

Longitudinal Ageing Study in India (LASI)

Wave-1

FACT SHEET INDIA



NATIONAL PROGRAMME FOR HEALTH CARE OF ELDERLY
&
INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES

MINISTRY OF HEALTH & FAMILY WELFARE
GOVERNMENT OF INDIA



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



सत्यमेव जयते

Government of India
Ministry of Health and Family Welfare

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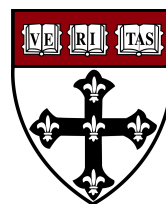
An Investigation of Health, Economic, and Social Well-being of
India's Growing Elderly Population

FACT SHEET

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HARVARD
T.H. CHAN
SCHOOL OF PUBLIC HEALTH



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Introduction

The Longitudinal Ageing Study in India (LASI) is a nationally and state representative longitudinal study of ageing and health. LASI is a national landmark, the largest in the world and, only of its kind in India. Its main goal is to provide valid, reliable and continuous scientific data on the health, social and economic well-being of India's older adult (aged 45 and above) population. These data will help to monitor existing programmes and inform new national health and ageing policies. LASI is undertaken as a globally harmonized study carried out in more than 44 developed and developing countries worldwide; and the survey schedules, protocols and methodologies are harmonized across these countries. These are part of the Health and Retirement Study (HRS) family of longitudinal ageing and retirement surveys. Therefore, LASI data will also serve as an important public resource for national policy making and worldwide comparative research on ageing.

LASI is undertaken under the aegis of the Ministry of Health and Family Welfare (MoHFW), Government of India. The International Institute for Population Sciences (IIPS), Mumbai is the nodal institution for implementing LASI in collaboration with the Harvard T.H.Chan School of Public Health (HSPH) and the University of Southern California (USC).

A. LASI Objectives and Coverage:

The LASI wave-1 survey (2017-18) covers all 30 states and 6 Union Territories of India with a panel sample size of 73,396 older adults aged 45 years and above and their spouses regardless of age. LASI collects data on four major subject domains:

1. Health: Disease Burden & Risk Factors (Reported and Measured)
2. Health Care and Health Care Financing
3. Social: Family, Social Network and Social Welfare Programmes for the Elderly
4. Economic: Income, Wealth, Expenditure, Employment, Retirement and Pension

The long-term goal of LASI is to continue for the next 25 years, with respondents surveyed every three years.

LASI Survey Instruments:

The LASI survey instrument comprises three schedules:

- 1. Household Survey Schedule:** Administered to one per household, collects information from interviewing one or more adult member of household. Includes the following modules: Household Roster, Housing and Environment, Household Consumption, Household Assets and Debts, Household Income and Household Health Insurance.
- 2. Individual Survey Schedule:** Administered to each respondent aged 45 years and above and their spouses (regardless of age) in the sampled households. Includes the following modules: Demographics, Work, Retirement and Pension, Health (Chronic Diseases and Health Conditions), Functional Health, Family Medical History, Mental Health (Cognition and Depression), Health Behavior and Food Security, Health Care Access and Utilization, Health Care Financing, Family and Social Network, Social Welfare Programmes and Experimental Modules on Time Use, Expectations, Social Connectedness and Vignettes.

In addition, LASI includes an individual module on measured biomarkers:

- **Anthropometric Measurements:** Height, Weight, Waist Circumference and Hip Circumference.
- **Functional Health Markers:** Blood Pressure and Pulse Rate, Lung Function Test (Spirometry) and Vision Test (Near and Distance Vision Impairment).

- **Performance Based Markers:** Grip Strength, Timed-Walk and Balance Tests.
- **Collection of Dried Blood Spot (DBS) samples:** To be tested for variety of molecular biomarkers.

3. **In addition, a Community Survey Schedule** is administered at the community level (villages in rural areas and census enumeration blocks in urban areas) and is answered by several key informants. The community schedule includes the following sections: Population Characteristics, Infrastructure and Common Resource, Accessibility and Availability of Health Care Services and coverage of Health and Social Welfare Programmes.

