Socio - Economic and the Health Status of Rural Households in Kerala: A Case Study of Malappuram District

Krishnan Kutty. V

Assistant Professor of Economics, Government College Kodanchery – Kozhikode – Kerala – India

ABSTRACT

The broad approaches to health establish indicators such as mental and social well-being, quality of life, satisfaction with one's lot in life, money, employment and working conditions, education, and other things that are known to have an impact on health. Each level of the social and economic hierarchy sees an improvement in health. Monthly family income is an important economic variable that has a direct impact on household accessibility, affordability, and utilization of healthcare facilities and services for health and illness. Education is an important indicator to determine the utilization of healthcare facilities and services for better health conditions. The family's education has determined which types of healthcare facilities are used for better health. The respondents' occupation is an important variable that influences the accessibility, affordability, and utilizations of healthcare facilities for services. The data regarding the distribution based on age of households' size is an important determinant of the utilization of healthcare facilities and services, which shows that 46 percent of Hindu, 47 percent Muslim, and 44 percent Christian households belong to the age group of 18 to 55. The awareness of healthcare through the media shows that 80 percent of the Hindu, 88 percent of the Muslim, and 85 percent of the Christian households were aware of healthcare through the media. Diseases are classified into acute and chronic illnesses, showing that 40 families of Hindus, 46 of Muslims, and 26 of Christians were affected by acute and chronic diseases, respectively. There is no association between the disease's status among the Hindu, Muslim, and Christian households in Malappuram district. That is, there is no association between the absences from work due to illness among Hindu, Muslim, and Christian households within the district of Malappuram. There is an association between the community and the average loss of wages due to illness. There is a significant difference in the mean treatment expenditure among households.

Keyword: Health, Health Status, Utilization, Households

INTRODUCTION

The broad approaches to health establish indicators such as mental and social well-being, quality of life, satisfaction with one's lot in life, money, employment and working conditions, education, and other things that are known to have an impact on health. Up until the top of the social and economic ladder, health condition improves. A country's health condition is influenced by a number of variables, including its income level, level of education, occupation, access to clean water, how waste water is disposed of, susceptibility to disease, and others. Therefore, on the one hand, there is the exposure of family income status, educational attainment, occupation, and age-wise distribution of household size; on the other, there is the status of diseases, hospitalization, days spent in the hospital, and time missed from work due to illness, as well as the average amount lost in wages as a result of illness and the mean expenditure for treatment. Kunhikannan and Aravindan (2000) examined the household expenditure patterns and changes in morbidity in Kerala between 1987 and 1997 using a two-week recall. This study primarily examines the relationship between Kerala's socioeconomic position and health. Kerala states have attained a high health indicator. Because of the economy's sluggishness, there is a negative correlation between the mortality rate and socioeconomic status as well as a high morbidity rate. The fundamental cause of diseases is societal poverty. In 1996, 82% of people used allopathic medicine, 11% used ayurvedic medicine, and 7% used homoeopathy; in 1987, those numbers were 72%, 10%, 6%, and 12%, respectively.The key element in achieving a higher level of health status in Kerala is the healthcare system. (Nabae 2003; Panikar and Soman 1984), Life expectancy at birth, infant mortality rate, fertility rate, crude birth rate, and crude

death rate are health status indicators. These indicators of health care are influenced by a variety of factors, including per capita income, nutrition levels, housing conditions, sanitation facilities, safe drinking water, social infrastructure, government-run healthcare and medical services, as well as geographic climate, employment status, and incidence of certain diseases.(Wani 2013)The study, "Health status of the rural people: A case study with special reference to Mannarkkad Municipality," was conducted by Ms. Fathimath Maha and Ms. Nabilah Haniph in 2017. The ability to adopt procedures while someone is going through a physical, emotional, or social transition is healthcare. Compared to other locations, rural residents deal with more issues. Hospitals, doctors, and other health-related personnel are few in rural areas. More chronic diseases affect rural populations than metropolitan ones. According to this study, the health status indicators, such as the birth rate, infant mortality rate, and maternal mortality rate, are nearly identical to those in the State of Kerala. Every year, traditional medical practices are being reduced. Ibrahim Cholakkal and Radhakrishnan (2014) look at Kerala's education system and health status, as both play a crucial role in the development of a country. An area's health state is influenced by its socioeconomic, educational, environmental, biological, and political conditions. Health and education are positively correlated with one another.

