed house: 32.43%, Pucca house: 15.56%.

Family Size

It refers to the members present in individual respondent's family. Generally, families consisting of one to five members are being regarded as small size families while large size families consist of more than five members. Small size family is generally happily distribution their food among the all members of the family equally to maintain the nutritional status in all. Whereas, large size family, which requires proper distribution of foods within all members, is very essential to maintain the proper nutritional status in all.

Evidence of the existence of social inequalities in health in England has been demonstrated for over 150 years. In the earliest of research, it is easy to see the casual links from low income, though poor housing and sanitation, inadequate diets and hazardous jobs, to poor health such as infectious diseases, injuries and accidents. However, the relationship between the health and income is more complex. For every incremental increase in income, there is an associate higher level of good health. Moreover, it is clear that there are complex chains of exposures and pathways between income and health across the life course. For instance, a major source of income in adulthood is employment, will be influenced by the income, wealth, and circumstance that will have been influenced by the income and wealth of the parents. This means the relationship between the money and health is inter-generational and bi-directional. For example; parents income may influence children's health and children's health influence their later earning capacity and hence income.

Choice for source of Health care according to the standard of household income

There are various types of health care facilities available for the treatment of illness in the area. The available health care's facilities have been divided into the following five categorize i.e.

1. **Public:** (includes- all the government run health care institution, PHC, CHC, ANM, and ASHA etc.)
2. **Private:** (includes- all the allopathic private hospital, clinic, etc.)
3. **Traditional Practitioner:** (includes- folk healer, herbalist, *Vaidyas, Gunia*, *Ojha* etc.)
4. **Chemist Shop:** (includes- treatment taken directly by approaching a chemist's shop without consulting any health care provider)
5. **Self-Medicated:** (includes- family member, relatives, friends, and self at the household level with home remedies.)
6. **Quack:** (non-institutional trained or expert)

Table 5: Preference of health care services according to the Annual income of household

Annual Household Income	Preferable Health Care Services											
	Public Sector		Private Sector		Traditional Practitioner		Chemist Shop		Self-Medicated		Quack	
	N	%	N	%	N	%	N	%	N	%	N	%
Below Rs. 20000	2	4.76	-	-	3	8.57	1	6.67	-	-	-	-
Rs. 20000-50000	9	21.43	3	10.34	11	31.43	5	33.33	-	-	1	20.00
Rs.50000-80000	16	38.10	5	17.24	13	37.14	6	40.00	3	60.00	3	60.00
Above Rs.80000	15	35.71	21	72.41	8	22.86	3	20.00	2	40.00	1	20.00
Total	42	32.06	29	22.13	35	26.71	15	11.45	5	3.81	5	3.81

The above table reflects that the traditional practitioners and the public health care sectors seem to play an important role in providing health care in the study area. The role of ASHA is also very important in this village. Whenever, the Santal people suffering from any kinds of ailment firstly they prefer to go ASHA only. Due to the poor economic condition, the people having less than 20000 per annum income were very eagerly prefer to traditional treatment and follow the all said things from the practitioners. When ailment is become major then only they wished to go either Primary Health centre (PHC) or govt. hospital. Those have more than Rs. 80000 they may prefer to treatment either private sectors or government sectors rather visit near quack or any chemist shop. Whereas, quack, chemist shop, self-medicated and traditional practitioner as well as government health sectors are playing a major role as compare to the private sectors among the people having annual income within Rs. 20000 above to less than Rs. 80000 for health cure purpose in this present research paper.

Types of Health Care Expenditure by Household

The health care expenditure includes both direct and indirect cost incurred to recover from the sickness episode during the reference period.

Direct cost includes

Doctor's fee, medicine cost, diagnosis test, pathological test, hospitalization and vehicle charges and the expense related to surgery if required.

