सत्यमेव जयते

Government of India

Longitudinal Ageing Study in India (LASI)
Main Wave 1 and 2, 2015-19

An investigation of the economic, physical and social well-being
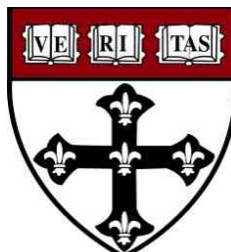of India's growing elderly population

OVERVIEW

(स्थापना / Established in 1956)
बेहतर भविष्य के लिए क्षमता निर्माण
Capacity Building for a Better Future

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LONGITUDINAL AGEING STUDY IN INDIA

OVERVIEW

Changes in Global Demographics

Population ageing is taking place in nearly all the countries of the world. The contours of global population have undergone marked changes over the past several decades. The global share of older people aged 60 years and above increased from 9.2 percent in 1990 to 11.7 percent in 2013 and will reach 21.1 percent by 2050.

Ageing results from decreasing mortality, and, most importantly, declining fertility. This process leads to a relative reduction in the proportion of children and an increase in the share of people in the main working ages and of older persons in the population. Older persons are projected to exceed the number of children for the first time in 2047.

Presently, about two thirds of the world's older persons live in developing countries. Because the older population in less developed regions is growing faster than in the more developed regions, the projections show that older persons will be increasingly concentrated in the less developed regions of the world. By 2050, nearly 8 in 10 of the world's older population will live in the less developed regions.

While global ageing can be seen as a symbol of medical, social, and economic advances and also has major health, social and economic consequences over the past half century, it also represents a significant policy challenge. Population ageing threatens to topple existing insurance and pension systems and create health system overload; therefore calls for review of existing models of healthcare, familial and social support. The phenomenon of global ageing has the potential to fundamentally alter disease burdens, economies and trade, and human migration.

Although some governments have begun to plan for their ageing societies, most have not.

There remains a dire need to raise awareness about the significance of population ageing and its potentially dramatic implications. In addition, gathering robust and internationally harmonized scientific data will prove vital in order to prepare financially, socially, and medically for rapid ageing population.

Ageing in India

With roughly 1.3 billion inhabitants, India is projected to become the world's most populous country within a decade. Currently, the 60+ population accounts for 9% of India's total population, translating into roughly 103 million older people.

Including the preretirement phase (i.e., population in age 45+), the proportion will rise to over 30%, or almost 600 million people. Between 2011 and 2050, the number of oldest old people of age 75 and above is expected to increase by 340%.The old-age support ratio (the number of persons aged 15 to 64 per person aged 65 or older) will also fall dramatically from 13 to 5, largely as a result of fertility decline and increasing life expectancy. Overall, little is known about the total disease burden, public health needs, economic and social implications of the growth of the elderly population in India.

While India is being propelled to a position of international eminence, it faces three main domain of health challenges: first, dealing effectively with unfinished agenda of communicable diseases, maternal and child health, and health systems strengthening; second, dealing with new emerging challenges such as the premature burden of NCDs; and third, dealing with globalization related issues while contributing to the management and shaping of the global policy environment.

However, out of pocket expenditures at the point of service account for more than 70% of health expenditures leading to health vulnerability of older population. India is currently developing policies and establishing health care and social security programmes to support a rapidly ageing population, and with its decentralized policy system, many of these programmes are being developed to be implemented at the state level. Many health policies and social security programmesare being tested.

The rapid rise of India's elderly population, coupled with changing family structures and limited social provisions, presents policy makers with pressing economic, health, and social challenges.

There are several forces driving India's population growth and changing age structure, including an upward trend in life expectancy. An Indian born in 1950, for example, could expect to live for 37 years, whereas today India's life expectancy at birth has nearly doubled to 69 years; by 2050 it is projected to increase to 76 years. This trend reflects significant declines in infant and adult mortality rates and improvements in survival rates at all ages. As a result, India's population will rise from 1.3 billion today to an estimated 1.7 billion by 2050, with a much larger elderly number of around 350 million.

The Longitudinal Ageing Study in India (LASI)

As no sufficiently broad nationally representative dataset is currently available in India, comprehensive new scientific data are needed to conduct analyses of health, economic and social challenges based on population ageing and to formulate mid and long-term policies and programmes to address these and other challenges presented by population ageing. Considering the void in scientific data, the Longitudinal Ageing Study in India (LASI) project is being launched under the aegis of the Ministry of Health and Family Welfare (MoHFW), Government of India. LASI will contribute greatly to the newly launched the National Programme for Health Care of the Elderly (NPHCE) and the social and economic security programmes planned to be initiated by the Ministry of Social Justice and Empowerment (MoSJE). LASI will help in expanding the scope of health and social security policy and programmes. We propose to disseminate the results to the entire policy and research community in India and around the world.

