

Public Health Care Utilization by Elderly in India: An Analysis of Major Determinants from LASI Data

As human life expectancy increases, there is a growing imperative to not only extend lifespan but also enhance the quality of life for the elderly. Achieving this goal involves addressing various factors influencing the utilization of healthcare services by the elderly, including knowledge, affordability, availability, and accessibility. The absence of robust health insurance schemes places a considerable financial burden on the elderly, compelling them to bear increased healthcare expenses out-of-pocket, especially if they encounter challenges accessing public health systems. The utilization of healthcare services is intricately woven into the fabric of socio-cultural, economic, and other factors such as the perceived cost and quality of care. According to the Longitudinal Ageing Study in India (LASI survey), 59% of the elderly sought outpatient services within the past year, with nearly two-thirds opting for private healthcare providers. Remarkably, only one-fourth of the elderly sought outpatient care from public health facilities in India. It is noteworthy that marginalized segments and individuals from lower economic strata are more inclined to avail themselves of public health systems. To address this scenario, enhancing outpatient care at the primary healthcare level emerges as a crucial strategy. This approach holds the potential to effectively cater to the healthcare needs of vulnerable elderly populations, ensuring that increased longevity is accompanied by an improved and sustainable quality of life¹.

The number and proportion of the elderly population (defined as 60 years and above) in India is increasing owing to rapid demographic transition. It is expected that the country will have **193 million elderly persons**, constituting about **13%** of the total population by 2030. The longevity is increasing due to improvements in general health of the population. As a result, an elderly is expected to live for another 18 years after reaching age 60. As we live longer, it is important to ensure that the elderly are able to lead a healthy, fulfilling life. While health status is determined by various economic, social, physiological psychological factors, the very utilization of health care services is equally important. This act of utilization does not exist in silos, it is governed by many factors including knowledge, affordability, availability, and accessibility of the services.

Due to dearth of health insurance scheme, the increased health expenditure in the latter stages of life has to be borne by the elderly out-of-pocket, especially if they are not able to access public health care system. According to a study by the United Nations Population Fund (UNFPA), it was found that 65% of the elderly suffer from chronic morbidities (UNFPA 2012²). This increases out-of-pocket expenditure and often push them to poverty given that they do not have dependable social security system in the country, that can cover the income deficit. With the increase in number of elderly persons, the demand for appropriate health care system is going to be pivotal upcoming decades. Therefore, the utilisation of public health system is *critical* for ensuring better living standard of elderly in India.

A recent study based on 75th round of National Sample Survey 2017-18, indicated that only *one-third of the elderly in India utilized health care from public system* (Ranjan and Muraleedharan, 2020³). The Government, in order to increase utilisation, is implementing the National Programme for the Health Care of the Elderly (NPHCE) with an aim to provide preventive, curative, promotional medical care, and rehabilitation for the elderly through healthcare institutions. The utilization of the health care by the elderly is not just limited to the availability of health service providers, either form public or private sector, but is also influenced by various social, economic, cultural, and other factors like distance, cost, and quality of care (Sahoo et. al, 2021⁴).

Health seeking behaviour on the other hand has been found to vary by virtue of the background characteristics of the population. This stands true for elderly persons as well. The implications of this however then lands on accessing services from government or private sectors. Generally, the cost of services is relatively higher in private sector, it is assumed that those who can afford may like to avail services from private providers. There are several studies on the utilization of health care by the elderly; yet it is important to investigate what factors contribute utilization of services from a public health facility vis-à-vis from the private facility. Considering the ever-growing demand of health services, the present study provides insight about the segment of the elderly, who are more likely to avail public health facility, that will be useful for evidence-based policy and programmatic responses.

¹ An earlier version of the analysis was presented at IUSSP Conference in December 2021.