Indirect cost includes

These expenses associated with the treatment, which relates on transport, food, staying arrangement, extra money given to get access to any person/ facilities at any level for getting better care. The expenses for who accompanying to patient, also expenses incurred for religio-magical aspects like; temple visit, God and Goddess worshiping, *Prasad, Agarvati*, sacrifice and others offering items and so on are carried out for the sole purpose of alleviating the suffering of the sick

person also part of indirect cost. In this phase, the loss of earning to the sick person is also included to indirect cost categories.

Generally, the tribal Santal people are suffered more acute illness than the chronic ailment. They thought all disease are caused for the wrath of the nature of affect by the evil spirit so they need not like to goes in 1st time to the doctors or hospital rather they prefer to consult traditional healer in 1st episode of the illness. While spent more on treatment of chronic illness as compared to acute illness.

Personal Hygiene and Sanitation

The bellow graph reflects that the distribution of the household according to the sanitation status of the Santal tribe of the Bantali Rakhasahi village. Around 37.41% of the household were having g the bathroom along with the latrine, whereas, 62.59% of the households without having any bathroom and latrine. Those have no bathroom and latrine facilities in their home, they generally prefer to go riverside or near pond for both bath and defecation purpose.

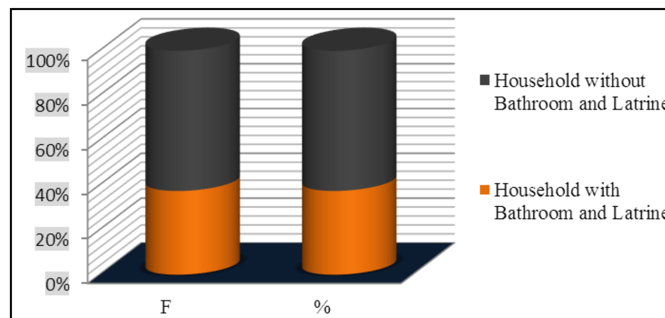

Fig 1: Distribution the household according to Personal Hygiene and Sanitation

Table 6: Alcohol addicted people both Male and Female

Sl. No	**Types of alcoholism**	**Male**		**Female**		**Total**	
		N	**%**	**N**	**%**	**N**	**%**
1	Smoking	51	36.67	12	3.82	63	9.17
2	Handia, Mahuli (country liquor)	139	37.27	136	43.31	265	38.57
3	Foreign Liquor	36	9.65	3	0.96	39	5.68
4	Tobacco	51	13.67	68	21.66	118	17.18
5	**No Smoking/ Alcohol**	**96**	**25.73**	**128**	**38.85**	**218**	**31.73**
	Total	373	100.00	314	100.00	687	100.00

The above table is reflecting the population who have addicted alcohol and not addicted. There are 31.73% people; with male 25.73% and female 38.85% of population were found having no addiction of any smoking or Alcohol. Whereas, 38.57% of the people found who addicts in country liquor (*Handia* and *Mahuli*). In this, regards female are in large numbers addicted than the male, i.e. 43.31% and 37.27% respectively. Out of the 9.17 percentage, only 3.82% female were having found in smoking and 36.67% found in the case of male members. The female percentile addicted in tobacco i.e. 21.66%, which is more than the male members i.e. 13.67%. This table also reveals that the how much people addicted and just think, how much money they have spent for smoking, country or foreign liquor and also tobacco. Which will ultimately leads their health condition weak.

CASE STUDY: 1

Name**: **Rama Hansdah

***Gender**: Male*

***Age**- 32 years*

***Marital Status**: Married*

***Wife Name**: Panamani Hansdah*

Rama Hansdah is daily wage labourer, working in different field like road construction, stone mines, canal repairing, draining, agricultural field, building and so on. Daily he earns around Rs. 250/. In a year hardly they may engage their work 6 to 8 months. And rest of the month they may either give time to their relatives or does not getting any work to do or enjoying their traditional festivals. He has for daughter and only a son. His educational qualification was stopped at the age of 14 in class nine, because of his shocking health condition. He was pretentious by the evil spirit. His brain was never working as like a normal man, happy to sit in a corner of a dark room often irritating the others fellow who wished to talk him. Everywhere (means the modern medical) he had checked up his health but there was no good result. Due to the poor economic condition, his health become decreasing. Finally with the help of the Ojha (the shaman) his health becomes the normal. Due to the early marriage of his and poor economic status, his wife's health is also not good. They cannot feed their children well and nutritious food. Therefore, they send to them at the primary school not for the learning purpose, but also for the sake of mid-day- meal and other accessories those provide the school.

