

Socioeconomic drivers of healthcare utilization among the elderly with reference to working and non-working population: Insights from LASI

Nayan Jyoti Nath

CHRIST (Deemed to be University), Bangalore

Aditi Chaudhary

International Institute for Population Sciences

Shubham Kumar (✉ shubhamk98@gmail.com)

International Institute for Population Sciences

Research Article

Keywords: Healthcare, geriatrics, utilization, ageing population, working population

Posted Date: April 14th, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1544135/v1>

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Abstract

Background: The elderly population of India has been escalating exponentially over the past few decades, caused by a decline in fertility and an increase in life expectancy. The increase eventually transcended the disease burden on the public healthcare system. Therefore, it becomes crucial to evaluate the healthcare utilisation pattern of the elderly based on their socioeconomic and working condition.

Methods: To measure healthcare utilisation, we have used access to public and private healthcare services. Descriptive analysis and multivariable logistic regression were used to understand utilisation patterns by working status and some selected sociodemographic parameters. All the results were reported at a 95% confidence interval.

Results: We have used the data from the first wave of longitudinal ageing study of India (LASI) with a sample of 22,680 older persons 60 years and above. The study identified that 50 per cent of the working elderly access private service; however, 26 per cent access public healthcare services. It was found that working status of the elderly alone did not influence access to healthcare services, but education is also an essential indicator for utilising healthcare services. Further, factors such as gender, marital status, religion, wealth, tobacco usage, self-rated health, ADL and IADL were significant contributors to utilising healthcare services in the elderly.

Conclusion: This study suggests that working status and other sociodemographic indicators are associated with the utilisation of healthcare services, highlighting that increasing health needs among the elderly requires strengthening the quality and appropriate public investment in health.

Background

Healthy ageing is a fundamental aspect of elderly well-being. The ageing population has triggered societal upheavals affecting nearly every element of society, including all the labour and financial markets [1], demand for goods and services [2], family patterns [3,4], social support [5], and healthcare settings [6,7]. Globally, all nations have witnessed a remarkable increase in the size and proportion of the greying population. The global population grows over time despite the reducing fertility rate [8]. The World Population Prospect, 2019 projected the global population to reach 8.5 billion in 2030, 9.7 billion in 2050 and 10.9 billion in 2100. Besides, the elderly population aged 65 years and above have outnumbered children under age five [9]. Further, the projection indicated that by 2050 there would be more than twice as many persons above 65 as children under five, in addition, more likely to surpass the number of adolescents and youth aged 15 to 24 years [9]. Similarly, in low- and middle-income countries such as India, the changing demographic composition is a crucial source of concern. As per the 2011 census, individuals aged 60 and above contributed for 8.6 per cent of the overall Indian population, counting 103 million older people, a figure expected to grow to 19.5 per cent (319 million) by 2050 [9]. Further, it is reported that the older adult population aged above 45 will constitute over 40 per cent of India's population by 2050.

The burgeoning elderly population in India, caused by the decline in fertility and increased life expectancy, eventually increase old-age dependency that transcends to disease burden over the public healthcare system [10]. The rising disease burden of the aged raises the need for healthcare facilities and staff, and the paucity of social security provisions for the elderly exacerbates the problem. Lack of adequate health infrastructure and sustainable financial condition, the elderly with varied social and economic factors, and patients suffering from

communicable, non-communicable, and infectious maladies all constituted significant barriers to healthcare utilisation [7].

In addition, studies have also identified how utilisation of healthcare services among the elderly mainly depends on the availability, affordability, and quality of healthcare services [10,11]. However, it becomes pertinent to evaluate the socio-demographic and economic factors such as livelihood pattern, age, gender, religion, marital status, education qualification, household conditions, basic activities for daily living (ADL) and consumption of smokeless or non-smokeless tobacco. Previous studies have identified that utilisation varies with the elderly's working and livelihood patterns. To date, research on healthcare utilisation has primarily concentrated on the adult population, and comparatively a little research is available on the older population. The capacity to acquire the cost of healthcare and the financial viability depends mainly on the livelihood pattern of the elderly. Hence, it is crucial to know how the utilisation of services varies across India's working and non-working elderly population. It is needed to evaluate the current condition of healthcare utilisation based on working status. Against this backdrop, Indian older adults keep working beyond the traditional retirement age of 60–65 years of age. With this demographic transition, it becomes crucial to assess the influence of working status on healthcare utilisation among Indian older adults.

Material And Methods

Data

Data has been drawn from first wave of longitudinal ageing survey of India (LASI) conducted in 2017-18 across all the 35 states (except Sikkim) and union territories (UTs) in India. The LASI survey adopted a multistage probability cluster sampling to collect the information on 45 years and above older adults in India. The survey collected nationally represented data on migration, health and well-being, self-reported morbidities and healthcare utilization. Besides the detailed information pertaining to the respondent's demographic and socio-economic characteristics.

The survey collected a sample of 72,250 individual aged 45 years and above, however, our study limited 22,680 individuals aged 60 years and above. In addition, our study sample considered to the individual based on their working status (working or not working).

Study Variables

Response Variable

The response variable for this study is healthcare utilization viz. public, private and others. In addition, public healthcare facilities included health post/sub-centres, Primary health center/Urban Health Center, Community health center, District / Sub-district hospital, Government/tertiary hospital and Govt. AYUSH hospital. Further, private healthcare facilities included Private hospital/nursing home, Private clinic (OPD based services), NGO/Charity/Trust/Church-run hospital, and Private AYUSH hospital whereas others healthcare facilities included Health camp, Mobile healthcare unit, Pharmacy/drugstore and, Home visit (IIPS, 2017). Moreover, the response variable was estimated based on respondent's working status. We have also considered another response variable "visited to different types of healthcare providers in last 12 months" to make some graphical presentation.

Predictors

Predictors for this study are age (60-69 and 70+), gender (male and female), marital status (currently married, never married and, divorced/separated/deserted), religion (Hindu, Muslim and, others), education (no education, below primary, primary, secondary, and higher), wealth index (poorest, poorer, middle, richer, and richest), use of tobacco (yes and no), self-rated health (poor and good), ADL disability (severe, moderate and no ADL disability), and IADL disability (severe, moderate, and no IADL disability).

