DOI: http://doi.org/10.4038/wjm.v13i1.7557

Wayamba Journal of Management
Volume 13 Issue I June 2022

Socioeconomic Determinants of Household Out-of-Pocket Payments on Healthcare in Sri Lanka

M.B.F.Asra[1] & M.D.J.W Wijesinghe[2]
[1,2]Department of Economics and Statistics, Faculty of Social sciences and Languages, Sabaragamuwa University of Sri Lanka
zaraazra33@gmail.com[1], jayaniwijesinghe@yahoo.com[2]

Abstract

Since its independence, Sri Lanka has had a free health care policy, and out-of-pocket healthcare expense has increased over time. The study's primary goal is to investigate the factors influencing out-of-pocket healthcare spending in Sri Lanka. Secondary data from the Household Income and Expenditure Survey conducted by the Department of Census and Statistics in Sri Lanka in 2016 were used in this study. Data were analyzed using descriptive statistics and the Semi-Log regression model. The results of the Semi-Log regression model show that households with the urban residential sector, post-secondary education, and chronic conditions were significant positive predictors of out-of-pocket healthcare expenditure, while households with primary education were substantial negative predictors. Distance to maternity clinics has a strong beneficial influence on healthcare expenditure on the supply side. As a result, the findings demonstrate a compelling need to mitigate the adverse effects of growing healthcare costs. The government can enact new rules and regulations to protect households' ability to meet their healthcare needs by offering all healthcare facilities and expanding health infrastructure.

Keywords-: Out-of-pocket healthcare costs, socio-demographic, economic, and health factors

1. INTRODUCTION

World Health Organization (WHO) defined Out-of-pocket (OOP) payments as "direct payments made by individuals to healthcare providers at the time-of-service consumption " (WHO,2010). Out-of-pocket payment is the most inefficient, inequitable, and regressive method of the major forms of health care financing, including government-funded (through taxes), social insurance, and private insurance (Puteh and Almualm,2017). However, it is a primary method for financing healthcare in most developing countries. According to O'Donnell et al. (2008), out-of-pocket (OOP) payments or the household's share of direct healthcare expenditure are the primary sources of

healthcare finance in low- and middle-income countries. In the Asian region, out-of-pocket payments to total household healthcare expenditure range from 30 to 82 percent (van doorslaer et al.,2006).

Considering the Sri Lankan context, its healthcare system combines the public and private sectors. However, over time in Sri Lanka, out-of-pocket health care payments have risen under the free health care policy (Withanachchi and Uchida,2006). According to Rannan-Eliya and Sikurajapathy (2008), out-of-pocket health care costs by households comprised approximately 33% of national health expenditure in 1953, 41% in 1980, and 48% in 2005. Further, Amarasinghe et al. (2013) pointed out that private finance accounts for 52% of overall healthcare expenditure, with 95% being out-of-pocket. Kumara and Samaratunga (2016) Found that more than 60% of households in Sri Lanka incur out-of-pocket healthcare expenses. Further, Figure 1 illustrates that the share of out-of-pocket health care spending in total household spending increased over the year. Households spent about 2% of their overall expenditure on out-of-pocket health expenses in 1990/1991. This percentage climbed to roughly 3% till 2012/2013. In 2016, households paid approximately 1.5 percent of their total spending on out-of-pocket health expenses. It is noted that under Sri Lanka's free healthcare program, out-of-pocket health care expenditures are increasing. In this scenario, the primary objective of this study is to investigate the relationship between socioeconomic variables of out-of-pocket household payments on healthcare in Sri Lanka.

1.1. Theoretical background

Many theories in economics on health care demand are based on Grossman's human capital approach to health (Grossman ,2000). The human capital theory outlines how an individual invests in human capital to increase productivity and produce earrings and commodities that feedback into the individual's utility function. Grossman used a household production function of consumer behavior to distinguish between medical care as input and health as an outcome. According to Grossman's approach, a person inherits an initial stock of health that declines with age but can be increased through investment. The decision to seek medical care is an input that can be used to assist offset the natural depreciation of the health stock. Other elements that influence the demanding healthcare include exercise, education, nutrition, and lifestyle choices.