Fact Sheet of Key Indicators for India

This fact sheet provides information on key indicators (weighted) for India. The fieldwork was conducted from **April 2017 through December 2018** (the fieldwork in Sikkim was undertaken in 2021). Table-1 provides information about the number of households and individuals interviewed.

Table 1. Number of Households and Individuals interviewed, India, LASI Wave 1, 2017-18

Sr. No.	Coverage	Rural	Urban	Male	Female	Total	
1.	Household roster completed	41,671	24,844	na	na	66,515	
2.	Households interviewed (with age-eligible individuals) #	28,725	16,355	na	na	45,080	
3.	Individuals Interviewed	45-59 years and their spouses irrespective of age	26,341	15,153	15,795	25,699	41,494
		60 years and above	21,085	10,817	15,340	16,562	31,902
		All ages	47,426	25,970	31,135	42,261	73,396

na "not applicable"

LASI age-eligible households are those with at least one individual in aged 45 years and above; age-eligible individuals are persons aged 45 years and above and their spouses (regardless of age) in the LASI sampled households.

India-Key Indicators

Household-Level Key Indicators		LASI-Wave 1, 2017-18		
Household Population Profile ¹		Rural	Urban	Total
1	Mean Household Size	5.9	5.2	5.7
Age Distribution in Years (%)				
2	0-14	28.4	23.1	26.7
3	15-44	46.5	51.1	48.0
4	45-59	12.2	13.5	12.6
5	60-69	7.5	7.2	7.4
6	70-79	3.8	3.4	3.7
7	80+	1.6	1.8	1.7
8	60-74	9.9	9.2	9.7
9	75+	3.0	3.2	3.1
Sex Ratio (Females per 1000 Males)				
10	All ages	995	965	984
11	60 + population	1051	1083	1062
Death Rate (per thousand population)²				
12	All ages	7.9	6.9	7.5
13	60 + population	38.8	34.9	37.4
Household-Level Key Indicators ³		Rural	Urban	Total
Housing and Environment				
14	Households with improved sanitation (%) ⁴	62.2	94.4	72.3
15	Households practicing open defecation (%) ⁵	37.7	5.1	27.4
16	Households with water facility inside dwelling/own yard (%)	58.6	80.7	65.5
17	Households with improved drinking water source (%) ⁶	94.8	92.2	94.0
18	Households with electricity (%)	88.6	98.2	91.7
19	Households using clean cooking fuel (%) ⁷	35.6	89.0	52.4
20	Households exposed to indoor pollution (%) ⁸	18.9	3.3	14.0
21	Households with <i>pucca</i> house (%) ⁹	42.3	80.1	54.2
Household Consumption				
22	Household Monthly Per Capita Consumption Expenditure (MPCE) in INR ¹⁰	2789.9	4412.1	3303.0
23	Household Per Capita Food Expenditure as a share of MPCE (%)	54.4	46.6	51.1
24	Household Per Capita Health Expenditure as a share of MPCE (%)	14.7	11.9	13.5

¹ Based on all households including LASI age-eligible and non-age-eligible households.

² Death rate is calculated based on deaths in the last two calendar years.

³ Based on LASI age-eligible households only.

⁴ Improved sanitation includes flush or pour flush toilet (which is flushed to piped sewer system/septic tank/ pit latrine), pit latrine, twin pit, composting toilet.

⁵ Open defecation refers to the practice whereby people go out in fields, bushes, forests, open bodies of water, or other open spaces rather than using the toilet to defecate. This information was collected from eligible household respondent.

⁶ Improved drinking water source includes water from pipe, public tap/standpipe, tube well or bore well, dug well, spring water and rain water.

⁷ Clean cooking fuel includes LPG, Biogas and Electricity.

⁸ Indoor pollution refers to households using solid and unclean fuel (for cooking or any other purpose) inside the household and cooking in traditional *chullah/stove* or open fire without any ventilation. Unclean fuel refers to use of kerosene, charcoal, coal, crop residue, wood/shrub and dung cake.

