# Determinants of Household Healthcare Choice Behavior: A Study in Purulia District, West Bengal

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**ABSTRACT-** A well organised healthcare system is one of the pillars of a society's social and economic infrastructure. Efficient healthcare system is one of the important indicators of development. In times of global epidemics Covid-19 healthcare seeking behaviour has become an important issue. People adjust their treatment modalities based on the health system. Poor families in particular have very limited access to medical care; they usually rely on government medical facilities because they cannot afford private treatment. On the other hand, even in rural areas, access to medical care limited due to lack of additional healthcare facilities. Therefore in rural area's it is very important to diagnose the factors that influence the health seeking behaviour of the household. The Specific objectives of the study are to investigate health status of households across Purulia district using secondary data from NFHS- 4 (2015-2016) and to determine the factors that influencing health seeking behaviour of the sample households. We have visited randomly selected three villages of Kashipur block in Purulia district, West Bengal and surveyed two hundred households. To determine the factors that influencing household healthcare seeking behaviour we have fitted logit model. The explanatory variables monthly average family income, household head's education, number of members in a household above 60 years, number of members in a household below 6 years, having at least one member who consume medicines during the whole year, effect of Covid-19 on income, effect of Covid-19 on health, social category, village residence have positive significant impact on the probability of household members seeking treatment from both government and private places. We consider ST as our base and find that the general community has significant impact on the household members receiving treatment from both government and private places. From the result we find that the major source of income of the sample households has no significant impact on the healthcare seeking behaviour of sample households.

**KEYWORDS-** Health seeking behaviour, medical care, NFHS- 4, Kashipur block, Logit model.

# I. INTRODUCTION

A well organised healthcare system is one of the pillars of a society's social and economic infrastructure. According to World Health Organization health is consider as "state being, and not merely the absence of disease or infirmity". Efficient healthcare system is one of the important indicators of development. In times of global epidemics Covid-19 healthcare seeking behaviour has become an important issue. People adjust their treatment modalities based on the health system. Poor families in particular have very limited access to medical care; they usually rely on government medical facilities because they cannot afford private treatment. On the other hand, even in rural areas, access to medical care limited due to lack of additional healthcare facilities. Therefore, in rural area's it is very important to diagnose the factors that influence the health seeking behaviour of the household. The specific objective of the study is to investigate health status of households across Purulia district using secondary data from National Family Health Survey- 4 (2015-2016) and to determine the factors that influencing health seeking behaviour of the sample households. We briefly review the underlying theories explaining household health seeking behaviour related issues. A comparative study was done in nine Chinese provinces to compare their health choice behaviours respect to the evolution of price, income, distance, insurance, age and regional inequality. The survey was conducted over two periods from 1989-93 and 2004-2006 which were the preliminary phase of deregulation of Chinese health care sector and also final phase of cooperative insurance scheme. They did Mixed Multinomial Logit (MMNL) estimation for analysis and showed a clear price effect is present in both the periods, which also become weak and heterogeneous as price increases. They also observed a strong negative distance effect [4]. A study was done to describe how notions of context and individual heterogeneity influence the health seeking behaviours with the help multiple models in health research. They analysed the health outcomes, health related behaviour, health services performance through social and demographic factors [8]. A conceptual framework was formed for the purpose of improved the insurance feature of health care systems. The literature had anticipated to be used as a tool for descriptive analysis of the policies and functions of existed health care systems as well as for recognized new policies for the same. It painted the required for coordinated reforms instead of spotlight on particular organizational forms of health insurance [10]. A comparative study was conducted in Jamaica on quality

of complete physical, psychological, and social well

of health care outcome by the parameter estimates choice of health care facilities and investigated the effect on labour force participation rate in a simultaneous equation probit model [11]. The demand function of the health seeking behaviour is in Nested Multinomial Logit from which assumes that the decisions to seek health care between any two alternatives do not depend upon the characteristics of any available alternatives and also concluded from the result that price have low impact on demand for health care [12]. Households (Kerala, south India) with high health care needs are at higher risk of incurring large expenditures on health care, after controlling health care need and influential confounders, they also confirmed caste-related inequality through multivariate analysis [13]. To our knowledge no such work done on household healthcare seeking behaviour in the context of Purulia district.