Statistical Analysis

Bi-variate percentage distribution was used to estimate the prevalence of healthcare utilization (private, public, and others) among working and non-working elderly by selected demographic and health parameters. In addition, we have also estimated the prevalence of visiting healthcare providers in last 12 months, reasons for not visiting healthcare providers, and reasons for not taking treatments. Multivariate logistic regression technique was used to estimate the likelihood effect of socio-demographic and health parameters on public, private and others healthcare utilization among working and non-working elderly. The equation for binary logistic regression is given below,

$$\log \log \left(\frac{p_i}{1 - p_i} \right) = \text{logit}(p_i) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n$$

In above regression equation, p_i is the probability of being perceived as communicable or non-communicable diseases, x_1, x_2, \dots, x_n are the predictors, β_0 is the intercept and $\beta_1, \beta_2, \dots, \beta_n$ are the coefficients.

Results

Table 1 shows the prevalence of healthcare utilisation among the elderly by their current working status in different socioeconomic and demographic parameters.

Amongst the working elderly, nearly half of the 70 plus elderly availed healthcare facilities in private service whereas only 26 per cent availed in the public service. There was no substantial difference between the male and female elderly availing healthcare facility in private service. However, the same differed by around two per cent in the case of public services, 24 per cent and 26 per cent respectively. Around 50 per cent of the working and never married elderly and 40 per cent of working divorced/separated/ never married elderly availed healthcare from some other source of healthcare.

Out of all working older adults, 25 per cent used private and 41 per cent some other mode of health service. Out of all the non-working older adults, around 56 per cent availed private healthcare facilities, 26 per cent availed public healthcare facilities, and 34 per cent availed another mode of healthcare services, in the 70 plus non-working age group, 56 per cent of people availed themselves healthcare in some private facility care. Many non-working Muslim older adults availed themselves healthcare in some private facility (60 per cent against 55 per cent). Among the non-working older adults having a higher level of education, 63 per cent had availed healthcare in some private facility, the same for older adults having no education was 54 per cent. Only 29 per cent of the older adults from the poorest wealth quintile availed healthcare at some public facility, the same for the private

hospital was relatively high, 45 per cent. Out of all non-working elderly having severe ADL, 54 per cent and 24 per cent preferred private and public healthcare facilities regularly.

Table 2 shows the logistic regression results of healthcare utilisation among the elderly by their current working status in different socioeconomic and demographic parameters.

Compared to males, working female older adults were 23 per cent more likely to use private healthcare facilities for themselves. Compared to currently married working older adults, never married working older adults were highly likely to be availing public healthcare facilities. Additionally, compared to the currently married working elderly, older adults working and divorced/separated/deserted were 18 per cent more likely to avail a public healthcare facility. Compared to Hindu working older adults, Muslim older adults were 64 per cent more likely to avail themselves of healthcare in a private facility. Compared to working Hindu older adults, Muslim older adults were 34 per cent less likely to avail healthcare facilities in other healthcare facilities. Compared to working older adults having no education, primarily educated working older adults were 32 per cent less likely to be availing of another form of a healthcare facility.

Compared to non-working male older adults, non-working female older adults were 27 per cent more likely to use private healthcare facilities. Compared to currently married non-working older, older adults who were not working and divorced/separated/deserted were 27 per cent less likely to avail a private healthcare facility. Compared to Hindu non-working older adults, Muslim non-working older adults were 23 per cent more likely to avail themselves healthcare in private facilities. Compared to non-working Hindu older adults, Muslim older adults were 25 per cent less likely to avail healthcare facilities in other healthcare facilities. Compared to non-working older adults residing in an urban area, rural non-working older adults were 17 per cent more likely to avail themselves of private healthcare facilities.

Compared to non-working older adults having no education, primarily educated working older adults were 26 per cent more likely to be availing public form of a healthcare facility. Similarly, in comparison, non-working older adults having no education, secondary and higher educated elderly were 23 per cent and 63 per cent less likely to be availing public form of a healthcare facility. Compared to non-working older adults from the poorest wealth quintile, older adults from the wealthiest quintile were 47 per cent less likely to be availing of another type of healthcare facility. Non-working older adults with no ADL were 28 per cent less likely to have availed healthcare in another healthcare facility than those with severe ADL.

Figure 1 shows the comparison of working and non-working older adults who have consulted doctors in the last 12 months across various wealth quintiles. Among the richest working and non-working older adults, there was around a ten-percentage point difference in the prevalence of consulting doctors in the last 12 months. As for the older adults from the poorest wealth quintile, their prevalence of working and non-working adults visiting a hospital in the past 12 months was 50 per cent and 42 per cent, respectively.

Figure 2 shows the line graph comparison of older adults who had consulted an AYUSH practitioner in the last 12 months across the various quintiles of wealth. Amongst the poorest wealth quintile, the prevalence for consulting AYUSH was almost equal across both working and non-working older adults (around 8%). The older adults of the middle-income quintile also had an equal prevalence of consulting AYUSH for medical needs (8%).

Figure 3 shows the comparison of working and non-working older adults who have consulted dentists in the last 12 months across various wealth quintiles. Amongst the poorest wealth quintile, only 0.41 per cent of the non-working older adults consulted a dentist in the last 12 months; the same for working older adults was almost double (0.82%).

Figure 4 shows the line graph comparison of older adults who had consulted a nurse/ midwife in the last 12 months across the various quintiles of wealth. In the middle wealth quintile, around 0.67 per cent and 0.79 per cent of the non-working and working elderly respectively had consulted a nurse or midwife in the last 12 months. At the same time, around 1.08 per cent of the older adults and 0.51 per cent of non-working and working older adults from the wealthiest quintile had consulted a nurse or midwife.