⁹ *Pucca* house refers to a house whose roof, wall and floor is made up of *pucca* (concrete) material.

¹⁰ MPCE is defined as total monthly household consumption expenditure divided by household size. Includes household's per capita spending on food and non-food items including spending on health, education, utilities etc.

Household-Level Key Indicators ³		Rural	Urban	Total
Household Assets and Debts				
25	Households owning current residence (%)	95.0	78.3	89.0
26	Households owning television, refrigerator, mobile phone and any motorized vehicle (%) ¹¹	15.9	44.3	26.0
27	Households who had taken any loan (%)	33.1	20.0	28.4
Household Income				
28	Per Capita Annual Household Income (in INR) ¹²	35710	65608	44726
Per Capita Annual Household Income by Source (in INR)¹³				
29	Mean income from agricultural and allied activities	12117	1607	8958
30	Mean income from non-agricultural business or self-employed activities	2523	11104	5084
31	Mean income from wages/salaries ¹⁴	12341	37563	19905
32	Mean income from pension ¹⁵	2079	7182	3604
33	Mean income from government/public transfers ¹⁶	1776	850	1500
Household Insurance				
34	Households covered by any health insurance (%) ¹⁷	26.6	26.9	26.7
35	Households covered by Rashtriya Swasthya Bima Yojana (RSBY) & allied schemes (%) ¹⁸	23.4	14.4	20.6
36	Households covered by Central Government Health Scheme (CGHS)/Employee State Insurance Scheme (ESIS) (%)	1.8	7.7	3.6
37	Households covered by medical reimbursement/health insurance from an employer (%)	0.5	2.9	1.2
38	Households covered by privately purchased commercial health insurance (%)	0.4	3.3	1.3

* Including spouse irrespective of age.

¹¹ Any one or more motorized vehicle includes car, motor cycle, moped and scooter.

¹² Per Capita Annual Household Income refers to total household income divided by household size. It includes income from all members of the household and from all sources such as agricultural work, non-agricultural work, self-employment, remittances/gifts, wages/salaries from employment, pension income and public/private transfers.

¹³ Based on income reported from household by that particular source.

¹⁴ Wage/salary work refers to income from full-time, part-time, side-jobs odd jobs or other wages or salaries.

¹⁵ Work related pension refers to income from central/state government pension, employer funded pension, privately purchased commercial pension and other state pension schemes.

¹⁶ Government/public transfers includes agriculture subsidies, non-agricultural government subsidies (LPG subsidy, scholarship for education, subsidy for building toilets, subsidy for setting up small scale industries, subsidy for solar panels, etc.), housing assistance, unemployment allowance, Janani Suraksha Yojana (JSY)/any other maternity compensation, compensation under any other health benefits program (other than JSY), Compensation for illness or accident, emergency or disaster relief (flood, earthquake, drought, etc.), debt waiver, compensation for re-settlement (due to slums, dams, road, etc.), assistance for self-employment (like Swarna Jayanti Gram Swarozgar Yojana/ National Rural Livelihood Mission), social security pension schemes (like Indira Gandhi National Old Age Pension Scheme, Indira Gandhi National Widow Pension Scheme, Indira Gandhi National Disability Pension Scheme) and other government transfers.

¹⁷ Includes different types of health insurance/benefits such as CGHS, ESIS, RSBY, other central/state government health insurance schemes or medical reimbursement from employer etc.

¹⁸ Allied schemes refers to state specific schemes which are based on Rashtriya Swasthya Bima Yojana (RSBY) model.