² UNFPA, (2012), 'Report on the Status of Elderly in Select States of India, 2011' Building a Knowledge Base of Population Ageing in India, New Delhi

³ Ranjan, A and Muraleedharan, V. R (2020) 'Equity and elderly health in India: reflections from 75th round National Sample Survey, 2017–18, amidst the COVID-19 pandemic', Globalization and Health (2020) 16:93 <https://doi.org/10.1186/s12992-020-00619-7>

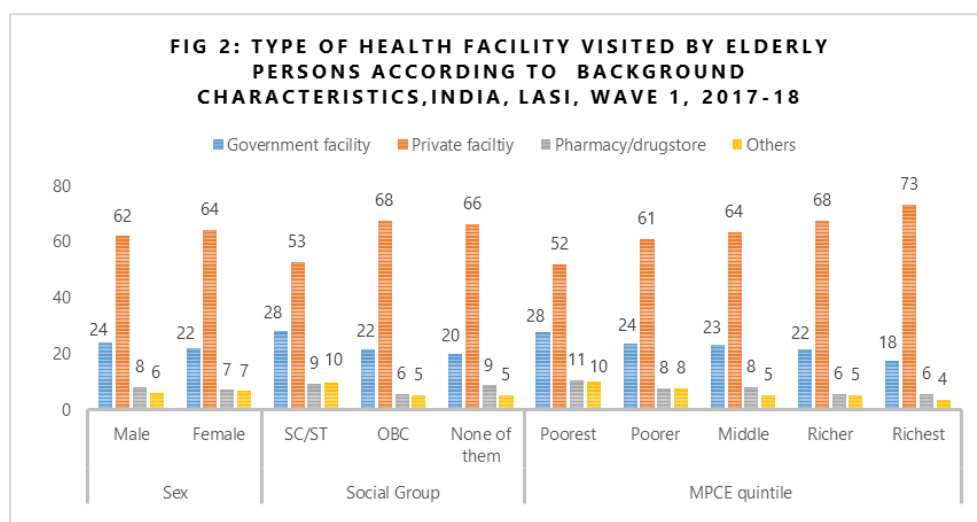
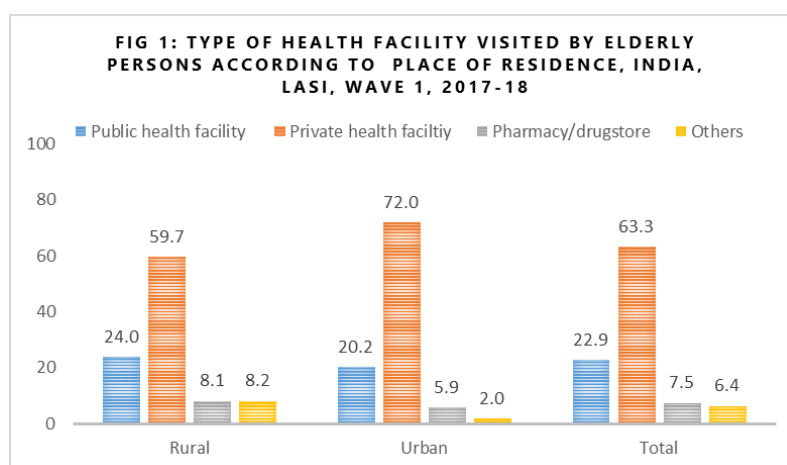
⁴ H Sahoo, D Govil, K S James, RD Prasad (2021), 'Health Issues, Health Care Utilization and Health Care Expenditure among Elderly in India: Thematic Review of Literature', Aging and Health Research, 2021

The focus of this paper is to investigate determining factors, which distinguishes availing services from public versus private sectors among those who have utilized health services in the recent past in India. The paper analyses data from Longitudinal Ageing Survey in India (LASI, Wave 1, 2017-18), which is a nationally and state representative longitudinal study of ageing and health. The study covered a sample of 42,949 households, 72,250 individuals (aged 45 years and above) and 31,464 elderly persons aged 60 years and above from 35 states and Union Territories of India. Depending upon the nature of this study, the analysis is based on the responses of 17,518 elderly, who had availed outpatient services from any type of health facility in the last 12 months prior to the survey.

The study was carried out using the unit level data obtained from the International Institute for Population Sciences (IIPS), Mumbai who had conducted the survey. The survey weights were applied while obtaining the results. Binomial logistic regression analysis was carried out to study the log odds of availing outpatient services by the elderly from the public health facility.