Figure 5 compares working and non-working older adults who have had physiotherapists in the last 12 months across various wealth quintiles. Among the richest working and non-working older adults, there was around a 0.2 per cent point difference in the prevalence of consulting doctors in the last 12 months. As for the older adults from the poorest wealth quintile, their prevalence of working and non-working adults visiting a hospital in the past 12 months was equal (0.2% only).

Figure 6 shows the line graph comparison of older adults who had consulted a pharmacist in the last 12 months across the various quintiles of wealth. Amongst the poorest wealth quintile, the prevalence for consulting one was almost equal across both working and non-working older adults (around 10%). The older adults of the middle-income quintile also had an approximately equal prevalence of consulting a pharmacist for medical needs, 10.6 and 10.8 per cent, respectively.

Figure 7 shows the line graph comparison of older adults who had consulted a traditional health practitioner in the last 12 months across the various quintiles of wealth. In the middle wealth quintile, around 7.4 per cent and 9 per cent of the non-working and working elderly respectively had consulted traditional healthcare last 12 months. At the same time, around 4.5 per cent of the older adults and 6.9 per cent of non-working and working older adults from the wealthiest quintile had consulted a traditional medical practitioner.

Figure 8 shows the line graph comparison of older adults who had consulted other healthcare personnel in the last 12 months across the various quintiles of wealth. Older adults from the poorest wealth quintile had a large percentage of older adults, both working (6.6%) and non-working (6.4%) consulting the other medical practitioners for their health needs.

Table 3 shows the reason for the working and non-working older adults for the last visit to the healthcare facility. Amongst the working older adults, around 12 per cent had visited for a preventive check-up, 80 per cent had visited due to sickness and 13 per cent for regular treatment or follow-up. Among the non-working older adults, around 12 per cent visited healthcare for preventive check-ups, 21 per cent for regular treatment/ follow-up visits and around 75 per cent for sickness.

Table 4 shows the various reasons for working and non-working older adults not going for treatment. Around 75 per cent of working older adults did not go for a check-up because they did not fall sick, around 10 per cent because the illness was not serious, 7 per cent did not go because they had medicine at home, and 2 per cent did not because they did not have money and the cost was high, and another 2 per cent did not go for other reasons. Amongst the non-working older adults, around 71 per cent did not go for treatment because they did not get sick,

10 per cent did not go because the illness was not serious, 11 per cent because they had medicine at home and around 3 per cent because they did not have enough financial stability.

Discussion

Population ageing substantially reshapes healthcare demand. Any older adult's working status and financial condition influence proper healthcare utilisation. The study is one of the few attempts to find the prevalence, nature and factors associated with health care utilisation among older adults using the LASI data. The country's healthcare delivery system has undergone a remarkable change over the past few decades; new improvised methods have primarily transformed the patterns of care provided. Health status and the need for healthcare services to improve or maintain health are significant determinants of healthcare utilisation. This study put forward several intriguing findings. The analysis revealed that working status itself did not appear to influence healthcare utilisation of Indian older adults. The prevalence of older adults using private health care was always higher than the public health care system. This was also discussed in a Japanese study by Tokuda and other researchers (2008), which also speaks to the fact that private hospitals have better quality equipment [13]. Doctors treat patients in a better manner, and that is the reason for the preference [14]. On contrary, public health care facilities are perceived to have a poor quality of services, owing to the poor quality of services, ailing older adults' resort to avail private healthcare services putting a considerable burden on their expenses even when they cannot afford it [11,15,16].

The results show that the working older adults from lower-income groups availed healthcare utilisation less than their counterparts. A plausible explanation for this is that working older adults belong to two extreme classes, one being well off and working post-retirement at their own will and convenience; however, the others are working without a choice, aiming for sustenance. The latter are in the labour market because they are poor and marginalised classes of the society working in farms, as labourers, rickshaw pullers etc. [17]. Due to their work, their disease pattern would be very different from the older adults who work by choice and even the non-working classes. They tend to work physically more, which keeps them physically fit and eventually less prone to various poor lifestyle-induced diseases. This further also keeps them active and aids in performing their ADL and IADL without much interruption. Another explanation of low healthcare utilisation could also be these disadvantaged groups' ignorance towards their health [18,19].

The results noted that education is a significant predictor of health care utilisation. It is in concordance with the results of previous studies [20,21]. The probability of seeking medical treatment is higher due to accompanied awareness with increasing education. This may be attributed to the fact that educated older adults better understand the need of seeking medical care in the event of them being unwell. They always look for quality healthcare which is presumed to be assured in private healthcare options.

Several works of the literature suggest that women tend to take their health less seriously, try to avoid hospitalisation costs and prefer home remedies for their illnesses. However, the results of the study show that female older adults were more likely to seek healthcare as compared to their male counterparts this draws attention to the fact that women in the 60 plus age group have more morbidities and health complications as compared to males; this goes in line with findings of studies that suggest that women face a higher burden of diseases as compared to men owing to weak bodies, poor nutrition and biologically weak [22, 23].

The study further emphasises the role of household wealth in health care utilisation. The results also show that independent of working status, those who prefer public facilities mainly belong to poor and marginalised groups. Many studies have underscored the influence that the economic status exerts on an individual seeking medical care. Socioeconomic advancements are significant drivers of health transition [24,25,26]. People having better economic status have the privilege to choose better healthcare [27,28]. Barriers in receiving appropriate care primarily exist within low-income groups, higher income group people have secured old-age, insurance, and income sources.

It is observed that the rural working older adults were more likely to avail public healthcare facilities. This observation has also been reported by Pariyo et al. (2009) in their Uganda study that rural residents are more likely to use public health facilities [29]. Nonetheless, in the current study, the non-working rural adults were more likely to use private healthcare facilities. The various nuances to this could be the wide variation in healthcare utilisation among older adults. This essentially points to the inadequate healthcare provided in rural areas of the country, where people are left with no option but to avail private healthcare facilities [11].