Figure 2 showed diminishing returns between health investment and health, i.e., the production function is in the typical shape as the level of health capital increases. It is increasingly challenging to generate health

from inputs. The demand curve slopes downward due to the diminishing marginal productivity of health capital. It generated three hypotheses on the impact of age, education, and wage rate on the demand for health by Grossman.

According to Figure 3, over the life cycle, depreciation increases from di to di+1. Consequently, marginal cost increases, and demand for health stock decreases from Hi to Hi+1. Due to higher elasticity, demand causes a massive decrease in the optimal stock of health with age. When the cost of capital is r+dn, and the stock of health is Hn=Hmin, as a result of that, death will occur. Healthy times are equal to zero at death, and there is no time available for both market and non-market activities. If the elasticity of the demand or marginal efficiency of the capital schedule is less than one, expenditure on medical care will rise with age.

According to Grossman (2000), education is a large and significant element that influences health and healthcare spending at the individual and national levels. The connection between health status and healthcare consumption is expected to influence and change healthcare costs. Education, often known as human capital, is a tool used to assess non-market efficiency. People with a higher level of education earn more money. If the wage rate and marginal product of a given health stock were unlinked, an increase in education would boost the marginal efficiency of health capital. As a result, the MEC schedule shifts to the right from the MEC_1 curve to the MEC_2 curve (Figure 4). If the cost of capital were independent of E and the MEC schedule's elasticity was smaller than one, more educated individuals would demand more health but less medical care (Grossman,1972).

Figure 5 shows how an increase in wage raises the return on healthy days. Because the wage rate and the level of the MEC schedule are directly associated, health demand is favorably related to wage. By increasing the pay from W_1 to W_2, the MEC schedule shifts from MEC_1 to MEC_2. If the cost of health capital remains constant, the ideal stock of health will increase from H_1 to H_2. Therefore, as wages rise, the demand for medical care increases.

The behavioral model of health care, on the other hand, is a conceptual model that highlights the factors that influence the use of health care services (Andersen,1995). This model depicts how three factors influence an individual's use of health care services: Predisposing characteristics, enabling resources, and needs. For example, needs show the necessity for individuals to use health care (Babitsch et al.,2012). Individuals' pre-illness sociocultural characteristics are predisposing variables (Andersen and Newman, 2005). It is based on demographic factors (age, gender,

and biological imperatives), social structure (education, occupation, ethnicity, social network, social interaction, and culture), and pre-illness health beliefs (Babitsch et al., 2012; Andersen and Newman, 2005). According to Andersen (1995), health beliefs are "attitudes, values, and knowledge about health and health services that can impact people's future perception of need and use of health services" (Andersen, 1995, pp 2). However, if someone is predisposed to use health care, other resources must be available to act effectively (Andersen and Newman, 2005). It is necessary to have community/organizational (physician and hospital density, office hours, provider mix, quality management oversight, outreach, educational program, health policy, and family/person enabling resources (Babitsch et al., 2012). Community resources include the structures and distribution of health care facilities and employees. People must have access to and understand how to use these services. Income, health insurance, a stable source of care, and travel and waiting time are also factors in this category. Need is determined as an initial factor of use. According to Andersen and Davidson (2001), individual needs can be differentiated. They are the perceived and assessed requirements for health care services. Perceived need refers to how people perceive their general health and symptoms of illness, discomfort, and health worries. The evaluated condition includes professional assessments and objective measurements of individuals' health status and need for medical care (Andersen, 1995; Andersen and Davidson, 2001; Babitsch et al., 2012; Andersen and Newman, 2005).

1.2. Review of Literature

This section examined existing studies on individual demand for health care to assess which characteristics influence health care demand consumption.

