

ID - 19

## HOUSEHOLD INCOME AND HEALTHCARE EXPENDITURE IN SRI LANKA

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### Abstract

Health can be recognizing as a main factor, which directly governs the overall economy and development of a nation. This article reviews the household healthcare expenditures using demographic characteristic of the household. Even though a number of studies have examined on this subject in Sri Lanka, Their expenditure patterns and household characteristics are not separately analyze based on recent data. This paper expects to bridge that knowledge gap. This study use Sri Lankan household income and expenditure survey of 2016(HIES). Our result findings demonstrated that a person living in urban area would spend higher health expenses in all health categories compare to rural and estate sector. When comparing gender, female spends more on healthcare in every considered factor and over 60 years old spends extra on healthcare compared to other age groups. This study further confirms that age and gender of the household are closely associated with healthcare expenditure.

**Keywords:** household, healthcare expenditure, HIES, Sri Lanka

### Introduction

Better health is important for happiness and well-being of humans. Populations with healthy lifestyles live longer which makes an important contribution to economic progress. This study is expecting to evaluate household income and healthcare expenditure in Sri Lanka.

Government of Sri Lanka provides free health services to its citizens, as a national priority for decades. Despite this free service, households still spend considerably on their health care. The empirical analysis is based on the Household Income and Expenditure Survey (HIES) 2016 from the Department of Census and Statistic (DCS). Accordingly, the mean monthly total household expenditure was Rs.54,999.00. Per month, the mean non-food expenditure was Rs.35,885.00 of that the health expenses was Rs.1,695.34 (3.08%).Therefore this research explores the problem of spending considerable amount for healthcare expenditure. Moreover, this study investigate further healthcare categories taking to an account.

Past researchers have identified that the people who are in age sixty and more than that have spent six times higher in average than person under age eighteen on healthcare (Martin, Whittle, Levit, Won, & Hinman, 2002).In Denmark literature has mentioned that maintaining income equality supports to minimize health inequality(Dorling, 2015). Health can vary with the age or gender variations (Furnee, Groot, & Pfann, 2011). Nutrition requirements, immunity, exposure to diseases can change with the age or gender. A research conducted in Bangladesh identified that women record more complaints than men in self-recorded health problems(Kabir et al., 2006).Even though there has been few compressive study done on this subject in Sri Lanka, their expenditure patterns and household characteristics are not separately analyze based on recent data. This study aims to bridge that gap. The main

objective of this study is to investigate social economic and demographic characteristics of household on different health expenses categories.

### Methodology

This study is based on secondary data gathered through the HIES 2016 from the DCS which includes 21,756 households. HIES 2016 survey comprise 11 healthcare categories and this study grouped those into 7 healthcare categories. Namely, spend on private medical practices, purchase of pharmaceutical products, fees to private nursing, fees to medical lab, consultation fees, spend on spectacles and hearing aids and other health expenses.

Furthermore HIES 2016 includes Household socio economic and demographic characteristics such as age group, gender and marital status. Data were use to analyzed by using average values of different demographic characteristics among the different health expenditure categories.

### Results

Table 1: illustrates that seven different ways of spending money on personal health care by sectors and provinces.

**Table 1: Mean per capita healthcare expenditure by sectors and provinces**

	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>	<b>C7</b>
<b>Sector</b>							
<b>Urban</b>	163.6	220.4	69.9	41.1	36.3	10.8	42.6
<b>Rural</b>	151.6	95.1	82.0	39.9	25.3	4.8	17.6
<b>Estate</b>	81.1	23.4	1.5	6.4	4.7	0.0	2.3
<b>Province</b>							
<b>Western</b>	209.2	221.1	113.0	52.1	31.4	7.3	33.3
<b>Central</b>	147.0	89.6	66.1	28.9	21.7	6.3	33.5
<b>Southern</b>	160.0	148.9	65.8	49.7	42.0	6.8	15.0
<b>Northern</b>	46.5	33.3	242.1	21.8	9.1	1.3	4.8
<b>Eastern</b>	94.8	25.1	15.4	24.3	8.8	0.5	2.6
<b>North-west</b>	177.6	116.0	38.3	66.0	39.2	12.4	46.4
<b>North-central</b>	148.1	51.8	25.2	19.2	17.0	3.1	4.6
<b>Uva</b>	78.7	41.6	13.4	17.2	17.5	1.8	9.2
<b>Sabaragamuva</b>	172.3	60.7	11.1	28.3	26.4	4.0	7.8

Source: Authors demonstration based on HIES 2016.