## II. PROFILE OF THE STUDY AREA

In the first section of this section we briefly study the demographic features, economic activities, healthcare

facilities of the Purulia district, West Bengal. In the second section we briefly review the demographic features and health care facilities of the selected sample villages.

#### A. Profile of the Purulia District

Purulia is one of districts of West Bengal in India. The Purulia district covers total area of 6,259 sq km out of them 147.53 sq km is urban and 6111.47 sq km is rural. As per 2011 census purulia district made up of 20 blocks, 28 towns and 210 villages are located within in this district. Block can be classified as sub-districts. As on the last 2011 census the names of the blocks in purulia districts are i) Jaipur ii) Purulia II iii) Para iv) Raghunathpur II v) Raghunathpur I Vi) Neturia vii) Santuri viii) Kashipur ix) Hura x) Purulia I xi) Puncha xii) Arsha xiii) Jhalda I xiv) Jhalda II xv) Bagmundi xvi) Balarampur xvii) Barabazar xviii) Manbazar I xix) Manbazar II xx) Bundwan.



Figure 1: Blocks of Purulia district

### **B.** Demographic Status of Purulia District

According to census 2011 total population in purulia district is 2,930,115, out of them 1,496,996 are male and

1,433,119 are female. Average literacy rate and gender wise literacy rate of Purulia district increases over the time from 2001 to 2011.

Description	2001	2011
Total population	25,36,516	29,30,115
Male	12,98,078	14,96,996
Female	12,38,438	14,33,119
Population growth	14.02%	15.52%
proportion to West Bengal population	3.16%	3.21%
Sex ratio(per 1000)	957	954
Average Literacy	55.57	64.48
Male Literacy	73.72	77.86
Female Literacy	36.5	50.52

(Source: Census 2001& 2011, Govt of India)

According to census 2011 average literacy rate of Purulia district is 64.48, early it was 55.57 in 2001. If things are looked out at the basis gender then male and female literacy were 77.86 and 50.52 respectively in 2011 census. For 2001 census, those figures were stood at 73.72 and 36.50 in Purulia District. As per the 2011 census data sex ratio in Purulia district stand 957 which were higher than the national average sex ratio 940 in India. According to census 2011, in purulia district 0.05%

of the total population live on footpath or without any roof cover.

#### C. Healthcare Facilities of Purulia District

As per the information from official website of Purulia district birth rate and death rate per 1000 population are 21.32 and 8.4 respectively. Infant mortality rate per 1000 life birth is 38.34 and maternal mortality Rate is 176.38. At present purulia District possesses government regulated seven medical institutions. Descriptions of these medical institutions are given in the following table 2.

Government Medical Institution	Location	Controlling Authority	Beds
1. Deben Mahato Hospital (Dist. Hospital)	Purulia (M)	SGH	506
2. Purulia Jail Hospital	Purulia(M)	SGJ	9
3. Purulia Police Hospital	Purulia(M)	SGP	10
4. Purulia Mental Hospital	Purulia(M)	SGH	190
5. Raghunathpur Subdivision. Hospital	Raghunathpur	SGH	68
6. Santaldih Thermal Hospital	Santaldih	SEB	10
7. South Eastern Rly. Hospital, Adra	Adra	RLY	198

(Source: official website, purulia.nic.in)

In addition to those seven government medical institution there are also five rural hospitals, fifteen block primary health centre, 53 primary health centres and 485 functioning Sub-Centres. At present 51 primary health centres are active, 2 primary health centres are not functional.

Table 3: Rural and	primary	health centres	of Purulia district
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Health centres	Number
Rural hospital	5
Block primary health centre	15
Primary health centre	43
Total	73



Purulia district has not only government medical institution and health centre but also it possesses five private regulated medical institutions and nine NGO regulated institution.

### D. Profile of the Primary Survey Area

At present there are total 20 blocks in Purulia district, out of which we have collected our primary data from Kashipur block. We consider Kashipur block as our primary survey area because most of the area in kashipur block belongs to rural area and different castes can be seen living here. From this Kashipur block we randomly selected three villages as our primary survey areas namely i) Bar Daikiari ii) Talajuri iii) Majuramura. As per the information from 2011 census there were 209 villages under Kashipur block. We have randomly selected the above mentioned villages as our survey area. In the following we have discussed the demographical and occupational features of those three villages.