The relationship between age and healthcare spending is intricately linked. According to Hwang et al. (2001), there is a positive relationship between OOP spending and age. For example, people in the oldest age category (age 80 or more) spent more than five times as much as people in the youngest age category (age 19 or less) and twice as much as people in the middle age category (age 45 to 65). Further, household heads in the oldest age category (65 or more) spent more on OOP than other families. Malik and Syed (2012) also revealed that households with older members had a more significant influence on OOP payments than households with younger members, implying that adult respondents were better predictors of OOP than younger respondents. There is a positive relationship between age and out-of-pocket costs, with children under the age of 5 incurring lower out-of-pocket expenses due to government initiatives for young children in

Kenya. However, older adults over 65 pay a more significant out-of-pocket expense (Ke Xu et al.,2006). Population age structure is one of the most influential elements influencing healthcare spending in Ghana (Angko,2013). Apere and Karimo (2014) identified households headed by older people with large families are more likely to incur OOP healthcare spending), in Nigeria's south-south geographical zone. In contrast, Samadi and Rad (2013) revealed a long-term negative relationship between health spending and age groups.

The rate of urbanization has a significant and beneficial impact on the rise in healthcare expenditure in Ghana. According to his estimation, a 1% increase in urbanization results in a 4% increase in per capita healthcare expenditure(Angko,2013). Malik and Syed (2012) also concluded that urban families spent more on OOP than rural households. Rural inhabitants are often less educated, resulting in lesser health awareness, and healthcare services are more limited in rural locations. Furthermore, they cannot afford specialized doctors/hospitals or high-tech equipment and recorded low spending on healthcare (Molla et al.,2017). However, Ke Xu et al. (2006) observed that the urban-rural split was a minor predictor of out-of-pocket healthcare spending.

Masiya and Kaonga (2016) found that the education level of the head of the household was associated with a higher demand for health care. According to Molla et al. (2017), a 10% rise in illiteracy results in an 11% decrease in household health spending. Uneducated households use less healthcare because they are either unaware of the availability of healthcare or prefer home or alternative cures.

There is conflicting evidence regarding the association between OOP spending and health insurance coverage. Some researchers discover a negative relationship between health insurance membership and OOP payments, implying that health insurance membership does not currently provide adequate financial protection and that reform is required. Ke Xu et al., 2006; Wagstaff et al., 2007). Morrisey (2001) has claimed that having health insurance coverage significantly lowers OOP spending. In contrast, mean OOP spending on uninsured people was higher than on people with health insurance (Masiya and Kaonga,2016).

Rashidul et al. (2017) revealed that household income differences substantially influenced OOP spending. The severity of illness in low-income groups may be greater than in high-income groups. In general, poor people may not utilize healthcare if their illness is not severe, but wealthy people may use healthcare in the early stages of the condition. According to Xu Ke et al. (2011),

income elasticity for OOP expenditures in high-income countries was more than one (1.50). The elasticity was approximately one in low-income countries and less than one in lower-middle and upper-middle-income countries. According to Molla et al. (2017), a 10% increase in household income correlates to a 2% increase in household healthcare expenditure at a high level of relevance. According to Sanwald and Theurl (2016), Higher-income households are more likely to have OOP expenses. According to Sozmen and Unal (2013), high-income households in Turkey spend more on out-of-pocket expenses. Per capita income has been highlighted as a crucial component in explaining healthcare expenditure among households and nations as one of the influencing variables on out-of-pocket healthcare expenditure. In OECD countries, cross-section regressions of aggregate health expenditure per capita on GDP per capita consistently revealed income elasticity significantly greater than one, ranging from 1.2 to 1.5. According to Fabbri and Monfurdini(2003), family income is a primary driver of the number of private consultations. Individuals with higher earnings have been found to use more private services.

Availability of healthcare facilities, such as the number of Physicians and public services, are also important factors in determining the out-of-pocket health expenses. For example, according to Masiya and Kaonga (2016), the lack of available public services shifts the cost of OOP to the poorest sector. Ke Xu et al. (2006) discovered that the type of health provider affects out-of-pocket spending because visiting a private health facility leads to greater out-of-pocket payments than visiting a public health provider, which results in lower out-of-pocket spending payments. Further lack of health sector resources for the management of specific chronic diseases in the elderly recorded a positive influence of old age on OOP health expenditures, especially since Bangladesh lacks a particular program of coverage for more senior citizens to mitigate excess healthcare costs at an affordable price (Rashidul et al. ,2017) .The number of physicians has a positive relationship with health costs in both the long and short run. As the number of doctors increases, people seek more expensive care, raising healthcare expenses (Samadi and Homaie ,2013). According to Masiya and Kaonga (2016), the type of perceived disease is also a significant factor driving OOP expenditure. According to Hwang et al. (2001), there is a positive relationship between OOP spending and chronic illness for Medicate beneficiaries: families with chronically ill members are 2.6 times more likely than other families to spend $1000 OOP yearly for medical care. Molla et al. (2017) found a statistically

significant relationship between chronic illnesses in the home and household healthcare spending. Having a chronic disease among household members results in a 101 percent increase in yearly household healthcare costs compared to households without chronic disorders.