An older person living alone or widowed may be disadvantaged in obtaining necessary healthcare. Loneliness affects social relations, makes them feel unwanted alone, and isolates them in shaping health and the use of healthcare services. Married elderly tends to feel more emotionally, financially secure, well taken care of compared to others, and hence their health care utilisation behaviour is also better [19,30]. The results of our study show that those who were not married were less likely to avail private healthcare facilities than married ones irrespective of their working status. This study unveils how socioeconomic status and inequality still determine the healthcare utilisation behaviour among older adults in India.

Conclusion

There were no significant differences between the working and non-working participants for those who reported their health as poor and used public mode of healthcare. This implies that working status does not solely affect the type of healthcare utilisation. There are various other factors underplay. Juxtaposing the poor economic status of older adults with their increasing need and age makes them even more susceptible to the inefficient healthcare available. The only way out is to strengthen the quality and more appropriate investment in health. The most crucial step is to increase public investments in health care infrastructure in geriatric care, particularly in rural areas and underdeveloped regions, to facilitate access and quality of care.

Declarations

Ethics approval and consent to participate

The study is based on secondary of LASI (2017-18) and does not include any human intervention. All methods are performed in accordance with the relevant guidelines and regulations. Agencies that conducted the field survey for the data collection have collected a prior consent from the respondent.

Consent for publication: Not applicable

Availability of data and materials: The datasets analyzed during the current study are from Longitudinal Ageing Survey of India (LASI).The data is available to everyone upon request from

Competing interests: None

Funding: None

Authors' contributions: NJN and SK were responsible for planning and designing the manuscript. SK was involved with the analysis of the data. NJN, AC, SK were responsible in writing the paper. NJN and AC were responsible for editing of this paper. All authors have seen and approved the final version of this manuscript.

Acknowledgements: None

Authors' information

Affiliations:

CHRIST (Deemed to be University), Central Campus, Bangalore, IN

Dr. Nayan Jyoti Nath

International Institute for Population Sciences, Govandi East, Mumbai, IN

Aditi Chaudhary, Shubham Kumar

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Tables

Table1: Prevalence of healthcare utilisation among elderly by their current working status in different socioeconomic and demographic parameters

Demographic	Working				Non-working			
	Private	Public	Others	N	Private	Public	Others	N
Age								
60-69	49.3	24.3	42.0	7,131	55.6	26.6	34.2	6,263
70+	52.0	25.7	39.1	2,074	55.9	26.3	34.4	6,994
Gender								
Male	50.0	23.9	42.5	6,210	55.6	26.1	34.2	7,630
Female	49.8	26.0	39.0	2,995	56.0	26.8	34.4	5,627
Marital status								
Currently married	50.6	23.7	41.7	7,042	58.3	25.3	33.0	7,908
Never married	50.7	24.0	50.0	73	41.0	24.1	37.9	109
Divorced/separated/deserted	47.9	27.5	40.1	2,091	52.3	28.0	36.2	5,240
Religion								
Hindu	49.0	25.0	42.1	7,747	55.3	26.3	34.9	11,072
Muslim	60.2	23.1	33.1	911	60.4	29.5	28.6	1,308
Others	45.7	21.0	45.5	547	55.0	23.2	34.8	877
Education								
No Education	48.3	24.8	42.0	5,062	54.0	27.9	35.3	7,328
Below primary	48.6	29.4	41.1	1,147	55.0	30.1	31.1	1,538
Primary	52.7	28.8	34.5	1,112	57.1	31.7	31.5	1,385
Secondary	53.6	19.9	44.2	1,576	58.3	21.3	34.7	2,194
Higher	54.0	11.9	43.0	307	63.4	10.6	35.3	811
Wealth Index								
Poorest	40.6	24.3	47.9	2,024	44.9	28.9	41.1	2,987
Poorer	50.4	24.0	42.9	2,077	52.5	28.7	35.6	2,821
Middle	49.8	26.3	40.0	1,999	56.2	26.4	34.3	2,732
Richer	53.2	22.4	40.3	1,811	62.6	25.7	29.8	2,501
Richest	59.5	26.4	32.4	1,294	66.4	21.0	28.5	2,216
Health-related								
Use of tobacco								

Yes	48.4	23.8	41.6	4,309	55.9	23.7	33.9	7,309
No	51.3	25.2	41.1	4,893	55.5	29.7	34.8	5,941
Self-rated health								
Poor	66.3	33.7	26.9	812	62.2	34.8	27.6	2,481
Good	48.3	23.7	42.8	8,371	54.4	24.5	35.5	10,417
ADL disability								
Severe ADL	51.0	24.0	30.1	24	54.4	24.4	38.5	622
Moderate ADL	52.4	27.5	36.2	1,126	58.0	28.8	30.5	3,139
No ADL	49.6	24.2	42.1	8,051	55.1	25.7	35.3	9,493
IADL disability								
Severe IADL	42.9	23.3	40.6	82	56.0	23.3	36.6	1,120
Moderate IADL	53.1	26.7	39.4	3,152	58.5	29.2	31.7	6,075
No IADL	48.4	23.5	42.4	5,950	52.9	24.1	36.5	6,049
Total	50.0	24.6	41.4	9,307	55.7	26.4	34.3	13,373

Table2: Logistic regression of healthcare utilisation among elderly by their current working status in different socioeconomic and demographic parameters

	Working			Non-working		
	Private	Public	Others	Private	Public	Others
	Odds ratio (CI at 95%)					
Demographic						
Age						
60-69						
70+	1.11 (0.94-1.31)	1.025 (0.86-1.22)	0.89 (0.75-1.05)	1.07 (0.94-1.21)	0.90 (0.78-1.04)	0.99 (0.87-1.12)
Gender						
Male						
Female	1.23** (1.02-1.50)	1.04 (0.86-1.26)	0.76* (0.63-0.92)	1.27*** (1.09-1.48)	0.97 (0.82-1.15)	0.90 (0.77-1.04)
Marital status						
Currently married						
never married	1.02 (0.54-1.92)	1.01** (0.49-2.07)	1.35 (0.69-2.60)	0.55** (0.31-0.98)	0.96 (0.47-1.95)	1.09 (0.63-1.89)
divorced/separated/deserted	0.88 (0.73-1.04)	1.18** (0.98-1.42)	1.00 (0.83-1.19)	0.73*** (0.64-0.84)	1.10 (0.94-1.28)	1.21* (1.05-1.39)
Religion						
Hindu						
Muslim	1.64*** (1.29-2.09)	0.89 (0.70-1.14)	0.66*** (0.51-0.85)	1.23** (1.02-1.47)	1.10 (0.91-1.34)	0.75*** (0.62-0.91)
Others	0.89 (0.69-1.13)	0.78 (0.59-1.03)	1.17 (0.92-1.49)	0.94 (0.76-1.16)	0.88 (0.70-1.25)	1.0 (0.83-1.27)
Residence						
Urban						
Rural	1.11 (0.91-1.37)	1.05* (0.86-1.28)	0.83** (0.68-1.02)	1.17** (0.99-1.37)	1.02 (0.85-1.22)	0.80* (0.68-0.94)
Education						