Age of the population and the health index are negatively correlated. The household's income and the health index are inversely correlated. Health consciousness is increasing among people. Health issues are prevalent among those with lower incomes. The research area's sex ratio is 1475. Education levels and gender ratios are positively correlated. Urban working women's health in Kerala: Baby (2004) claims that working women in Kerala have better health than in other Indian states. In both rural and urban areas of Kerala, women have a higher morbidity rate than men. Kerala has a worse nutritional status for women than the rest of the country, and 42% of working, married women their report having one or more issues with their reproductive systems. The majority of working women experience harassment, whether it be verbal or physical, but there are few reports. This study also identifies a negative relationship between monthly income and health, as well as an association between age and health. In Bangladesh, the Unani and Ayurveda medical systems are practiced, and patients can access them at both public and commercial hospitals, according to Mohamed Mustofa Nabi et al. Several factors have an impact on Bangladesh's health status. According to the study, the majority (18.8%) of respondents were between the ages of 26 and 30. The respondents make up 57.5% women. 91.7% of respondents were in favor of Islam, and 7.1% were Hindu. 43.8% of the respondents (or 33.3%) have graduated from high school or above. Laborers make up the majority (43.8%) of the respondent's occupations, while cultivators make up 6.3%. Unani/Ayurvedic medication is used by 55.4% of respondents.The family's monthly income is a significant economic factor that has an immediate impact on the availability, affordability, and use of healthcare facilities and services for both health and disease. In a similar vein, education, occupation, and age grouping are crucial indicators for predicting the use of healthcare facilities and services for improved health. Acute and chronic illnesses separate diseases into two categories. In the Malappuram district, there is no correlation between disease prevalence and household affiliation with Hindu, Muslim, or Christian. An major factor in determining the health status of rural households is hospitalization among those living in the district. Hindu, Muslim, and Christian households in the Malappuram district do not share any similarities in their rates of sick leave from work.

Objectives
To assess the social and economic situation of rural householders in the district of Malappuram.
To examine the average expenditure of the Malappuram district's homeowners was examined to determine the health condition.

Hypothesis
The average cost of medical care across families in the Malappuram district does not correlate.
The number of households in the Malappuram district that miss employment because of illness is unrelated.

Methodology
For the social, economic and health status of rural householders in Malappuram district, primary data were collected from the district of Malappuram with 60 householders from the communities of Hindu, Muslim and the Christian. A well-structured questionnaire was used for conducting the study. To analyze the rural householder's status, average, Chi-square and Analysis of variance (ANOVA) were used.

RESULTS AND DISCUSSION

The general approaches to health establishing an indicators like mental and social well-being, quality of life, life satisfaction, income, employment and working condition, education and other factors known to influence the health. The health status of rural households on the basis of the family income status, educational status, occupational status, households' size and age wise distribution of household's size on one side and the exposure of health awareness,

diseases status, hospitalization, number of days hospitalized, absence of work due to illness, average wages loss due to illness, mean expenditure for treatment were examined below.

Table 1: Distribution of the Monthly Income of the Family

Households	Category			
	Monthly income	Hindu	Muslim	Christian
Malappuram	<5000	2	1	2
	5000 to 10000	14	5	13
	10000 to 15000	24	29	28
	15000 to 20000	14	16	10
	➢ 20000	6	9	7

Source: Primary Data.

Monthly income of the family is an important economic variable which have a direct influence of the accessibility, affordability and utilization of healthcare facilities and services for health and illness among the households shown in table 1, which shows that the 40 percent, 48 percent and 47 percent of the Hindu, Muslim and the Christian households were under the income group of Rs. 10000-15000. The greater than Rs. 20000 were only in the 10 percent,15 percent 12 percent respectively.