Note: C1 -Spend on private medical practices, C2 - Spend on Purchase of pharmaceutical products, C3 - Spend on Private nursing, C4 - Spend on Medical labs, C5 - Spend on Consultation fee, C6 - Spend on Spectacles and hearing aids, C7 - Spend on Other medical expenses.

Table 1 illustrates that the highest spend on private nursing are in rural sector while all other are in urban sector. This is due to nursing is easier in rural area. In addition, expenses on private medical practices and purchase on pharmaceutical products are high in Western province. It is explainable as western province is the capital of Sri Lanka and has the highest population density and widely available private medical practices. However Highest spend on consultation fee has recorded in Southern and highest spend on private nursing has recorded in Northern Province.

**Table 2: Household demographic characteristics on different healthcare expenditure categories**

	C1	C2	C3	C4	C5	C6	C7
<b>Age level</b>							
0-10	134	67	100	22	21	2	11
11-20	110	78	26	27	16	5	20
21-30	141	106	80	41	24	5	28
31-40	131	89	98	32	25	5	14
41-50	155	103	42	34	20	4.7	21
51-60	178	138	89	54	28	4.4	24
60+	214	224	94	66	47	12.4	31
<b>Gender</b>							
Male	141.3	109.7	77.12	37.5	25.4	5.1	19.7
Female	158.2	114.91	75.6	39.6	27.1	5.9	22.2
<b>Marital status</b>							
Never married	133.7	87.1	67.9	29.9	21.3	4.6	19.2
Married	160.5	127.4	83.5	44.9	29	5.5	22.1
Widowed	182.4	161.9	74.8	51.1	36.5	12.3	20.3
Divorced	151.6	169.3	306.6	32.3	30.2	1.17	21.1
Separated	154.1	121.3	21.4	23.9	22.9	1.1	50.9

Source: Authors demonstration based on HIES 2016.

Note: C1 -Spend on private medical practices, C2 - Spend on Purchase of pharmaceutical products, C3 - Spend on Private nursing, C4 - Spend on Medical labs, C5 - Spend on Consultation fee, C6 - Spend on Spectacles and hearing aids, C7 - Spend on Other medical expenses.

As can be seen from the Table 2 illustrates demographic variables on different health expenses categories. Our results indicate that the spending on private nursing is high for the participants below 10years old. Senior citizens over 65 years old spends extra on healthcare compared to other age groups because getting old itself makes a person more vulnerable for diseases and it is difficult to recover from illnesses. However based on gender variable females spends the most on all the healthcare expenses except private nursing. According to the marital status of household widowed participants spends extra on private medical practices, medical labs, consultation fee, spectacles, hearing aids, and divorced participants more spend on pharmaceutical products and private nursing.

## Discussion and Conclusion

This study investigates the household's demographic factors on different healthcare expenditure categories. The findings of this study demonstrated that a person living in urban area would spend higher health expenses in all health categories compare to rural and estate sector. When considering overall spending of each province, Northern Province has showed highest increment for spending on private nursing. When comparing gender, female spends more on healthcare in every considered factor and over 60 years old spends extra on healthcare compared to other age groups. This study further confirms that the over 60 year elderly people spend more out of pocket healthcare expenditure. Hence, it is important to paid more attention to elderly people when formulating health policies. Therefore, this research study provides the opportunity to both government and policy makers to investigate on health expenditure and well-being for all people in Sri Lanka.

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