CASE STUDY: 2

Name**: **Sunamani Soren

***Gender**: Female*

***Age**- 46 years*

***Marital Status**: widow*

***Village**- Bantali Rakhasahi*

Housing is the major factor, which is very much responsible for good and bad health. Most of the low-level of income people in our society were having poor standard of house, which have no window or ventilation, thatched roof, plastered floor by mud and cow dung with mud wall. Sunamani says this is true for her family. She lives a small single room with her two daughters and a grandchild along with pets (2 goats). She built this house long year ago. When something breaks, she says it takes years to get it fixed. Ovens do not work, there are holes and crack in the walls, due to poor economy status, she cannot construct latrine. Hence, along with Sunamani all the family members using the open field for defecating purpose and using the pond water and mud for washing their hand. They are not using chappal regularly while going for defecating. Therefore, in rainy season she suffers from

unwanted diseases, like diarrhea, vomiting, swelling in fee and so on. Waste materials and litters deposited on the floor. In addition, these waste materials create major role to born the mosquitoes and ultimately found malaria. Last year she suffered two times in malaria diseases and spent more than two thousand rupee for treatment. After treatment in allopathic for a long time, when she could not feel in good, then she finally decided to visit a local medicine men for proper cure. And she cured from there.

Conclusion

Analyzing above discussion, we come up with the conclusion that, People whose household income is more than Rs. 80000 a year have very different perceptions of what affects health than those whose household income is less than or within Rs. 20000 in a year. Another social fact that affects health is housing. 40% of the low-income people in our key informant say bad housing causes bad health. In Bantali Rakhasahi village the occupation of the household, maximum people are agricultural followed by wage labourer and private company job. Most of the household were having the BPL card. It is because of their poor income level, less education and unawareness of various fields. As we seen in earlier that households with less education and low level of income are spending less on health care expenditure and vice versa. Most of the time, the Santal people bound to sell or mortgage their household asset to bear the health expenditure. After launching the scheme of Rastriya Swasthya Bima Yajna (RSBY) card, during the illness period of people, when he showing this card to the Govt. health centre then the people will get the benefit. However, all Santal people were having RSBY card but they do not know its proper use or about its benefits. But, few of the people aware about this. Therefore, people should aware of it and getting its facilities. If we see the alcohol and the tobacco scenario of the village, then most of the people both male and female were addicted in country liquor which is called as Rice beer or *handia*. As per their views, Handia has rich cultural values, no rituals and festival will complete without *handia*. Therefore, they cannot give up handia. While male members of the villagers were habit of smoking. While talking about the personal sanitary system; 62.59% of the households were without having bathroom and latrine, because of the poor economy condition. Therefore, the Santal people use to go the open field for defecation purpose. Native people also claim that government also should take more initiative measures to solve the sanitation problem and creating awareness program among the people to the advantage of using latrine and prevent alcohol and tobacco. People of the 32.06% of the household go for public sectors (govt. hospital) for treatment but still people also prefer to go the traditional methods (26.71% of household) of treatment is close to allopathic treatment. Those who have well enough financial support, they only prefer to go private sectors for treatment, i.e. 22.13 % of household largely prefer to go private sectors and 11.45% of the household were wished to visit the chemist shop without any consult of physician. Very few percentage of the household were believe in self-treatment or being treatment by the quack i.e. 3.81%.

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