Table 2: Educational Status of the Respondents

Households	Category			
	Level of Education	Hindu	Muslim	Christian
Malappuram	Illiterate	3	1	2
	Primary	17	11	16
	Secondary	18	22	18
	Graduate & Post graduate	12	15	14
	Others	10	11	10

Source: Primary Data

Education is an important indicator to determine the utilization of healthcare facilities and services for better health condition. Education of the family had decided which types of healthcare facilities are used for better health were shown in table 2. About 18 numbers in Hindu, 22 in Muslim and 18 in Christian households were in Secondary level of education. The proportion of the illiteracy were 5 percent, 2 percent and 3 percent. The proportion of the primary level of education among the householders were 28 percent, 18 percent and 27 percent respectively.

Table 3: Occupational Status of the Respondent

Households	Category			
	Occupation	Hindu	Muslim	Christian
Malappuram	Casual Workers	33	15	30
	Agriculture	4	13	9
	Govt/Aided	5	7	6
	Driver	7	6	3
	Private Service	9	7	8
	Business	1	5	1
	Gulf/Foreign	1	7	3

Source: Primary Data.

Occupation of the respondents is an important variable which determines the accessibility, affordability and the utilization of the healthcare facilities for the services. Hence, the data related to the occupational status of the

respondents were collected and presented in the table 3, which shows that 55 percent of the Hindu, 25 percent of the Muslim and 50 percent of the Christian households were in casual workers, 2 percent of Hindu, 12 percent of the Muslim and 5 percent of the Christian households in gulf/foreign, 8 percent of Hindu,12 percent of Muslim and 10 percent of the Christian households were in govt/aided job. Only one family belongs to business in Hindu, 5 were in Muslim and one in Christian households.

Table 4: Age Wise Distributions of the Households

Households	Category			
	Age Group	Hindu	Muslim	Christian
Malappuram	<6	26	30	26
	6 to 18	49	68	46
	18 to 55	96	131	80
	Above 55	39	48	31
Total		210	277	183

Source: Primary Data.

The data regarding the distribution based on age wise of households' size is an important determinant of the utilization of healthcare facilities and services because the different age group may be utilized different types of medical facilities. Hence data regarding these were collected and is exhibited in the table 4, which shows that the 46 percent of Hindu, 47 percent of the Muslim and 44 percent of the Christian households belonging to the age group of 18 to 55, 12 percent of the Hindu, 11 percent of the Muslim and 12 percent of the Christian households belongs to the age of less than six and 18 percent of the Hindu, 17 percent of the Muslim and the 16 percent of the Christian households within the age of above 55.

Table 5: Awareness of Healthcare Through the Media

Response of Households		Hindu		Muslim		Christian	
		Count	%	Count	%	Count	%
Malappuram	Yes	48	80	53	88	51	85
	No	12	20	7	12	9	15

Source: Primary Data.

Table 5 shows the awareness of healthcare through the media, shows that 80 percent of the Hindu, 88 percent of the Muslim and 85 percent of the Christian households were aware about the healthcare through the media and 20 percent of Hindu, 12 percent of the Muslim and the 15 percent of the Christian households were no more aware about the healthcare through the media.

Table 6: Disease's Status of the Households Within the District

Diseases status among the households		Categories		
		Hindu	Muslim	Christian
Hindu	Acute	9	7	15
	Chronic	11	7	19
	Acute & Chronic	40	46	26
Chi-square test				
Null Hypothesis (Ho)		Results	DF	P-Value
No association between the disease's status among the households within the Malappuram district.		4.532	4	0.152

Source: Primary Data

Diseases are categorized in to acute and the chronic illness. Whether there is any association between the numbers of households affected diseases among the Hindu, Muslim and the Christian households within the districts of Malappuram, are statistically checked by using the Chi-square test, result are presented in the table 6, shows that 40 family of the Hindu, 46 in Muslim and the 26 among the Christian were affected the acute and the chronic diseases.

Only 9 family in Hindu, 7 in Muslim and the 15 family in Christian households were affected acute only. 11 family of Hindu, 7 in Muslim and 19 in Christian family were affected only the chronic diseases. The test results shows that the p-values isgreater than 0.05, which means that the null hypothesis accepted, so the there is no association between the diseases status among the Hindu, Muslim and the Christian households in Malappuram district.