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Descriptions	Bar Daikiari		Talajuri		Majuramura				
2.000.10.000	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total household	232	-	-	542	-	-	125	-	-
Total population	1,085	592	493	2,305	1,173	1,132	618	308	310
Child (0-6)	111	66	45	296	159	137	88	47	41
SC population	821	444	377	544	262	282	157	72	85
ST population	0	0	0	268	139	129	448	232	216
Literacy rate	76.49%	88.78%	62.05%	74.22%	85.31%	62.91%	50.19%	67.82%	33.09%

Table 4: Demographic distribution of the sample villages

(Source: Census 2011, Govt of India)

Bar Daikiari village is located under Kashipur block. 232 households residing in this village with 1085 total population as per the information from 2011 census. According to 2011 census literacy rate of Bar Daikiari was 76.49% which was higher than the literacy rate of West Bengal 76.26 per cent. As per the census data of 2011 most of the people in Bar Daikiari were belonged to SC community, they captured 75.67 per cent of the total population and don't have any schedule tribe households. According to 2011 census 363 people were engaged in work activities which were 36.30 per cent of the total population, out of them 35.25 per cent were associated with main work while the other 64.74per cent were engaged in marginal work. The second village that we choose for our primary survey is Talajuri. Talajuri village is situated in Kashipur block under Purulia district. 542 households in this village with 2305 total population as per the information from 2011 census. According to 2011 census literacy rate of Talajuri was 74.22 per cent which was lower than the literacy rate of West Bengal 76.26 per cent. As per the census data of 2011 in Talajuri village schedule caste and schedule tribe population were 23.60 per cent and 11.63 per cent respectively. According to 2011 census 754 people were engaged in work activities which were 32.31per cent of the total population, out of them 64.32 per cent were associated with main work while the other 35.68per cent were engaged in marginal work. The third village that we choose for our survey area is Majuramura which is located in Kashipur block under Purulia district. According to 2011 census literacy rate of Majuramura was 50.19 per cent which was lower than the literacy rate of West Bengal 76.26per cent. As per the 2011 census data most of people in Majuramura village are belong to schedule tribe and schedule cast community. As per the census data of 2011 in Majuramura village schedule caste and schedule tribe population were 72.49 per cent and 25.40 per cent respectively. According to 2011 census 218 people were engaged in work activities which were 35.27 per cent of the total population, out of them 30.28 per cent were associated with main work while the other 69.72 per cent were engaged in marginal work.

#### **III. DATA AND VARIABLE DESCRIPTION**

Primary data: We have surveyed two hundred households from randomly selected three villages of Kashipur block in Purulia district. The primary was conducted during Jan2021- March 2021.

Secondary data: We also used secondary data from National Family Health Survey-4 (2015-2016) to highlight health seeking behaviour of households across Purulia district.

Following table 5 gives the descriptions of those variables which are used in econometric analysis.

Table 5: Variable Description

	VARIABLE DESCRIPTION
HH	Household
CATEGORY	Social category of the sample households
HHSIZE	Household size
HHAGE	Age of the household head
HGEND	Gender of the household head if MALE=1, other wise 0
HEDU	Year of schooling of the household head
AMI	Monthly average family income (Rupees) of the household
MFOODEXP	Monthly average food expenditure (Rupees) of the household
MEDUEXP	Monthly average education expenditure (Rupees) household
MHEXP	Monthly average health expenditure (Rupees) of the household
CHRONIC	Number of members in a household who consumes medicine during the last year
HH6	Number of children in household less than 6 years
HH60	Number of members in family above 60 years
	From where households generally go for treatment, if both Govt and private places =1, only govt
PROVIDER	places=0
C19INCOME	Effect of Covid-19 on income, if HIGH=1, otherwise 0
C19HEALTH	Effect of Covid-19 on Health, if HIGH=1, otherwise 0

## IV. HEALTH STATUS OF THE HOUSEHOLDS IN PURULIA DISTRICT

In this section we will represent the health status of the households across Purulia district. The present section is based on secondary data from National Family Health Survey-4 (2015-2016). According to the NFHS data (2015-16) near about 70 per cent of the household members in Purulia district sought medical help from government medical hospitals. Only 30 per cent of the household members in Purulia district go to private hospitals for their medical treatment. Most of the places in Purulia district are in rural areas, so there are not many facilities of private hospitals in those places. Most of the household members in Purulia district rely on government hospitals for lack of access to private hospitals. As per the information from NFHS data (2015-16) we represent the fact that how household member access to health centres varies according to their residence, social category, household's head education and sex, structure of the family in Purulia district.