The International Institute for Population Sciences (IIPS), Mumbai in collaboration with Harvard T. H. Chan School of Public Health (HSPH) and University of Southern California (USC), USA is undertaking the "The Longitudinal Ageing Study in India (2015-19)". LASI is jointly funded by the Ministry of Health and Family Welfare (MoHFW) and Ministry of Social Justice and Empowerment (MoSJE), Government of India, the United States' National Institute on Ageing, and the United Nations Population Fund-India.

The Longitudinal Ageing Study in India (LASI) is a full–scale, national survey of scientific investigation of the health, economic, social, and determinants and consequences of population ageing in India. LASI is a nationally representative survey of 60,250 older adults in age 45+ in India in all the states and union territories. LASI will be conducted every 2 years for the next 25 years. In LASI, internationally harmonized, de-identified panel data will be collected enabling cross-state analyses within India and cross- national analyses of ageing, health, economic status, and social behaviors and lays the foundation for national and state-level policy implication to address the challenges presented by increasing disease burden and population ageing in India.

Scientific Goal of LASI

The main goal of LASI is to collect credible scientific data on burden of disease, functional health, health care and social and economic wellbeing of older adults. LASI data will be collected based on internationally comparable research design, tools and adopt cutting edge scientific methods to provide the foundation for credible and acceptable data – for national policy and long-term scientific research.

LASI Main Objectives

The main objective of LASI is to provide comprehensive longitudinal evidence base on health, social and economic wellbeing of elderly population in India. LASI will provide data on demographics, household economic status, health and biomarkers, health insurance and health care utilization, family and social network, welfare programmes, work and employment, retirement, satisfaction and life expectations. LASI is designed to cover scientific data on four major subject and policy domains of adult and older population of India namely:

1) Health: Disease burden & risk factors (reported and measured)

2) Health care and health care financing

3) Social: Family and social network, Social welfare and security

4) Economic: income, wealth and expenditure

LASI Innovations

LASI is the first dataset in India that will provide a longitudinal database for designing policies and programmes for the older population in the broad domains of social, health and economic wellbeing. LASI adopts the state of the art of large scale survey protocol and field implementation strategies.

LASI Research Design

Representativeness

- National estimates
- State estimates (30 states and 6 UTs)

Study Population

- All persons (men and women) aged 45 and above and their spouses irrespective of ages
- Households with at least one person aged 45+, will cover all age eligible persons in LASI eligible households

Panel Sample size

- 60,250 individuals aged 45 and above and their spouses, which includes 30,192 elderly persons aged 60+ and 6000 oldest-old persons aged 75+

Study type

- Longitudinal - 25 years; First two waves during 2015-19 and; Follow up Interview - every 2 years; 10 Waves until 2040

❖ **Computer-Assisted Personal Interviewing (CAPI):**

The LASI will employ computer-assisted personal interviewing (CAPI) technique and directly to record the responses of survey participants. This method requires field teams to be outfitted with laptop computers, pre-loaded with survey questions asked of respondents in a face-to-face interview. Field teams input responses directly into a laptop computer, thereby limiting data entry processes as well as minimizing data recording and entry errors.

❖ **Comprehensive Range of Biomarkers:**

Another feature of the LASI survey instrument is the collection of biomarkers, which can be