Table 7: Hospitalization Among the Households Within the District

Hospitalisation among the households	Categories		
	Hindu	Muslim	Christian
Malappuram	11	16	7

Source: Primary Data.

Hospitalization among the households within the district is an important determinant of health status of the rural households. Therefore, the numbers of household hospitalized within one year data were collected and are shown in the table 7, which shows that 18 percent of Hindu, 27 percent of the Muslim and 12 percent of the Christian households were hospitalized during one year.

Table 8: Number of Days Hospitalized Among the Households

Days	Categories		
	Hindu	Muslim	Christian
1 – 2	7	9	4
3 – 4	2	2	1
5 – 6	1	3	1
>6	1	3	1

Source: Primary Data.

The number of days hospitalized are classified in 1-2 days, 3-4 days, 5-6days and up to greater than 6 days. Household's wise data among the Hindu, Muslim and the Christian within the district is collected and that are presented in the table 8, which shows that majority of the households were hospitalized to the range of 1-2 days. There is a certain deviation were found in Muslim community compared with the other community in Malappuram district.

Table 9: Absence of Work Due to Illness Among the Household

Absence of work due to illness		Categories		
		Hindu	Muslim	Christian
Malappuram	Yes	56	54	58
	No	4	6	2
Chi-square test				
Null Hypothesis		Result	DF	P-value
No association between the absences of work due to illness among households within the district of Malappuram.		0.638	2	0.061

Source: Primary Data.

The Chi-square test is checked the association between the numbers of household took the absence of work due to illness among the Hindu, Muslim and the Christian within the district of the Malappuram are presented in the table 9, which shows that the p-value is 0.061, which is greater than the 0.05, means the null hypothesis were accepted. That is, there is no association between the absences of work due to illness among Hindu, Muslim and the Christian households within the district of Malappuram.

Table 10: Average Loss of Wages Due to Illness Among the Households

Mean, Standard deviation and F value for households – Malappuram						
Variable	Households	N	Mean	Standard deviation	F value	P value
Average loss of wages due to	Hindu	60	4414.00	2430.43	2.213	0.041

| illness | Muslim | 60 | 4762.00 | 2421.19 | | |
| | Christian | 60 | 4172.00 | 2432.41 | | |

Source: Primary Data.

Table 10 shows that the average loss of wage due to illness among the households, among the Hindu, Rs. 4414, Rs.4762 for Muslim and the Rs. 4172 for Christian households loss the wages due to illness. Compare the association between the mean expenditure for treatment among the Hindu, Muslim and the Christian households within the districts of Malappuram by using of analysis of variance (ANOVA); the result is exhibited that p-value is less than 0.05, the null hypothesis rejected, that is, there is an association between the community in the Average loss of wages due to illness.

Table 11: Mean Expenditure for Treatment Among the Households

Mean, Standard Deviation and F value for Households						
Variable	Households	N	Mean	Standard deviation	F value	P value
Mean Expenditure for treatment	Hindu	75	3345.91	323.9	8.41	0.001
	Muslim	75	3841.87	378.8		
	Christian	75	3153.41	312.2		

Source: Analysis of Primary Data

Table 11 revealed that the statistical value of p is less than the level of significance 0.05 for the variable of mean expenditure for treatment of various households. Hence, the mean score expenditure for treatment differs with households. So that rejects the null hypothesis Ho. Since the ANOVA test indicate that the significant difference exists among householders for the mean expenditure of treatment.

CONCLUSION

The health and well-being of the society determines the health status of the state. The health status of the society determines the level of income, level of education, occupation status, distribution of the households' size, age wise distribution of the households' size on one side and the exposure of health awareness, diseases status, hospitalization, number of days of hospitalization, absence of work due to illness, average loss of wages due to illness and mean expenditure for treatment on the other side. Monthly income, education, occupation, age wise of households' of the family is an important economic variable which have a direct influence of the accessibility, affordability and utilization of healthcare facilities and services for health and illness among the households. The awareness of healthcare through the media, shows that 80 percent of the Hindu, 88 percent of the Muslim and 85 percent of the Christian households were aware about the healthcare through the media. There is no association between the diseases status among the Hindu, Muslim and the Christian households in Malappuram district.Hospitalization among the households within the district is an important determinant of health status of the rural households. Therefore, the numbers of household hospitalized within one year data were that 18 percent of Hindu, 27 percent of the Muslim and 12 percent of the Christian households were hospitalized during one year. There is no association between the absences of work due to illness among Hindu, Muslim and the Christian households within the district of Malappuram.There is an association between the community in the Average loss of wages due to illness.