No Education						
Below primary	1.04 (0.84- 1.30)	1.27** (1.01- 1.61)	0.91 (0.74- 1.41)	1.08 (0.88- 1.33)	1.13 (0.92- 1.40)	0.80** (0.64- 1.00)
Primary	1.26** (1.02- 1.55)	1.24** (1.00- 1.55)	0.68*** (0.55- 0.84)	1.13 (0.91- 1.41)	1.26** (0.98- 1.62)	0.8 (0.68- 1.06)
Secondary	1.38*** (1.11- 1.71)	0.79** (0.62- 0.99)	1.01 (0.81- 2.26)	1.14 (0.94- 1.37)	0.77** (0.62- 0.96)	1.07 (0.88- 1.29)
Higher	1.38** (0.78- 2.42)	0.42*** (0.24- 0.74)	1.05 (0.57- 1.95)	1.26 (0.93- 1.70)	0.37*** (0.26- 0.52)	1.21 (0.90- 1.63)
Wealth Index						
Poorest						
Poorer	1.45*** (1.19- 1.75)	0.96 (0.78- 1.18)	0.84** (0.70- 1.02)	1.37*** (.16-1.63)	1.01 (0.83- 1.22)	0.75*** (0.63- 0.90)
Middle	1.46*** (1.17- 1.80)	1.14 (0.90- 1.43)	0.714*** (0.58- 0.87)	1.55*** (1.30- 1.86)	0.92 (0.76- 1.12)	0.73*** (0.61- 0.88)
Richer	1.59*** (1.28- 1.98)	0.91 (0.73-.14)	0.75** (0.60- 0.93)	2.07*** (1.69- 2.52)	0.92 (0.73- 1.15)	0.57*** (0.47- 0.69)
Richest	2.07*** (1.65- 2.59)	1.20 (0.95- 1.51)	0.50*** (0.40- 0.64)	2.42*** (1.98- 2.95)	0.75 (0.61- 0.93)	0.53*** (0.43- 0.65)
Health-related						
Use of tobacco						
Yes						
No	1.21** (1.03- 1.40)	1.07 (0.91- 1.25)	0.89 (0.77- 1.04)	1.04 (0.60- 0.82)	1.22*** (1.06- 1.41)	1.06 (0.93- 1.20)
Self-rated health						
Poor						
Good	0.48*** (0.37- 0.63)	0.62*** (0.48- 0.80)	1.97*** (1.47- 2.63)	0.70*** (0.60- 0.82)	0.62*** (0.52- 0.73)	1.46*** (1.25- 1.72)
ADL disability						
Severe ADL						
Moderate ADL	0.63 (0.22- 1.80)	0.96 (0.28- 3.21)	1.89 (0.60- 5.94)	1.34 (0.92- 1.94)	1.12 (0.76- 1.64)	0.64** (0.44- 0.94)

No ADL	0.64 (0.22- 1.83)	0.90 (0.27- 3.02)	2.22 (0.70- 6.98)	1.37 (0.94- 1.99)	1.09 (0.74- 1.62)	0.72** (0.49- 1.05)
IADL disability						
Severe IADL						
Moderate IADL	2.27** (1.06- 4.84)	1.33 (0.57- 3.11)	0.58 (0.25- 1.32)	1.03 (0.78- 1.35)	1.56*** (1.17- 2.08)	0.86 (0.65- 1.13)
No IADL	1.84 (0.86- 3.94)	1.23 (0.52- 2.90)	0.61 (0.27- 1.40)	0.75 (0.56- 1.01)	1.36** (1.00- 1.85)	1.07 (0.76- 1.45)

Table 3: Reasons of last visit to the healthcare facility		
	Working	Non-working
Preventive check-up	11.6	12.4
Regular treatment/check-up/routine follow-up visit	13.2	21.0
Sickness	79.6	75.2
Injury/Violence	4.4	3.2
Others	0.0	0.1

Table 4: Reason for not taking treatment

	Working	Non-working
Did not get sick	75.3	71.0
Needed to work	1.0	1.6
Didn't want to give up a day's work	0.4	0.0
Not enough money or cost was too high	2.1	2.8
Treatment was unlikely to be effective	0.2	1.1
Illness was not serious	10.4	10.1
Nobody to accompany	0.1	0.5
No quality facilities available nearby	0.1	0.2
Had medicine at home	7.0	10.7
Family member(s) decided it wasn't re	1.1	0.6
No healthcare facility nearby	0.1	0.3
Other	2.4	1.1