Individual-Level Key Indicators	Age		Sex		Residence		Total	
	45-59 years*	60 years & above	Male	Female	Rural	Urban		
Demographics								
39	Literate (%)	52.7	39.6	62.0	35.5	36.5	68.4	46.7
Schooling								
40	No schooling (%)	43.6	56.5	33.8	60.9	59.1	29.0	49.5
41	Less than 5 years complete (%)	10.3	11.4	13.3	9.0	11.6	9.2	10.8
42	5-9 years complete (%)	24.0	17.8	26.2	17.4	19.3	25.0	21.1
43	10 or more years complete (%)	22.2	14.2	26.7	12.7	10.0	36.8	18.5
Marital Status								
44	Currently married (%)	87.4	61.6	87.1	67.3	76.1	74.5	75.6
45	Widowed (%)	9.4	36.2	10.1	30.0	21.6	21.9	21.7
Work, Retirement and Pension								
46	Ever worked (%) ¹⁹	71.4	73.6	96.9	54.7	76.6	63.5	72.4
47	Currently working (%) ²⁰	61.9	35.7	70.4	35.0	53.8	41.32	49.9
Type of Work								
48	Agricultural and allied activities (%) ²¹	51.9	64.8	51.7	62.6	72.5	10.5	56.1
49	Non-agricultural business activities (%) ²²	17.6	16.6	21.4	11.3	10.8	35.5	17.3
50	Wage and salary workers (%) ²³	30.5	18.6	26.9	26.1	16.8	53.9	26.6
Mean Monthly Individual Earnings from Work Related Activities (in INR)²⁴								
51	Agricultural and allied activities ²¹	5277	4859	6160	3840	5059	6271	5119
52	Non-agricultural business activities ²²	9574	8146	10520	5227	6759	11136	9124
53	Wage and salary workers ²³	12181	7014	13340	7516	8131	13548	10999
54	Mean income from all sources ²⁵	8134	5803	9004	4961	5760	11907	7370
Job Search								
55	Persons seeking job (%) ²⁶	4.4	1.5	3.6	2.3	2.8	3.6	3.0
Retirement and Work-Related Pension Coverage								
56	Covered under work-related pension scheme (%) ²⁷	2.8	8.6	8.4	1.9	3.2	11.7	5.5
57	Covered under Provident Fund (%) ²⁷	4.7	6.0	7.3	2.8	2.9	11.6	5.3
58	Officially retired from organized sector of employment (%) ²⁸	0.8	9.9	7.7	1.7	3.2	9.8	5.0
59	Currently receiving retirement pension (%) ²⁸	0.5	7.7	6.0	1.1	2.4	7.6	3.9

* Including spouse irrespective of age.

¹⁹ Ever worked includes persons engaged in work at least for 3 months during lifetime but excluding own housework; it includes persons engaged in agricultural and allied activities, non-agriculture business owner, own account worker and wage/salary earners.

²⁰ Currently working includes persons engaged in agricultural and allied activities, non-agriculture business owner, own account worker, wage/salary earners or temporarily laid off (due to sick or other leave or in job training) at the time of survey but excluding own housework.

²¹ Agricultural work includes cropping, forestry, livestock & fishery, working for own or family's or for other people's farm/ fishery/ forestry.

²² Non-agricultural business activities include own account worker i.e. self-employed without employees or non-agricultural business owners.

²³ Wage & salary work includes full-time, part-time, contract-based, temporary or seasonal employment.

²⁴ Includes monthly individual earnings from main job as well as from side job from work related activities.

²⁵ Mean income includes income from main as well as side job from agriculture work, non- agricultural business and wage & salary work.

²⁶ Persons who have ever worked in their lifetime and currently looking for job.

²⁷ Among those who have ever worked.

²⁸ Based on all age eligible individuals.