REFERENCES

[1]. Abbas, A, & Walker, G.I.A (1986), "Determinants of the utilization of maternal and child services in Jordan", *International journal of Epidemiology*, 15, 404.
[2]. Albert, Sandra, Melari Nongrum, Emily L. Webb, John D.H.Porter& Glenn C.Kharkonngor (2015),"Medical pluralism among indigenous people in north east India – Implications for Health Policy", *Tropical Medicine and international health*, 20(7), 952 – 960.
[3]. Anderson, R& Newman,J.F,(1973),"Societal and Individual determinants of healthcare utilization in US", *Milbank Memorial Fund* Q., 8, 132 - 42.
[4]. Banerjee, A, A Deaton & E Duflo (2004)." Wealth, Health and Health services in Rural Rajasthan", *American Economic review*, 94 (2), 326 – 330.

[5]. Cassar, Carmel (2008), Medical pluralism and its impact on illness in 16th and 17th century in Malta. *Malta medical journal*, 20(1), 44- 48.

[6]. Cholakkal, Ibrahim & N. Radhakrishnan (2014)" Education complements health status of Kerala: A study of Malappuram district", *IOSR Journal of humanities and social science*, 19 (1), 50 – 55.

[7]. Daniels N (1982): Equity of Access to health care: some conceptual and ethical issues.Milbank Mem Fund Q 1982, 60:51–81.

[8]. Dilip, T.R (2002). Utilization of reproductive and child healthcare services: Some observation from Kerala, *Journal of Health and management*, 4 (19).

[9]. Gangadharan, K (2008)," Policy reforms and healthcare system in Kerala: Constraint and options", 4 (1-4), 195 – 208.

[10]. George, V (1999) Healthcare system in Kerala: A case study of primary health centers in Kozhikode district, Phd thesis, university of Calicut.

[11]. Hag Wani, Nassir Ul, Kanchan Taneja & Nidhi adlakha (2013), Healthcare system in India: Opportunities and Challenges for enhancements, *IOSR – JBM*, 9 (2), 74- 82.

[12]. Ibrahim,P.(2008). 'Impact of gulf migration on the health status of Kerala.'Perspectives of health Economics, serials publication – New Delhi.

[13]. Jana, Arnab &RounaqBasu (2017)," Examining the changing health care seeking behaviour in the era of health sector reforms in India: Evidence from the National sample survey- 2004 – 2014", Research article, *Global health research and policy*, DOI 10.1186/S 41256 – 017 – 0026 – Y.

[14]. Kim, Han – Kyoul&Munjae Lea (2016) Factors associated with healthservices utilization between the years 2010 and 2012 in Korea: Using Andersen's behavioural model. *Osong public healthy and research perspective*, 7(1) 18 – 25.

[15]. McIntyre, D, M Thiede, G Dahlgren and M Whitehead (2006): "What Are the Economic Consequences forHouseholds of Illness and of Paying for Healthcare in Low- and Middle-Income Country Contexts?", *Social Science and Medicine*, 62(4), pp 858-65.

[16]. Nag, M (1983). "Impact of Social and Economic development in mortality: A comparative study of Kerala and West Bengal", *Economic and Political weekly*, 18 – 21.

[17]. Oliver A, Mossialos E. Equity of access to health care: outlying the foundations for action. *J Epidemiol Community Health*, 2004; 58: 655–658.

[18]. Rao, P. H. 2012. 'The Private Health Sector in India: A Framework for Improving the Quality of Care'. *ASCIJournal of Management* 41 (2): 14–39.

[19]. Strasser, Roger (2003)," Rural health around the world: Challenges and Solutions "Family Practice, Oxford University Press, 20 (4), 457 – 463.