Figures

Figure 1: consulted with doctors in last 12 months

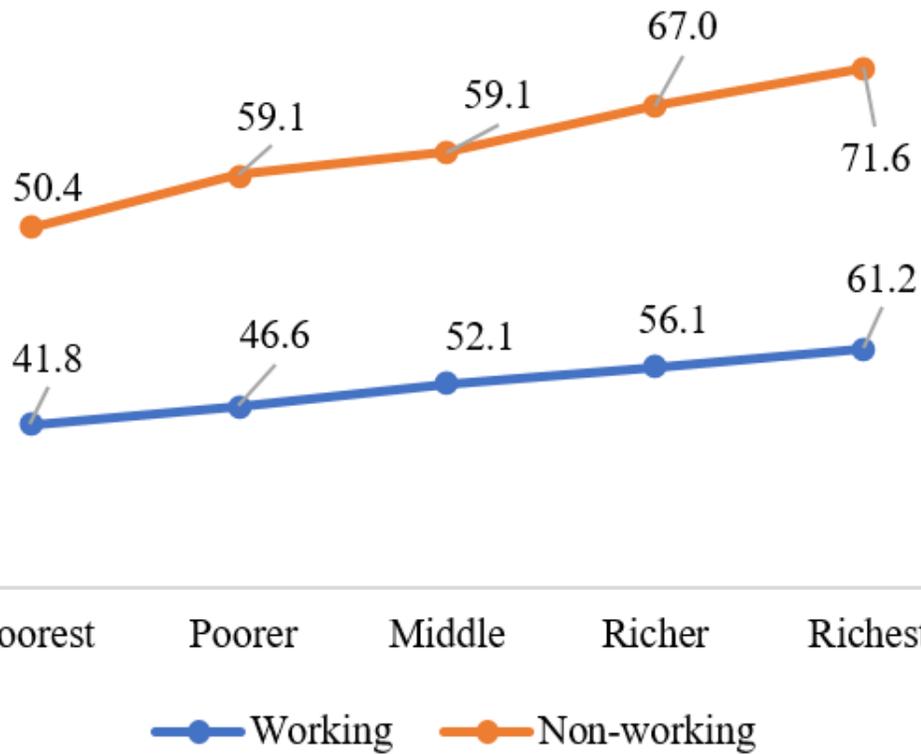


Figure 1

See image above for figure legend

Figure2: consulted with AYUSH practitioner in last 12 months

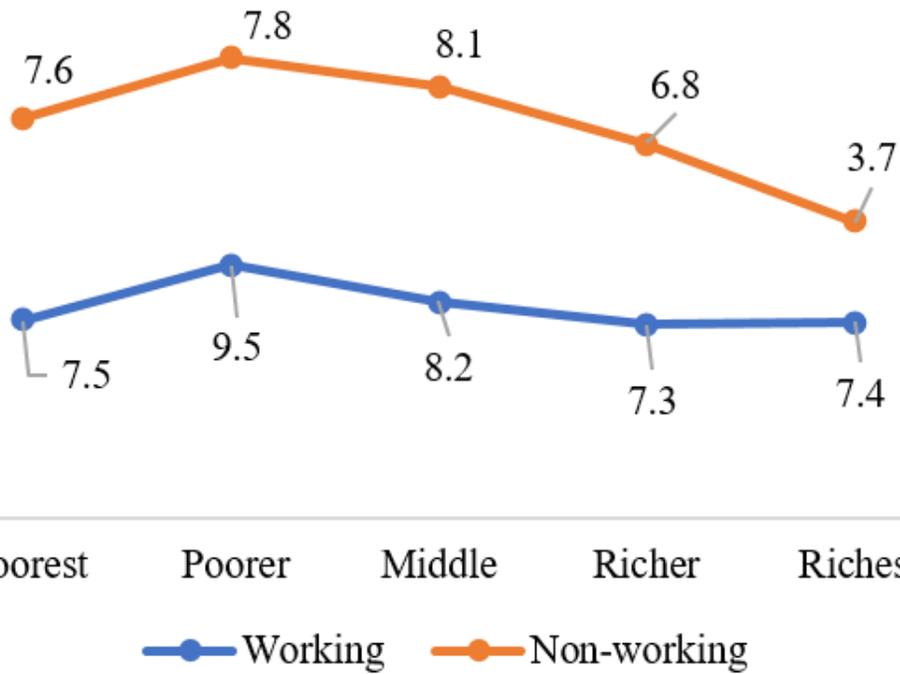


Figure 2

See image above for figure legend

Figure3: consulted with Dentist in last 12 months

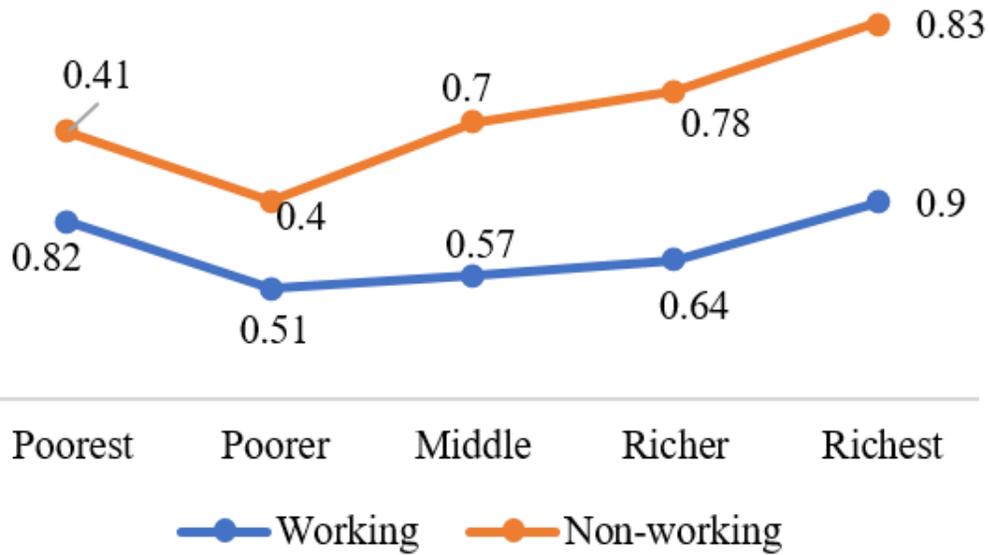