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
Family and Social Network								
Current Living Arrangement								
60	Living alone (%)	1.4	5.7	1.8	4.5	3.9	2.3	3.4
61	Living with spouse and/or others (%)	12.2	20.3	19.3	13.5	16.8	14.0	15.9
62	Living with spouse and children (%)	74.2	40.6	67.1	52.7	58.4	59.7	58.8
63	Living with children and others (%)	9.4	27.6	8.6	24.4	16.9	19.6	17.7
64	Living with others only (%)	2.9	5.7	3.3	4.9	4.1	4.4	4.2
Satisfaction with Current Living Arrangement								
65	Satisfied with current living arrangement (%) ²⁹	79.7	74.8	78.3	76.9	76.0	80.9	77.5
Shares most of Personal Matters with (for age 60 and above having spouse)								
66	Spouse/Partner (%)	na	82.2	84.1	79.0	82.8	80.5	82.2
67	Children/Grandchildren (%)	na	31.9	30.3	34.7	32.2	31.4	31.9
Financial Support Received from or Provided to Family/Friends during Past 12 Months³⁰								
68	Received financial support (%)	12.3	15.2	12.5	14.5	14.9	10.9	13.6
69	Provided financial support (%)	8.2	5.9	9.9	5.2	6.8	8.0	7.2
Instrumental Care								
70	Having family members who are unable to carry out basic daily activities (%) ³¹	2.9	2.4	2.4	2.8	2.8	2.4	2.7
Role in Decision Making in³²								
71	Marriage of son or daughter (%)	97.3	92.3	96.8	93.6	94.6	97.5	95.0
72	Buying and selling of property (%)	95.8	90.0	96.9	90.3	92.4	94.8	93.2
73	Education of family member/s (%)	94.7	83.7	93.3	87.3	88.5	93.0	89.9
Experience of Ill-Treatment during the Last One Year (for age 60 and above only)³³								
74	Experienced any ill-treatment (%)	na	5.2	4.8	5.6	5.8	3.8	5.2
Perceived Life Satisfaction/Social Status								
75	Persons reporting satisfied with their own life (%) ³⁴	42.8	43.9	45.2	41.9	41.4	47.6	43.3
Social Welfare Schemes: Awareness and Enrollment								
Awareness of Welfare Schemes for Elderly (for age 60 and above only)								
76	Indira Gandhi National Old Age Pension Scheme (%)	na	55.0	59.0	51.5	57.6	48.6	55.0
77	Indira Gandhi Widow Pension Scheme (%)	na	44.0	43.0	44.9	44.8	42.0	44.0

* Including spouse irrespective of age, na "not applicable".

²⁹ Includes strongly satisfied and satisfied with their current living arrangement.

³⁰ Financial support received /provided refers to money received/provided for helping to pay bills or covering specific types of costs such as those for medical care or insurance, schooling, marriages in family, religious events, down payment for buying a home and rent.

³¹ Basic daily activities refer to everyday routine activities such as eating, putting on cloths, taking bath and using toilet.

³² Includes taking decision alone or contribute to decision making.

³³ Refers any one or more ill-treatment such as physical, verbal/disrespect, economic exploitation, emotional/psychological or neglect experienced in the past year.

³⁴ Includes somewhat agree and strongly agree with the statement "I am satisfied with my life".