Utilisation of Outpatient Services

- ◆ More than half of the elderly in India (59%) had utilized outpatient services during last 12 month prior to survey in India. Among these, about two-thirds (63%) had sought the services from a private facility or provider, while 23% had availed services from the public health facilities. Around 7% of the elderly sought outpatient care from pharmacy/drug store and rest 6% sought treatment from other sources such as NGO / Trust Hospital, Mobile Health Care etc. (Fig 1).
- ◆ The health seeking behaviour differed by place of residence with more elderly in urban areas (72%) using private health facility as compared to rural areas (60%). The use of public health facilities was lowest in urban areas (20%) while 24% of the elderly sought services from public health facilities in rural areas.
- ◆ There were no major differences in the behaviour of availing services from public health facilities by the virtue of sex of the elderly persons. However, there was a slightly higher proportion of elderly persons belonging to Scheduled Tribes and Scheduled Castes as well as from the poorest quintile of Monthly Per Capita Expenditure (MPCE) that did public health facilities more often as compared to their counterparts (Fig 2).



Determinants of Public Health Care Utilization

After controlling for the socio-economic and background characteristics variables in the model, a multivariate analysis was carried out to assess the net association of the utilising public health facilities. The dependent variable has dichotomous category, with availing outpatient care from public health facility categorised as 1 and private and other sectors categorised as 0. *Table 1 brings out the results of logistic regression analysis and the odds ratios.* The value of odds ratio greater than 1 shows the likelihood of an elderly to utilise the healthcare services from public health system whereas and odds ratio of less than 1 shows greater likelihood of them utilising private or other sectors for outpatient care.

- ◆ The analysis suggests that the odds of an elderly being male, belonging to SC/ST caste category, Muslim, and Christian religion, not currently married are more likely to avail outpatient care from public health facilities.
- ◆ Those elderly that have been covered under any social security scheme and holding any insurance policy are more likely to avail health services from public health facilities.
- ◆ After controlling for other variables in the model, elderly living in either rural or urban areas and their living arrangement did not show any significant effect on utilizing services either from public or private facility.
- ◆ As expected, the economic factor has a negative association with availing healthcare services from the Government system and elderly belonging to lower Monthly Per-capita Consumer Expenditure (MPCE) quintiles are more likely to utilize public facilities for outpatient care. Those who are either currently working or receiving any pension are more likely to seek outpatient services from private facilities as compared to those who have never worked.

Characteristics	Odds ratio	Characteristics	Odds ratio
Gender		Marital Status	
Male®		Not currently married®	
Female	0.762***	Currently married	0.857***
Residence		Work status	
Rural®		Never worked®	
Urban	1.034	Currently working/receiving pension	0.837**
Religion		Worked in past but currently not working/receiving pension	0.850**
Hindu®		Living arrangements	
Muslim	1.740***	Living alone®	
Christian	1.560***	living with spouse and/or others	0.903
Others	0.674***	Living with children/others	0.876
Social group		Enrolled in any social security scheme	
SC/ST®		No®	
Other backward class	0.623***	Yes	1.256***
None of them	0.664***	Covered with health insurance	
Wealth status		No®	
Richest®		Yes	1.382***
Poorest	1.491***		
Poorer	1.264***		
Middle	1.198**		
Richer	1.088		

Note: ® Reference category; **p<0.05; ***p≤000

The findings of the multivariate analysis have identified various vulnerable segments of the elderly population, who are more likely to be dependent on the public health system. Thereby, the public health system should also prioritise these segments for targeted elderly health care, for example, categories such as those belonging to lower economic strata, women elderly and marginalised communities in terms of caste and religion. Government of India's flagship programme under 'Aayushman Bharat' scheme is an attempt to this direction, however, it is only for hospitalization and specialised care, whereas the need of the hour is to design and implement programme that caters to an easy access of the public healthcare systems for the vulnerable segments of the elderly.

Differential by States

There is a wide geographical variation in healthcare utilization from public health facilities by the elderly, ranging from 79% in Arunachal Pradesh to as low as 9.7% in Bihar (Fig 3). The figure also depicts percentage of elderly in the total population. Kerala with more than 16% of its population in this age category, which is the highest, however, only 42% utilize healthcare services from a public health facility. In nine states, it ranges from 20 – 50%, and in eight states, less than 20% of the elderly utilise public health care facilities for their outpatient service needs.