	Variable	Government Hospital	Private Hospital	
Head's Sex	Male	70	30	
	Female	73.4	26.4	
Residence	Rural	65.4	34.6	
	Urban	71.2	28.8	
Wealth Index	Poorest	75.5	24.5	
	Poorer	70.6	29.4	
	Middle	57.5	42.5	
	Richer	52.4	47.6	
	Richest	31.6	68.4	
Social Category	SC	82.6	17.4	
0.	ST	66	34	
	OBC	61.4	38.6	
	General	69.2	30.8	
Head's Education	No education, preschool	76.9	23.1	
	Primary	75.5	24.5	
	Secondary	62.4	37.6	
	Higher	52.3	47.7	

Table 6: Types of Hospitals chosen by Households in Purulia District

From the above table 6, we found that 73.4 per cent of the household members visit government hospital and 26.6 per cent of the household members choose private hospitals for seeking medical help when they are guided by female head. On the other hand, in a male headed household 70 per cent of the household members prefers government hospitals and 26.6 per cent household members choose private hospital for their treatment. As per the information from NFHS data (2015-16) household member access to health a centre varies according to their residence in Purulia district. In urban areas, more than 65 per cent of household members visit government hospitals and 34.6 per cent to private hospitals for seeking medical help. The percentage of household members taking medical treatment from government hospital is quite high in rural areas compare to urban areas i.e. 71.2 per cent. On the other hand the percentage of household members receiving treatment in private hospitals is much lower in rural areas than in urban areas i.e. 28.8 per cent. On the basis of wealth index the households are divided into five categories namely, i) poorest ii) poorer iii) middle iv) richer v) richest. From the above table 6 it is evident that as we move from poorest to richest in terms of wealth index, find that the tendency to seek medical care from government hospitals tends to decline in Purulia district. On the other hand, the tendency to seek treatment from private hospital increases as we move form poorest to richest. So, from the above data we can easily interpret that the rich households prefer to go private hospitals for better health facilities instead of relying too much on government hospitals. On the opposite side the poor households rely more on government hospitals as they cannot afford private hospitals. The above table shows that more than 80 per cent of the household members in the SC category are treated in government hospitals. Less than 18 per cent of household members in the SC community receive treatment from private hospitals. There is a similar attitude between General, ST, and OBC community about

what kind of hospital to seek treatment from. According to the above table we can say that only SC community behaves differently among these four social categories. On the basis of year of schooling we divide the household's head education into four categories namely: i) No education, preschool ii) Primary iii) Secondary & iv) Higher. The above table shows that the when educational qualification of the household head is low then the tendency to seek treatment from government hospital is very high i.e. 76.9 per cent. As per the above information, we can see that as the educational qualification of the household's head increases tendency to seek medical help form government hospital rapidly falls. On the other hand, the percentage of people seeking treatment from private hospital has increased as the educational qualifications of the household's head increases. So there is a direct relation between the educational qualifications of the household's head and the tendency to seek treatment from private hospital. Conversely there is an inverse relationship between the between the educational qualifications of the household's head and the tendency to seek treatment from government hospital.

## V. SOCIO ECONOMIC AND HEALTHCARE SEEKING CHARACTERISTICS OF SAMPLE HOUSEHOLDS

In this section we will explore socio economic and healthcare seeking characteristics of sample households with the help of descriptive statistics and some pictorial exposition. We got all types of social categories in the sample.OBC category has the maximum share 35.5 per cent and ST category has minimum share 9.5 per cent. 29.5 per cent of sample households are lies above the poverty line and 37.5 per cent households are lies below the poverty line. Remaining 33 per cent households are comes under Antyodaya Anna Yojana scheme.