Individual-Level Key Indicators	Age		Sex		Residence		Total	
	45-59 years*	60 years & above	Male	Female	Rural	Urban		
Receiving Benefits from Welfare Schemes for Elderly (for age 60 and above only)³⁵								
78	Indira Gandhi National Old Age Pension Scheme (%)	na	29.1	31.8	26.7	30.3	22.1	29.1
79	Indira Gandhi Widow Pension Scheme (%)	na	23.7	na	23.7	25.4	17.8	23.7
Awareness and Utilization of Concessions for Elderly (for age 60 and above only)								
80	Aware of any concession given by government to elderly (%) ³⁶	na	28.4	33.0	24.1	24.9	36.7	28.4
81	Received any concession or benefit (%) ³⁷	na	18.6	22.6	15.0	14.8	27.5	18.6
82	Aware of "Maintenance and Welfare of Parents and Senior Citizens Act" (%) ³⁸	na	12.3	16.0	9.1	9.6	19.1	12.3
Health Risk Behaviour								
83	Currently smoking (%) ³⁹	10.8	13.8	25.8	2.4	14.3	7.5	12.2
84	Currently consuming tobacco (%) ⁴⁰	18.3	21.5	27.9	13.9	23.0	12.7	19.8
85	Prevalence of heavy episodic drinking (%) ⁴¹	3.1	2.6	6.2	0.5	3.2	2.1	2.9
Physical Activity								
86	Physically active (%) ⁴²	74.1	54.1	59.8	68.7	65.0	64.8	65.0
87	Yoga practice, meditation, <i>asana</i> and <i>pranayama</i> (%) ⁴³	10.5	11.2	12.3	9.8	9.2	14.4	10.8
Health⁴⁴								
88	Poor Self Rated Health (SRH) (%) ⁴⁵	12.0	24.2	17.0	17.9	18.7	15.2	17.6
Self-reported Prevalence of Diagnosed Cardiovascular Diseases								
89	Cardiovascular diseases (CVDs) (%) ⁴⁶	21.9	34.6	25.7	29.2	23.2	37.5	27.7
90	Hypertension or high blood pressure (%)	20.5	32.0	22.9	27.8	21.2	35.6	25.8
91	Chronic heart diseases (%)	2.2	5.2	4.2	3.1	2.8	5.3	3.6
92	Stroke (%)	1.0	2.7	2.5	1.3	1.7	2.0	1.8
Self-reported Prevalence of Diagnosed Other Chronic Risk Conditions								
93	Diabetes or high blood sugar (%)	9.2	14.2	12.4	10.8	7.6	19.9	11.5
94	High Cholesterol (%)	1.9	2.5	2.2	2.1	1.2	4.2	2.1
95	Anaemia (%)	4.7	4.7	3.1	5.9	5.0	4.1	4.7
Self-reported Prevalence of Diagnosed Chronic Lung Diseases								
96	Chronic lung diseases (%) ⁴⁷	4.4	8.3	7.2	5.5	6.0	6.6	6.2
97	Chronic Obstructive Pulmonary Disease (COPD) (%)	1.6	2.8	2.3	2.0	1.9	2.6	2.1

* Including spouse irrespective of age, na "not applicable".

³⁵ Elderly who belongs to BPL households.

³⁶ Refers to discounts or concessions received for elderly in train/bus/air travel, telecommunication, special interest rates on bank accounts or loans, income tax benefits or others.

³⁷ Among those who are aware of concessions given by the government for elderly.

³⁸ The "Maintenance and Welfare of Parents and Senior Citizens Act" mandates legal obligation on children to financially maintain their parents/ provide monthly allowances.

³⁹ Currently smoking tobacco refers to smoking any tobacco product such as cigarette, *bidi*, cigar, *hookah* and *cheroot* etc.

⁴⁰ Currently consuming tobacco refers to consumption of any smokeless tobacco product such as chewing tobacco, *gutka* or *pan masala* etc.

⁴¹ Heavy episodic drinking refers to those who reported consumption of at least 60 grams or more (10 grams = 1 standard drink) of pure alcohol on at least one occasion in the past 30 days.

⁴² Those who are either engaged in moderate physical activity (at least 150 minutes throughout the week) or vigorous physical activity (at least 75 minutes throughout the week) or an equivalent combination of moderate- and vigorous-intensity activity.

⁴³ Refers to yoga/meditation/asanas/pranayama etc. practicing daily or more than once a week.

⁴⁴ For all chronic conditions, the reference period is *ever diagnosed* and diagnosed by MBBS, BDS and AYUSH health professionals.

⁴⁵ Poor Self Rated Health (SRH) includes both poor and very poor self-assessed health status.

⁴⁶ Cardiovascular diseases include hypertension, heart disease and stroke (any one or more).

⁴⁷ Chronic lung diseases include chronic obstructive pulmonary disease (COPD), asthma and chronic bronchitis (any one or more).