Figure 3

See image above for figure legend

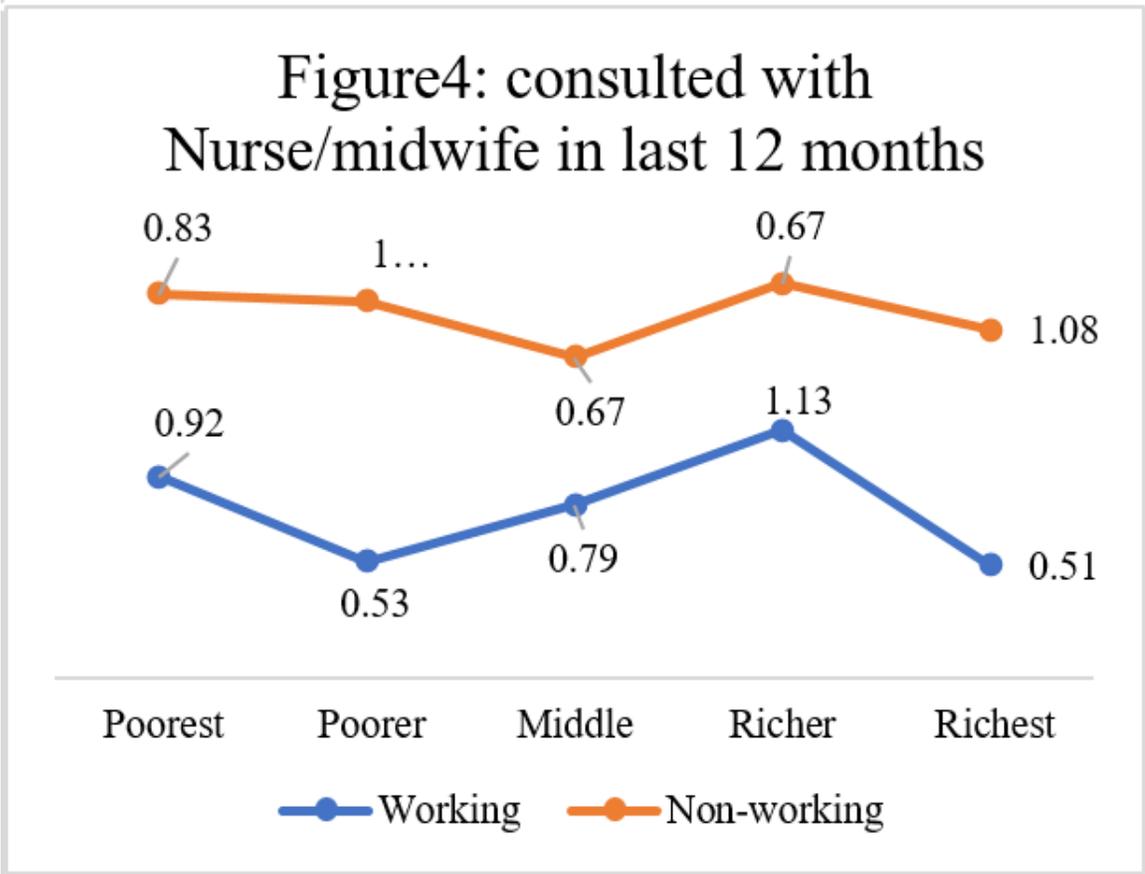


Figure 4

See image above for figure legend

Figure5: consulted with Physiotherapist in last 12 months

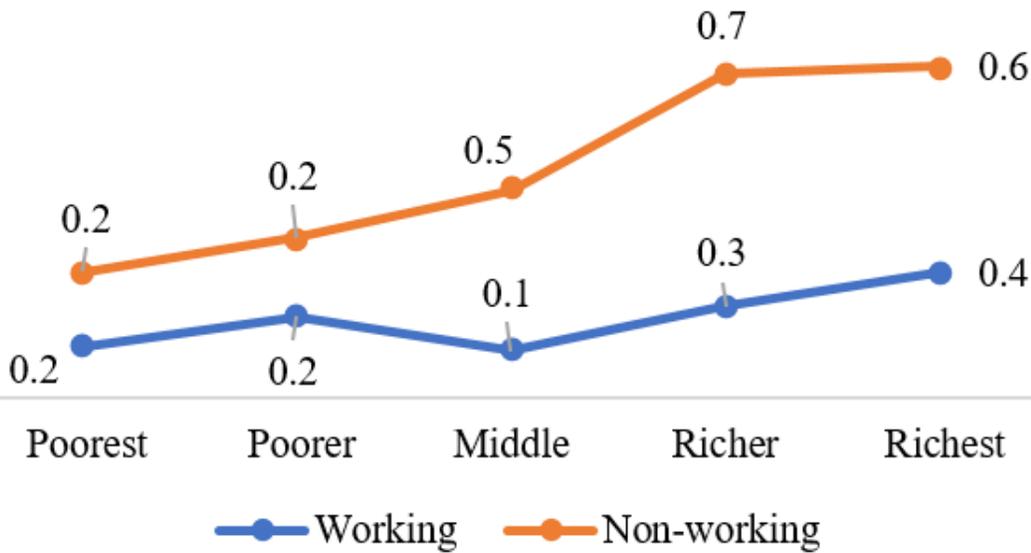


Figure 5

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Figure6: consulted with Pharmacist in last 12 months