Considering the studies on the Sri Lankan context, Kumara and Samaratunge (2016) discovered that age, education, living sector, and income all impacted the burden of out-of-pocket health care spending in Sri Lanka. Households with more than one elderly adult, preschool children, people with chronic illnesses, and educated household leaders are more likely to pay out-of-pocket health care costs. Out-of-pocket healthcare cost is emphasized as a more noticeable component in households with multiple members suffering from chronic illnesses. Higher-income households spend a greater proportion of their earnings on out-of-pocket expenses. Out-of-pocket spending for urban households is higher than for estate and rural households. Furthermore, supply-side factors such as the proximity of government hospitals, bed numbers, and dentists at government hospitals should minimize out-of-pocket costs. According to Pallegedara and Grimm (2018), out-of-pocket medical expenses gradually increase. They found that the government's limited supply of public health services drives people towards the private sector. This study also identified per capita income as a major contributor to rising healthcare expenses in Sri Lanka. Population age composition and crude death rate are two critical factors influencing out-of-pocket healthcare costs across districts and over time (Pallegedara and Grimm,2018).

2. METHODOLOGY

This study is mainly based on secondary data. Data were obtained from the 2016 Household Income and Expenditure Survey (HIES) 2016 conducted by the Department of Census and Statistics of Sri Lanka. HIES surveys a sample of 25,000 housing units throughout the country.

All independent variables included in the analysis mainly covered economic, demographic, social and living standards, and health characteristics of the households. Household OOP payments are usually positive, with sizable zero responses and a positively skewed data distribution (Mullahy,2009). In the case of the HIES data, around 70% of households reported OOP payments. It exhibited a positively skewed distribution. Therefore, the study uses a natural logarithm transformation of health expenditure in the regression model.

3. RESULTS AND DISCUSSION

According to figure 7, fees for private medical expenditures highly contribute to the households' healthcare expenditures in Sri Lanka at 32.5%. Purchasing of medical and pharmaceutical products is the second principal component of the households' healthcare expenditures in Sri Lanka at 26.12%.

Table 1 presents the coefficients of the Semi-Log model,t-statistics, P-values, and Standard errors. There is a statistically significant influence of the residential sector on healthcare expenditure in Sri Lanka. It revealed that positive relationship between the residential sector with healthcare expenditure. The coefficient of the residential sector under Semi- Log regression model, healthcare expenditure will increase at the rate of 135.2 percent in the urban sector, and healthcare expenditure will increase at the rate of 44.8 percent in the rural sector. Malik and Syed (2012) found that urban households made higher OOP expenditures than other sector households. In contrast ,Ke Xu et al. (2006) found that the urban-rural difference was an insignificant predictor of OOP spending. Samadi and Homaie (2013) demonstrate a positive long-term relationship between the percentage of urbanization and health expenditures. This is because the individuals in urban regions have more access to healthcare resources. As well as Molla et al. (2107) found that rural and estate households spend less on healthcare than their urban counterpart. Rural and estate people are usually less educated and hence have less health awareness, and there are fewer healthcare services available in their area. Moreover, they cannot afford specialist doctors/hospitals and sophisticated technology in the urban sector.