	Variable				
1	Social category	GENERAL	29		
		OBC	35.5		
		SC	26		
		ST	9.5		
2	Poverty level	APL	29.5		
		BPL	37.5		
		AYY	33		
3	Major source of	AGRICULTURE	15.5		
	income	GOVT SERVICE/PERSION HOLDER	13.5		
		NON FARM LABOUR	71		
4	Assets	TV	54		
		RADIO	4		

Table 7: Socio Economic Characteristics of Sample Households

		CYCLE	84
		MOTOR CYCLE	34
		MOBILE	92
5	House	KACHA	42
		PAKKA	37.5
		MIXED	20.5
6	6 Effect of Covid-19 on income —	HIGH	46.5
		MEDIUM	38
		LOW	15.5
6	Effect of Covid-19 on	HIGH	13
	health	MEDIUM	50.5
		LOW	36.5

(Source: Calculated based on field survey)

We divide the major source of income into three broad categories namely i) Agriculture ii) Govt service/Pension holder iii) Non farm labour. In case we got more than one earning members in a family, we consider maximum earner's occupation as major source of income. 71 per cent of the sample household's major source of income comes from non farm labour. During the primary survey we asked the respondent that how many assets they have among radio, television, cycle, motor, cycle and mobile. According their responds we found that mobile and cycle is the most common asset among 92 per cent and 84 per cent of the sample households. 54 per cent households have TV and 34 per cent households have motor cycle. Of the sample households, 42 per cent live in a Kacha house,

37.5 per cent live in Pakka house and the remaining 20.5 per cent live in Semi Pakka house. 46.50 per cent of the households reported that Covid-19 caused them a great loss of income. 38 per cent of the households reported that their income moderately affected and rest 15.50 per cent reported low affected on income due Covid-19. Covid-19 has been found to have a highly effect on the health of 13 per cent of sample households. 50 per cent of the households said that the Covid-19 has a moderate affect on their health and the remaining 36.50 per cent of the households reported mild affect.

Now we represent the descriptive statistics of the sample in the following table and try to analyze the basic characteristics of the relevant variables.

	MEAN	MODE	S.D	RANGE
HEDU	7.5	10	4.65	20
HH60	0.905	0	1.46	6
HH6	0.37	0	0.65	3
HHSIZE	4.1	4	1.71	11
CHRONIC	0.775	0	1.11	4
FOODEXP	3175	3000	1638.96	9000
EDUEXP	776.25	0	1154.05	7000
HEALTHEXP	594.75	200	1175.64	9950
AMI	4838.542	3200	3311.41	25783.33

Table 8: Descriptive Statistic of Sample Households

(Source: Calculated based on field survey)

The average year of schooling of the sample household's head is 7.5 years which shows that the household's heads are not well educated. The average number of children in a sample household under six years is 0.37 and the standard deviation is 0.65. Mode of number of children in a family is 0 because most of the households do not have any children less than 6 years of age. The average number of children in a sample household above 60 years is 0.905 and the standard deviation is 1.46. Average household size of our sample households is 4.1.Mean of household having at least one member who medicine during the whole year is 0.775.Mean of the monthly food

expenditure is ₹3175. Difference between highest and lowest food expenditure of the sample households is ₹9000. Standard deviation is near about 1668 which indicate the inequality of the sample households in terms of monthly food expenditure. Average monthly education expenditure of our sample households is near about ₹776. Mode of Average monthly education expenditure occurs 0 because the cost of education can be seen in those families where at least one member of the family is still studying. Mean of the monthly average health expenditure is ₹594 with standard deviation 1175.64. Difference between the highest and lowest monthly health expenditure of the sample households is  $\gtrless$ 9950. Average monthly family income of the sample household is  $\gtrless$ 4838 and mode is 3200. Standard deviation in terms of monthly family income is high which indicate high inequality of family income.

As per the survey data we divide the mode of treatment into two broad categories namely i) Both government and private places and ii) only government hospital. We represent this mode of treatment by social category in the following figure.

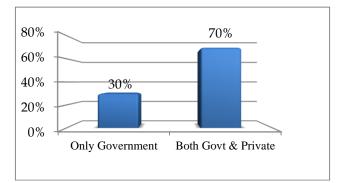


Figure 2: Types of Healthcare Facility Chosen by Sample Household

(Source: Calculated based on field survey)

From the above table we found that 70% of the sample households are seeking medical help from both Govt and private places, whereas only 30% of the sample households receiving treatment from only government hospital.

## VI. METHODOLOGY AND ECONOMETRICS ANALYSIS

In the previous section we have examined some general aspects of our sample households. Now, we have

Table 9: Base of the Category Dummy Variables

Regressor	Base
CATEGORY	UR
VILLAGE	BAR DAIKIARI
MAJOR SOURCE OF INCOME	AGRICULTURE

After the logit transformation,

$$ln\left(\frac{p}{1-p}\right) = x_i'\beta$$

Where,  $\frac{P}{1-P} = e^{x_i^{\prime}\beta}$ , is known as the 'odds ratio'. It indicates how often the event happens, relative to how often it does not, under a certain circumstance.

