

Editorial**Longitudinal Ageing Study (LASI): A National Landmark for Understanding India's Ageing Population****Running Title:** Understanding India's Ageing PopulationAmaljith A B¹, Divya Sharma¹, Tanvi Kiran¹¹Department of Community Medicine and School of Public Health, PGIMER, Chandigarh**Corresponding Author:** Dr. Tanvi Kiran, Assistant Professor, Department of Community Medicine and School of Public Health, PGIMER, Chandigarh, Email- tanvikiran3@yahoo.com**Abstract**

With India's population ageing, adult health challenges are becoming more and more prevalent. LASI is an important national milestone in scientific study that aids in this understanding. The Ministry of Health and Family Welfare (MoHFW) of the Government of India established LASI to provide an essential framework for research and policy-making on ageing in India. At the national and sub-national levels, research on demographics, health, the economics of the ageing transition, and other factors will be aided by the longitudinal data from the LASI. The underlying (physical, emotional, economic, and social) problems that older persons face were identified with the help of this study. It will assist in addressing these problems and creating a strategy to lessen their effects on senior citizens.

Keywords: Ageing, LASI, Elderly, Survey**Introduction**

The Longitudinal Ageing Study in India (LASI) is a detailed national scientific study of factors influencing India's ageing population's health, economic, and social well-being[1]. The International Institute for Population Sciences (IIPS) in India, the University of Southern California (USC), and the Harvard T.H. Chan School of Public Health (HSPH) collaborated on the LASI, a nationally representative panel survey of adults aged 45 and older and their spouses in India[2],[3]. It is the most extensive health and retirement study in the world[4].

LASI is a significant national milestone in scientific research that helps to understand adult health issues in the ageing population in India. The dramatic shift in the age structure suggested a need for comprehensive data on ageing to have a thorough understating of the process. No survey data covered the topics necessary to understand the ageing process's health, economic, social, and psychological aspects. The inclusion of biomarkers in the dataset also distinguishes it from previous studies, as comprehensive data on health and biomarkers has never been collected. Considering this literature gap, LASI was launched under the Ministry of Health and Family Welfare (MoHFW), Govt. of India[1]. LASI intends to bridge the gap by providing a vital foundation for research and policy-making on ageing in India[1]. The LASI's prime objective is to provide credible and complete scientific evidence based on demographics, household economic status, symptom-based health conditions, chronic health conditions, mental health, functional health, biomarkers, family and social networks, welfare programmes, health insurance and healthcare utilization, work and employment, retirement, satisfaction, and life expectations.

Launched in 2016, LASI conducted its wave 1 survey between April 2017 and December 2018. The LASI wave 1 successfully interviewed a panel sample of 72,250 people aged 45 and above and their spouses, including 31,464 elderly people aged 60 and up and 6,749 people of 75 years and above. The information was gathered from 35 Indian states and union territories (excluding Sikkim)[1],[5]. It was conducted by a research

team of demographers, economists, physicians, sociologists, and specialists in public health and policy, to provide the information required to comprehend the state of India's senior population [6]. The government has decided to conduct follow-up surveys every two years for the next 25 years [6].

The first wave of LASI used an instrument with three schedules: Household Schedules, Individual Schedules, and Community Schedules[7]. The Household Schedule was administered one per selected eligible household. In contrast, the Individual Schedule was administered to all eligible individuals aged 45 and above and their spouses, irrespective of age in the household. The Community Schedule was administered at the community/village/ward level[8]. Responses from the participants were gathered by person-to-person with computer-assisted personal interviewing (CAPI), which also included proxy interviews[2]. The first national wave of the LASI includes detailed information on ageing, economic factors, health status, social connections, social support, family, and life satisfaction to help identify the unique needs, circumstances, and viewpoints of ageing adults in light of shifting social and familial contexts. All the measurements are distinctive and sensitive to the Indian context and have been systematically synchronized as feasible with similar worldwide ageing and retirement surveys[9]. This is done to offer a useful source for comparison and to strive towards presenting a thorough picture of India's population ageing and comparative studies of the ageing of the world's population. LASI has used multistage stratified cluster sample design with four separate selection phases in urban regions and three distinct selection stages in rural areas[9],[10]. A well-versed pilot study including the collection of biomarkers was conducted before the actual survey. The full-scale nationally representative LASI survey was designed and implemented as a result of the successful 2010 LASI pilot survey conducted on a selected sample of 1,600 people aged 45 and older and their spouses in four states[11].

The LASI data highlights the prevalence of chronic diseases rises with age, with older persons (aged 60 and up) having a higher prevalence than those aged 45-59. Undiagnosed and underdiagnosed ailments, such as hypertension, diabetes, and eye impairment, are common. Noncommunicable illnesses are the primary cause of hospitalization among older persons, however only about 20% have health insurance[11]. Gender differences in the health, social, and economic well-being of older adults are evident. Other discrepancies are revealed by the data include site of residence, caste, religion, education, and money all have a significant impact on the well-being of older persons. Because a high proportion of older adults work in the informal sector and are thus ineligible for a pension when they retire or stop working, the problem of consumption surpassing production for this group is aggravated. The data suggests that around 50% older adults are satisfied with their lives,

Significance of LASI

This survey assisted in identifying the underlying (physical, emotional, economic, and social) issues older people are dealing with. It will help in addressing these issues and developing a plan to reduce their impact on older individuals. This survey's biomarker coverage aids in identifying underdiagnosed illnesses in older Indian adults. It has aided in identifying under-researched health issues, including elderly people's depression[9,10]. The LASI data set is a reservoir of information and evidence for policymakers and bureaucrats to make informed policy decisions on the issues of ageing. The LASI data can also be further analyzed by researchers to determine the relationship between the various demographic characteristics of the elderly population and their impact on health status, social and employment status, and economic wellbeing. Additionally, the longitudinal data of the LASI will help in studying the demography, health, economics of ageing transition, and other variables at the national and sub-national levels.

Key findings of LASI wave 1 survey

A way forward

The LASI dataset is a valuable resource for tackling the issue of ageing in India and worldwide. It provides a plethora of data on ageing in India and has the potential to promote ageing research in response to the looming issues of rising population ageing.

Since the follow-up surveys are scheduled in every two years, the tools can be further modified to get detailed information on domains such as health insurance, out of pocket expenditure, etc. The LASI survey is restricted to adults living in households which excludes homeless or adults staying in institutions. The subsequent surveys can also consider including these adults in the sample for a more comprehensive data[9],[12]. The LASI survey can also collect certain information using other sources of data such as medical records or administrative data to reduce the recall bias in the self-reported data[9].

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