Out of pocket healthcare expenditure will decrease by 26.7 percent among the household heads with primary education. Also, healthcare expenditure will increase by 15.2 percent for household heads with post-secondary education. Therefore, there is a statistically significant impact of the level of education on healthcare expenditure in Sri Lanka. Masiya and Kaonga (2016) found the level of education of the head of the household was positively associated with a greater demand for health. Sanwald and Theurl (2016) revealed the highest probability of out-of-pocket healthcare expenditure. Further, Households with a higher level of education show a significantly higher likelihood of having OOP expenditures. Compared with private-sector employees in Sri Lanka, the coefficient of employment status under the semi-log regression model, out-of-pocket healthcare expenditure will decrease by 11.8 percent due to a particular household head

being an own-account worker. Previous studies by Samaraweera (2008) and Malik and Syed (2012), found employment status as an essential factor that influences the healthcare expenditure. Out of pocket healthcare expenditure will decrease at the rate of 5.7 percent due to the household with no chronic disease in Sri Lanka. It shows a statistically significant impact of chronic disease on healthcare expenditure in Sri Lanka. It revealed that household with chronic disease has higher spending on healthcare. Some researchers emphasize the same results of this study. Such as Molla et al. (2017), Hwang et al. (2001); O'Donnell et al.(2008); Kumara and Samaratunga (2016) are some of them. Hwang et al. (2001) demonstrate a positive relationship between OOP spending and chronic disease. However, age, marital status, and wage are not statistically significant in determining the out-of-pocket healthcare expenditure.

Considering the supply-side factors in determining the healthcare expenditure in Sri Lanka such as distance (in kilometers) to healthcare resources (hospital, Maternity home, Government dispensary, private dispensary, maternity clinic) from their house ,the distance of maternity clinics from their homes shows a statistically significant impact on healthcare.

4. CONCLUSION

The main objective of this research is to identify the determinants of out-of-pocket healthcare expenditure in Sri Lanka based on the Household Income and Expenditure Survey (HIES)2016. Semi-log (Log-Lin) regression estimation is used to identify the determinants of out-of-pocket healthcare expenditure. The study found that demand-side factors play an essential role in determining out-of-pocket healthcare expenditure than Supply-side factors in Sri Lanka based on HIES 2016. It means that demand-side factors of the residential sector, level of education, and chronic conditions of households significantly influenced healthcare. In contrast, the Supply-side factor of the distance of maternity clinics from their houses shows a statistically significant positive impact on healthcare. Results revealed that households with chronic disease have higher spending on healthcare than households with no chronic diseases. Chronic disease positively impacts healthcare expenditure in Sri Lanka. Therefore, the government can proceed with new rules and healthcare programs to prevent chronic diseases and fulfill their healthcare requirements to reduce out-of-pocket healthcare costs.

APPENDIX

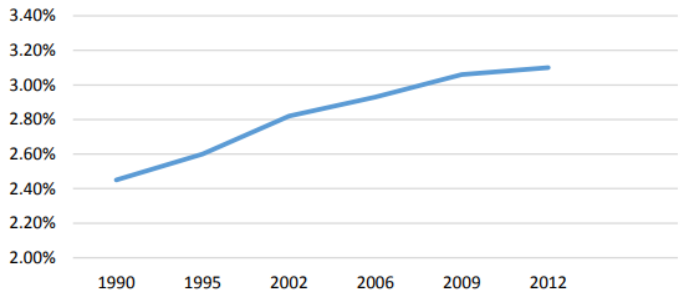

Figure 1: The share of out-of-pocket health care expenditure in total expenditure by Sri Lankan households