## VII. RESULTS & ANALYSIS

To examine the factors that influencing household member's health seeking behaviour, we fit the logistic model as mentioned above. The results are represents in the below table 10.

intended to do some deeper analysis on the target group. In specific we are interested into the factors that influencing the household members seeking medical treatment from both government and private places. To do so we have fitted logistic model. The logistic regression model is applied to examine the factors that influencing the household members seeking medical treatment from both government and private places. The dependent variable, Provider in the logistic regression is a dichotomous variable defined as 1 when the household members seeking medical treatment from both government and private places and 0 if the household members seeking medical help from only Government places.

Based on the logistic distribution function, the probability of the household members seeking medical treatment from both government and private places is:

$$p = Pr(Provider = 1) = \frac{e^{x_i^{\prime}\beta}}{1 + e^{x_i^{\prime}\beta}}$$

Where,  $x_i$  is a set of regressors,  $\beta$  a set of parameters to be estimated. In our analysis

 $\begin{aligned} x_i &= \{\text{HGEND}, \text{HEDU}, \text{HH60}, \text{HH6}, \text{CHRONIC}, \text{LOGAMI}, \\ \text{C19INCOME}, \text{C19HEALTH}, \text{CATEGORY}, \\ \text{VILLAGE}, \text{MAJOR SOURCE OF INCOME} \} \end{aligned}$ 

Provider(G+P=1,G=0)	Odds Ratio	Std. Err.	Z	P>z
HSEX	0.5323531	0.4654918	-0.72	0.471
HEDU	1.15555	0.0685225	2.44	0.015
HH60	1.536334	0.3959715	1.67	0.096
HH6	3.061861	1.519153	2.26	0.024
CHRONIC(Yes=1,No=0)	3.802872	1.806592	2.81	0.005
LOGAMI	3.079222	1.538157	2.25	0.024
C19INCOME (High=1,Low=0)	0.281118	0.1476508	-2.42	0.016
C19HEALTH (High=1,Low=0)	4.489506	2.467443	2.73	0.006
SC	1.912577	1.819604	0.68	0.496
OBC	2.640266	2.289573	1.12	0.263
GENERAL	10.33023	11.14734	2.16	0.03
SERVICEORPENSIONHOLDER	0.37988	0.3778521	-0.97	0.331
NONFARMLABOUR	0.960407	0.5824811	-0.07	0.947
BARDAIKIARI	0.0342636	0.0265678	-4.35	0
MAJURAMURA	0.203172	0.1915312	-1.69	0.091
CONS	0.0001123	0.0004661	-2.19	0.028
Logistic regression				
Number of obs $= 200$				
LR $chi2(15) = 98.40$				
Prob > chi2 = 0.0000				
Pseudo R2 = 0.4027				

 Table 10: Factors influencing health seeking behaviour of the household

(Source: Calculated based on field survey)

The LR chi2 of 98.40 with a p-value of 0.0000 implies that our model as a whole fits significantly. The regressors year of schooling of the household head, number of member in a household above 60 years, number of member in a household below 6 years, at least one family member who consume medicine during the whole year, average monthly family income of the household, effect of Covid-19 on income and effect of Covid-19 on health have positive significant impact on the probability of household members seeking medical treatment from both government and private places. A household with high effect of Covid-19 on income has the lower probability to seeking medical help form both government and private places in compare to others. On the other hand household with high effect of Covid-19 on health has the higher probability to seeking medical help form both government and private places in compare to others. The ST category is considered as the base. The general category has positive significant impact on the probability of household members seeking medical treatment from both government and private places. The households who are belong from general category having higher probability to seeking medical help from both government and private places. We consider Bar-Daikiari village as our base and find that Talajuri and Majuramura village have positive significant impact on the probability of household members seeking medical treatment from both government and private places. The Agriculture major source of income considered as our base and we find that the major source of income have no significant impact the probability of household members seeking

medical treatment from both government and private places.