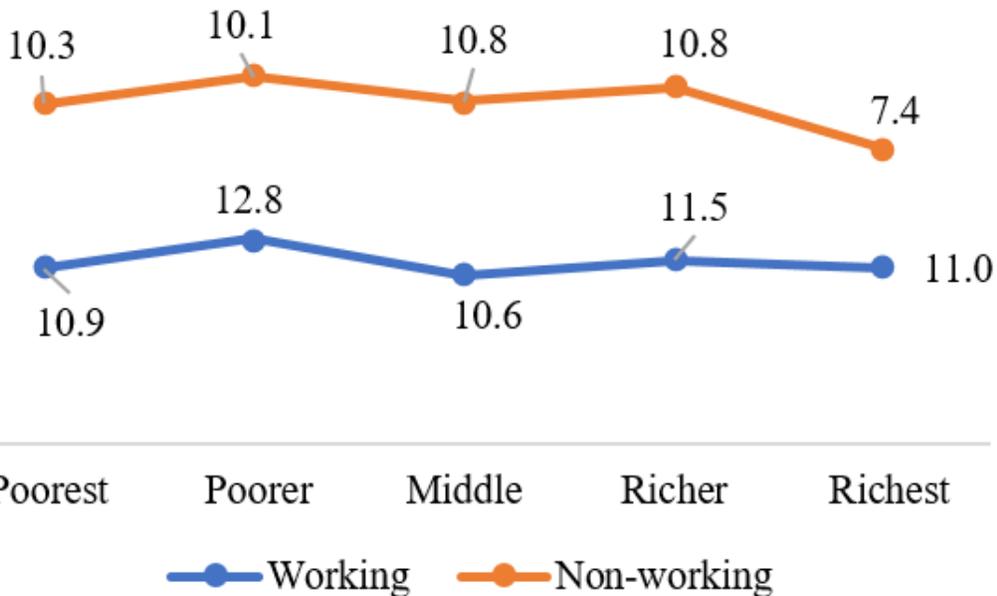


Figure 6

See image above for figure legend

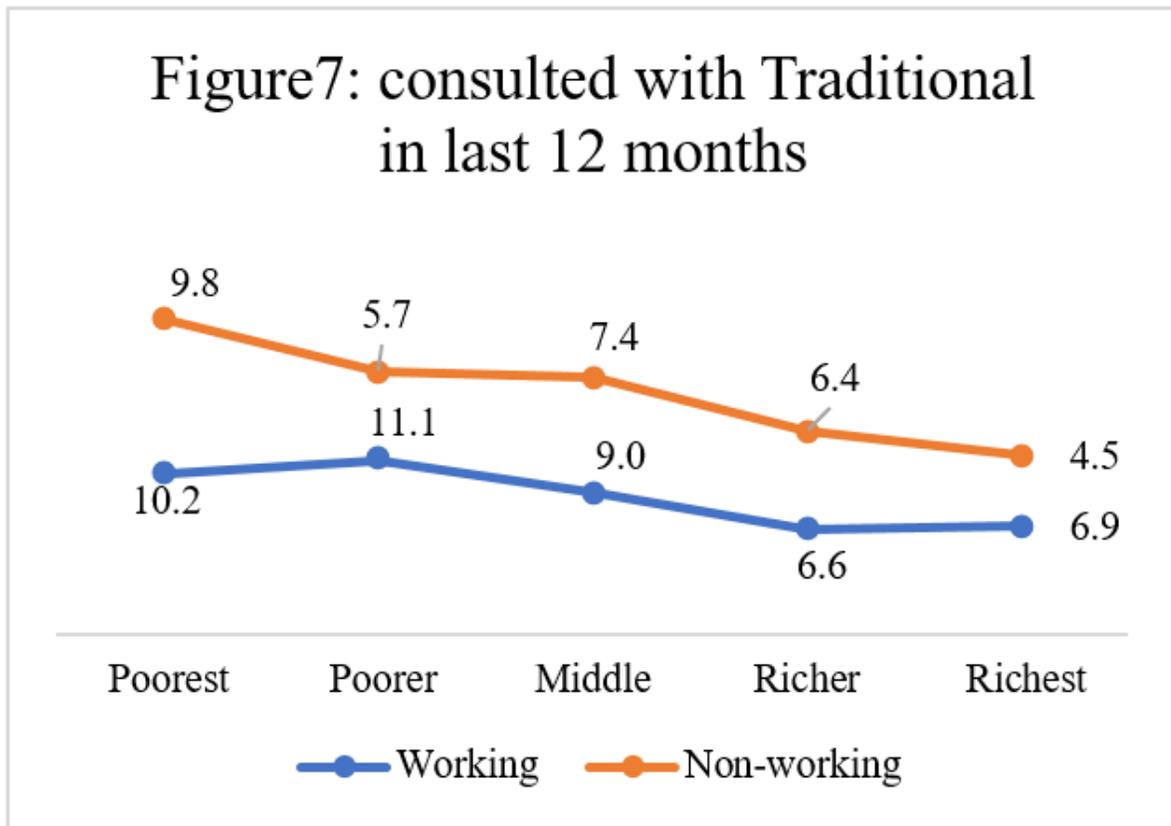


Figure 7

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Figure8: consulted with any others in last 12 months

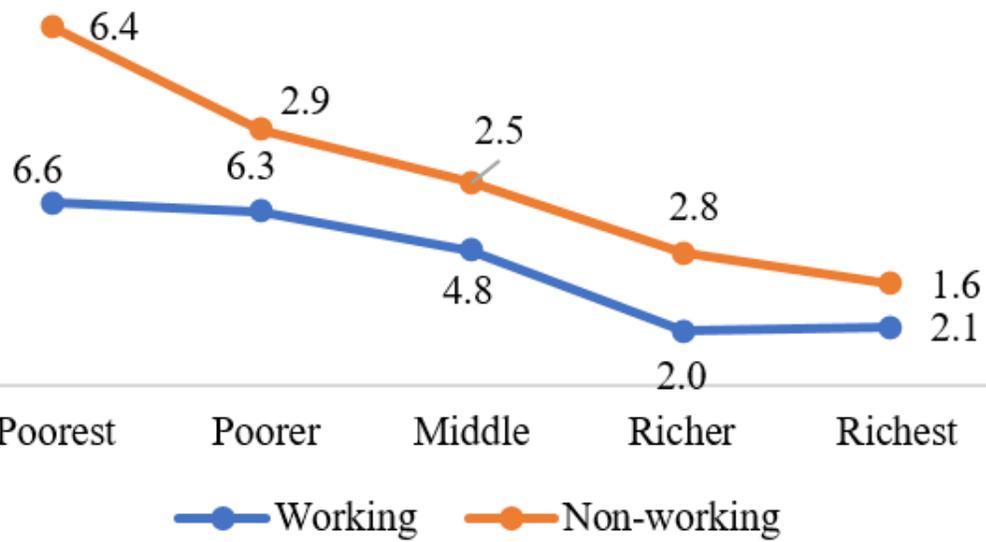


Figure 8

See image above for figure legend