Source: HIES 2012/2013

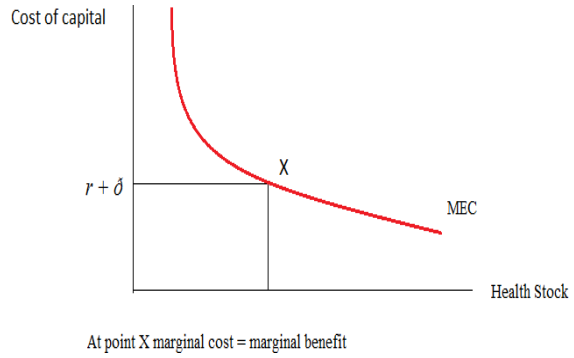

Figure 2: Demand for Health Capital

Source: Grossman,1972

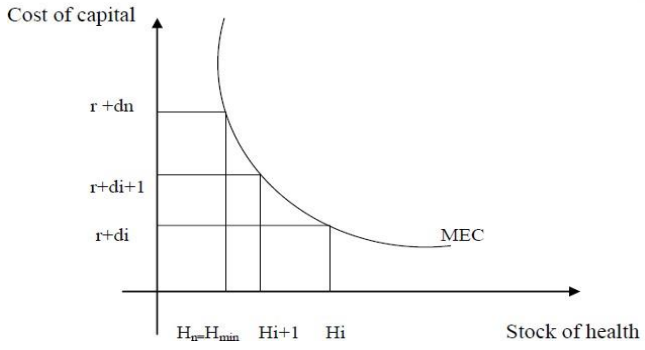

Figure 3:Impact of age on demand for health

Source: Grossman,1972

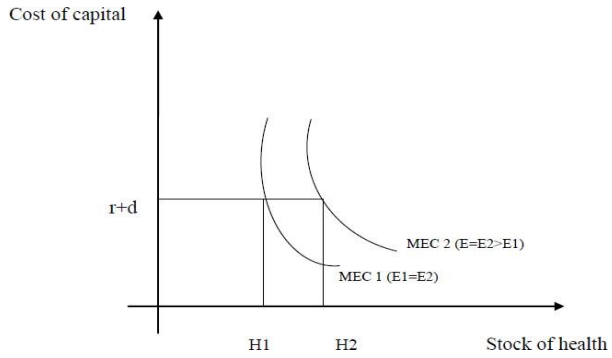

Figure 4: Impact of education on demand for health
Source: Grossman,1972

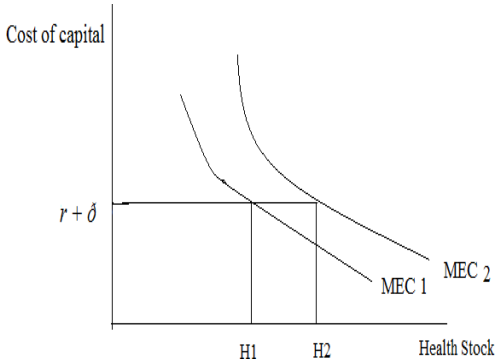

Figure 5: Impact of wages on demand for health
Source: Grossman,1972

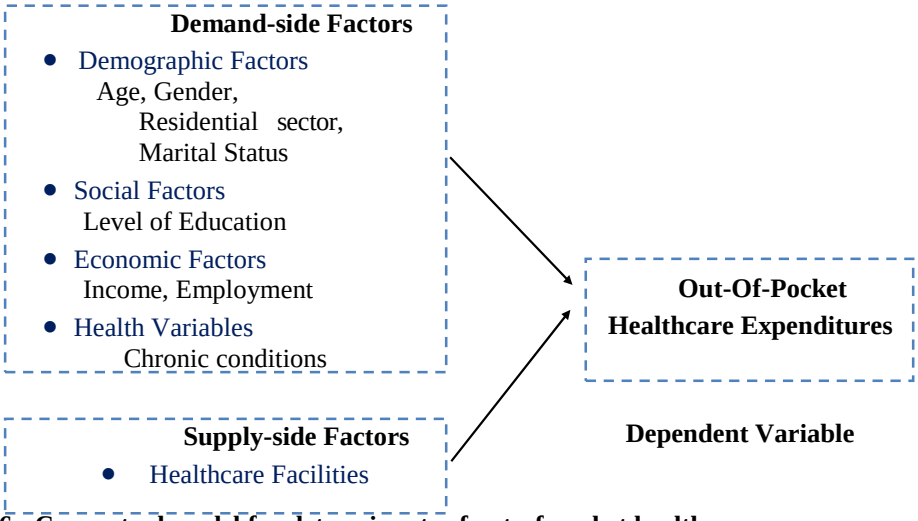

Figure 6: Conceptual model for determinants of out-of-pocket healthcare expenditure