#### VIII. CONCLUSION

The present study is an attempt to investigate the healthcare seeking behaviour of the households in the context of Kashipur block in Purulia district, West Bengal. The Specific objectives of our study are to investigate health status of households across Purulia district using secondary data from National Family Health Survey- 4 (2015-2016) and to determine the factors that influencing health seeking behaviour of the sample households. We have visited randomly selected three villages of Kashipur block in Purulia district, West Bengal and surveyed two hundred households. To determine the factors that influencing household healthcare seeking behaviour we have fitted logit model. The explanatory variables monthly average family income, household head's education, number of members in a household above 60 years, number of members in a household below 6 years, having at least one member who consume medicines during the whole year, social category, village residence have positive significant impact on the probability of household members seeking treatment from both government and private places. We consider general category as our base and find that the SC community has significant impact on the household members receiving treatment from both government and private places. From the result we find that the major source of income of the sample households has no

significant impact on the healthcare seeking behaviour of sample households.

#### **IX. REFERENCE**

- Ahmed, S. M., Adams, A. M., Chowdhury, M., & Bhuiya, A. (2000). Gender, socioeconomic development and health-seeking behaviour in Bangladesh. Social science & medicine, 51(3), 361-371.
- [2] Ahmed, S. M., Tomson, G., Petzold, M., & Kabir, Z. N. (2005). Socioeconomic status overrides age and gender in determining health-seeking behaviour in rural Bangladesh. Bulletin of the world health organization, 83, 109-117.
- [3] Akande, T. M., & Owayemi, J. (2009). Health-seeking behaviour in Anyigba, north-central Nigeria. Res J Med Sci, 3, 47-51.
- [4] Audibert, M., He, Y., & Mathonnat, J. (2013). Multinomial and Mixed Logit Modeling in the Presence of Heterogeneity: A Two-Period Comparison of Healthcare Provider Choice in Rural China.
- [5] Begashaw, B., & Tesfaye, T. (2016). Healthcare utilization among urban and rural households in Esera District: Comparative cross-sectional study. American Journal of Public Health Research, 4(2), 56-61.
- [6] Bhattacharya, S. (2014). Health seeking behaviour and efficiency status of providers in the dooars of Jalpaiguri district (Doctoral dissertation, University of North Bengal).
- [7] Chenge, M. F., Van der Vennet, J., Luboya, N. O., Vanlerberghe, V., Mapatano, M. A., & Criel, B. (2014). Health-seeking behaviour in the city of Lubumbashi, Democratic Republic of the Congo: results from a crosssectional household survey. BMC health services research, 14(1), 1-12.
- [8] Duncan, C., Jones, K., & Moon, G. (1998). Context, composition and heterogeneity: using multilevel models in health research. Social science & medicine, 46(1), 97-117.
- [9] Grundy, J., & Annear, P. (2010). Health-seeking behaviour studies: a literature review of study design and methods with a focus on Cambodia. Health policy and health finance knowledge hub working paper series no, 7.
- [10] Kutzin, J. (2001). A descriptive framework for countrylevel analysis of health care financing arrangements. Health policy, 56(3), 171-204.
- [11] Lavy, V., Palumbo, M., & Stern, S. N. (1995). Health care in Jamaica: Quality, outcomes, and labor supply. The World Bank.
- [12] Manski, C. F., & McFadden, D. (Eds.). (1981). Structural analysis of discrete data with econometric applications (pp. 2-50). Cambridge, MA: MIT press.
- [13] Mukherjee, S., Haddad, S., & Narayana, D. (2011). Social class related inequalities in household health expenditure and economic burden: evidence from Kerala, south India. International Journal for Equity in Health, 10(1), 1-13.
- [14] Ngugi, R. (1999). Health seeking behaviour in the reform process for rural households: The case of Mwea division, Kirinyaga district, Kenya.
- [15] Pokhrel, S., & Sauerborn, R. (2004). Household decisionmaking on child health care in developing countries: the case of Nepal. Health policy and planning, 19(4), 218-233.
- [16] Shariff, A., & Singh, G. (2002). Determinants of maternal health care utilisation in India: Evidence from a recent household survey (No. 85). New Dehli: National Council of Applied Economic Research.

[17] Wang, Q., Brenner, S., Leppert, G., Banda, T. H., Kalmus, O., & De Allegri, M. (2015). Health seeking behaviour and the related household out-of-pocket expenditure for chronic non-communicable diseases in rural Malawi. Health policy and planning, 30(2), 242-252.