analyzed to provide researchers with quantitative data on health. Biomarkers include: Physiological Assessments - Blood Pressure, Lung Function Test, Vision Tests; Anthropometric Measurements-Height & Weight, Waist & Hip Circumference; Performance Based Measurements-Grip Strength, Balance Tests, Timed walks; Molecular Markers-C-reactive protein, Glycosylated Hemoglobin, Cytomegalovirus, Epstein-Barr Virus. Biomarkers are incorporated to (a) capture health data from a portion of the population that otherwise would not have this type of data recorded; (b) investigate molecular determinants of common health outcomes; and (c) study interactions between biomarkers and other social conditions that may subsequently lead to declines in health outcomes. The inclusion of biomarkers and other health assessments is particularly important for less-developed countries such as India, where access to health care tends to be limited. As a result, undiagnosed diseases are more common than in developed countries.
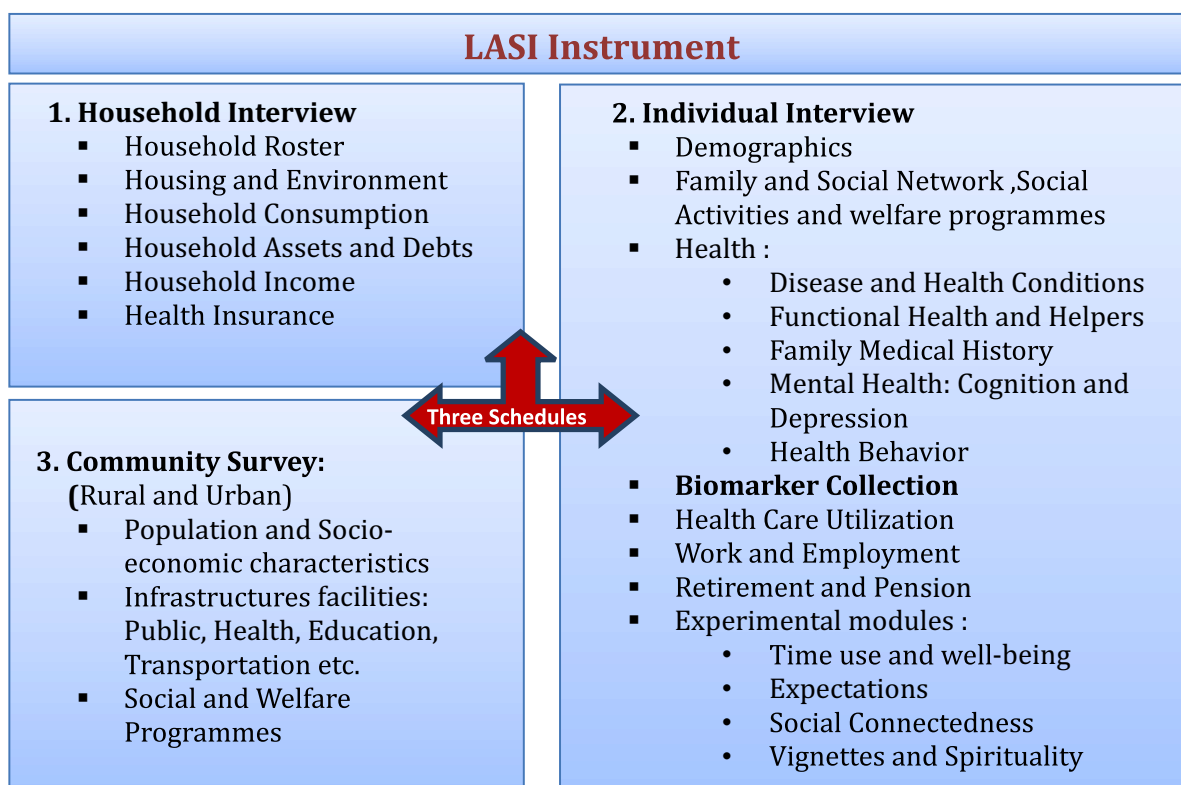
❖ Use of IT-based Technologies :

LASI will use latest IT based technologies including Geographic Information System (GIS), for thematic mapping and community analysis of information at community level. Barcode technology will be used for correct matching and anonymizing data.

LASI Survey Instrument

The LASI instrument has three survey schedules, namely:

i) Community survey administered at village and urban ward level
ii) Household schedule administered at the household level and
iii) Individual schedule administered to each respondent of aged 45+ and his/her spouses

LASI Instrument

1. Household Interview
- Household Roster
- Housing and Environment
- Household Consumption
- Household Assets and Debts
- Household Income
- Health Insurance

3. Community Survey:
(Rural and Urban)
- Population and Socio-economic characteristics
- Infrastructures facilities: Public, Health, Education, Transportation etc.
- Social and Welfare Programmes

Three Schedules

2. Individual Interview
- Demographics
- Family and Social Network ,Social Activities and welfare programmes
- Health :
  - Disease and Health Conditions
  - Functional Health and Helpers
  - Family Medical History
  - Mental Health: Cognition and Depression
  - Health Behavior
- **Biomarker Collection**
- Health Care Utilization
- Work and Employment
- Retirement and Pension
- Experimental modules :
  - Time use and well-being
  - Expectations
  - Social Connectedness
  - Vignettes and Spirituality

Expected Outcomes of LASI

LASI will provide comprehensive evidence base for national and state level policy and programmes:

- As per requirements of National Programme for Health Care of the Elderly (NPHCE) initiated by Ministry of Health and Family Welfare (MoHFW).

- As per the requirements of the Social and Economic Security Programme to be initiated by the Ministry of Social Justice and Empowerment (MoSJE).

- In addition, LASI will help in establishing a range of preventive and curative health care programmes for older population and most vulnerable among them.

- LASI will contribute to developing a comprehensive health and social security policy and program framework. Lastly, LASI will lay the foundation for landmark research on ageing in India and globally.

LASI Outcomes and Long Term Implications

Comprehensive national and state reports, summarizing the descriptive findings

Health; Disease prevention and control, Disability Control
Social Security and Ageing Policy Framework
Policies for Economic Challenges posed by Ageing

Reports and Dissemination

Landmark National Policies Implications

Outcomes

National and International Scientific Value Addition

Publicly available high quality Data for Scientific Research

Internationally comparable scientific multidisciplinary data
Enhance the understanding of the Science of healthy ageing

Contribute to National and Global Research Agenda
Substantive data analysis and Scientific research in the key domains of health and ageing