Source: Developed by researcher

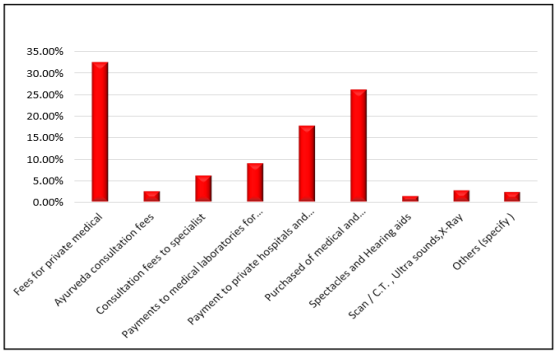

Figure 7: Healthcare Expenditures by the major Components
Source: HIES 2016

Table 1: Determinants of Out-of-Pocket Healthcare expenditure in Sri Lanka

Determinants	Variable	Coefficient	Standard error	P-value	t-test
Demographic Characteristics	Age	0.00048	0.0017	0.785	0.27
	Gender (male=1)	0.119	0.070	0.091	1.69
	Residential sector:				
	Urban	1.352	0.092	0.000*	14.61
	Rural	0.448	0.086	0.000*	5.3
	Marital status:				
	Never married	0.142	0.124	0.253	1.14
	Divorced Widowed	-0.251	0.253	0.323	-0.99
	Separated	-0.026	0.085	0.759	-0.31
		0.061	0.14	0.662	0.44
Social factor	Level of Education:				
	Primary	-0.267	0.053	0.000*	-5.02
	Post-secondary	0.152	0.051	0.003*	2.93
	Tertiary	0.079	0.079	0.315	1.00
Economic Factors	Wage-salaries	1.51	8.16	0.064	1.85
	Employment status:				
	Gov. employee	-0.103	0.071	0.144	-1.46
	Semi gov. employee	-0.117	0.103	0.254	-1.14
	Employer	-0.194	0.107	0.070	-1.82
	Own account worker	-0.118	0.042	0.005*	-2.81

	Family worker	0.297	0.253	0.24	1.17
Health factor	Suffer from Chronic condition No=1	-0.057	0.045	0.026*	-1.27
Healthcare facility	hospital	0.005	0.0034	0.095	1.67
	Maternity home	-0.002	0.0032	0.452	-0.75
	Government dispensary	-5.52	0.0063	0.999	-0.00
	private dispensary	0.002	0.0022	0.201	1.28
	maternity clinic	0.011	0.0051	0.021*	-2.31
	constant	6.354	0.148	0.000*	42.78

Source: Researcher's findings using HIES 2016

*Significant coefficients at 5% significance Level

Base category: Being female, being married, having a chronic illness, being a private sector employee, being a household head with a pre-secondary education level, being an Estate sector household.

REFERENCES

Amarasinghe ,S ., De Alwis, S and Saleem S. (2013). IHP Technical Reports Series, Number 2: Private Health Sector Review 2012, Colombo: Institute for Health Policy

Andersen, R. M. (1995). Revisiting the Behavioural Model and Access to Medical Care: Does it Matter? Journal of Health and Social Behaviour, 36:1-10.

Andersen, R. M. and Davidson, P. L. (2001). Improving Access to Care in America: Individua and Contextual Indicators. Changing the US Health Care System

Andersen, R.M. and Newman, J. F. (2005). Societal and Individual Determinants of Medical Care Utilization in the United States. The Milbank Quarterly, Vol. 83 (4):1-28

Apere,T.O and Karimo T.M.(2014).Determinants of Out-Of-Pocket Healthcare Expenditure in theSouth-South Geopolitical Zone of Nigeria ,International Journal of Economics, Finance and Management ,3(6)

Angko, W. (2013). The Determinants of Healthcare Expenditure in Ghana. Journal of Economics and Sustainable Development ,4

Babitsch, B., Goh,l D and von Lengerke T.(2012)

.Re-revisiting Andersen's Behavioral Model of Health Services Use: A systematic review of studies from 1998-2011. Psychosoc Med ,9.

Fabbri, D and Monfardini, C.(2003). Public vs. Private Health Care Services Demand in Italy,Giornale degli Economisti, GDE (Giornale degli Economisti e Annali di Economia), Bocconi University, 62(1)

Grossman, M.(1972). On the concept of health capital and the demand for health. Journal of Political Economy ,80

Grossman, M.(2000). The human capital model. In: Culyer, A.J., Newhouse, J.P. (Eds.), Handbook of Health Economics, vol. 1A, Elsevier, Amsterdam

Household Income and Expenditure Survey. (2016).Department of Census and Statistics, Ministry of Finance and Planning, Sri Lanka

Hwang ,W., Weller ,W .,Ireys ,H and Anderson G.(2001). Out-of-pocket medical spending for care of chronic conditions. Health Aff (Millwood),20(6)

Ke Xu., David, B., Evans, Patrick Kadama, Juliet Nabyonga, Peter Ogwang Ogwal, Pamela Nabukhonzo and Ana Mylena Aguilar.(2006).Understanding the impact of eliminating user fees: Utilization and catastrophic health expenditures in Uganda,Social Science & Medicine,62(4)

Kumara, A.S and Samaratunge, R. (2016).Patterns and determinants of out-of-pocket health care expenditure in Sri Lanka: evidence from household surveys. Health Policy Plan.31(8)

Malik ,A and Syed S.I.(2012), Socio-economic determinants of household out-of-pocket payments on healthcare in Pakistan. Int J Equity Health ,11

Masiye, F. and Kaonga, O. (2016). Determinants of Healthcare Utilisation and Out-of-Pocket Payments in the Context of Free Public Primary Healthcare in Zambia. International Journal of Health Policy and Management, 5(12)

Morrisey, M. A. (2001). Competition in hospital and health insurance markets: a

review and research agenda. Health services research, 36(1 Pt 2)

Molla, A.A., Chi, C. & Mondaca, A.L.N. (2017). Predictors of high out-of-pocket healthcare expenditure: an analysis using Bangladesh household income and expenditure survey, 2010. BMC Health Serv Res, **17**

Mullahy, J. (2009). Econometric Modeling of Health Care Costs and Expenditures: A Survey of Analytical Issues and Related Policy Considerations. Medical care, 47

O'Donnell, O., van Doorslaer, E., Wagstaff, A and Lindelow, M(2008). Analyzing Health Equity Using Household Survey Data : A Guide to Techniques and Their Implementation. Washington, DC: World Bank.

Pallegedara , A and Grimm, M.(2018). Have out-of-pocket health care payments risen under free health care policy? The case of Sri Lanka. Int J Health Plann Mgmt,33

Puteh S.E.W and Almualm Y.(2017).Catastrophic Health Expenditure among Developing Countries. Health Syst Policy Res. 4(1)

Rannan-Eliya R.P and Sikurajapathy L. (2008). Sri Lanka: ‘‘Good Practice’’ in expanding healthcare coverage. In: Good Practices in Health Financing Lessons from Reforms in Low- and Middle-Income Countries. Washington DC: World Bank

Rashidul A. M,,Abdur R. S and Alec Morton et al.(2017).Distribution and determinants of out-of- pocket healthcare expenditures in Bangladesh.

Samadi A, Homaie R. E.(2013).Determinants of Healthcare Expenditure in Economic Cooperation Organization (ECO) Countries: Evidence from Panel Cointegration Tests. Int J Health Policy Manag ,1(1)

Samaraweera G. R. S. R. C. (2008). A Comparative Study of Demand for Ayurvedic Care: Private vs. Government: a Case Study from Ratnapura District,http://www. mgt/images/stories/research/ircmf/2010/BE/7.PDF

Sanwald, A and Theurl ,E.(2016). Out-of-pocket expenditure by private households for dental services - empirical evidence from Austria. Health Econ Rev. 6(1)

Sozmen, K and Unal, B.(2008).Explaining inequalities in Health Care Utilization among Turkish adults:findings from Health Survey 2008, European Journal of Public Health,23(1).

World Health Organization.(2010). The World Health Report – Health systems financing: The path to universal coverage. Geneva

van Doorslaer, E., O'Donnell, O and Rannan-Eliya R, et al.(2006). Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. Lancet.

Wagstaff, A., O'Donnell, O., Van Doorslaer, E., and Lindelow, M. (2007). Analyzing health equity using household survey data: a guide to techniques and their implementation. World Bank Publications.

Withanachchi, N and Uchida Y.(2006). Healthcare rationing: A guide to policy directions in Sri Lanka. Health Policy,78(1)