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
98	Asthma (%)	3.1	5.9	5.2	3.8	4.4	4.5	4.4
Self-reported Prevalence of Diagnosed Bone/Joint Diseases								
99	Bone/Joint diseases (%) ⁴⁸	11.7	18.8	12.3	16.9	14.4	16.3	15.0
100	Arthritis (%)	7.0	10.7	7.1	9.8	8.1	10.0	8.7
101	Osteoporosis (%)	2.1	4.4	2.8	3.4	3.1	3.5	3.2
Self-reported Prevalence of Diagnosed Neurological or Psychiatric Problems								
102	Neurological or psychiatric problems (%) ⁴⁹	1.9	2.6	2.3	2.2	2.1	2.4	2.2
103	Depression (%)	0.5	0.8	0.5	0.7	0.7	0.5	0.6
104	Alzheimer's disease and dementia (%)	0.4	1.0	0.5	0.7	0.8	0.5	0.7
105	Psychiatric problems (%) ⁵⁰	0.4	0.4	0.5	0.3	0.3	0.5	0.4
106	Neurological problems (%) ⁵¹	1.3	1.6	1.6	1.3	1.4	1.6	1.4
107	Self-reported prevalence of diagnosed Cancer or Malignant Tumor (%) ⁵²	0.5	0.7	0.5	0.7	0.5	0.8	0.6
108	Self-reported prevalence of diseases or conditions related to urogenital systems (%) ⁵³	5.5	7.7	7.9	5.5	6.4	6.8	6.5
Self-reported Prevalence of Diagnosed Eye or Vision & Ear related Conditions								
109	Eye or vision related conditions or problems (%) ⁵⁴	38.7	55.3	48.1	45.1	40.9	58.1	46.3
110	Cataract (%)	4.6	23.2	12.9	13.3	12.0	15.5	13.1
111	Glaucoma (%)	1.3	2.5	1.9	1.8	1.8	1.8	1.8
112	Refractive error (%) ⁵⁵	33.9	35.4	36.6	33.2	29.8	45.0	34.6
113	Hearing or ear-related problems (%)	4.1	9.6	6.9	6.4	6.8	6.4	6.6
Self-reported Prevalence of Diagnosed Oral Health Problems								
114	Common oral health problems (%) ⁵⁶	44.2	51.3	45.2	49.1	47.7	46.9	47.4
115	Dental caries (%)	18.1	19.5	17.1	20.0	17.3	22.0	18.8
116	Periodontal disease (%) ⁵⁷	15.4	16.0	14.2	16.7	17.4	11.9	15.7
117	Partial edentulism (%)	48.8	72.0	60.5	58.6	59.1	60.0	59.4
118	Complete edentulism (%)	3.0	11.2	7.4	6.3	6.9	6.5	6.8
Self-reported Prevalence of Injuries and Fall								
119	Injuries (%) ⁵⁸	13.9	18.8	15.7	16.5	17.5	13.2	16.1
120	Fall (%)	16.5	22.9	17.7	20.6	21.1	15.7	19.4

* Including spouse irrespective of age.

⁴⁸ Bone /joint diseases include arthritis, rheumatism and osteoporosis (any one or more).

⁴⁹ Any neurological/psychiatric problem includes depression, alzheimer's disease, dementia or psychiatric problem or neurological problem (any one or more).

⁵⁰ Psychiatric problems include unipolar or bipolar disorder, schizophrenia etc. (any one or more).

⁵¹ Neurological problems include neuropathy, convulsion, migraine, Parkinson's etc. (any one or more).

⁵² Includes oral cancer, breast cancer, cervical cancer, lung cancer or cancer/malignant tumors originating in any other organs/ body parts (any one or more).

⁵³ Urogenital conditions include chronic renal failure, incontinence, kidney stone and Benign Prostate Hypertrophy-BPH (only among males) (any one or more).

⁵⁴ Eye or vision related conditions or problems include presbyopia, glaucoma, cataract, myopia, hypermetropia, other eyes problems such as conjunctivitis, eye injury, red eye etc. (any one or more).

⁵⁵ Refractive error includes presbyopia, myopia and hypermetropia with or without astigmatism.

⁵⁶ Common oral health problems include painful teeth, ulcer lasting more than two weeks, bleeding gums, swelling gums, loose teeth, dental cavity/dental caries & soreness or cracks in the corner of the mouth in past 12 months (any one or more).

⁵⁷ Periodontal diseases include bleeding gums, swelling gums or ulcers lasting more than two weeks (any one or more).

⁵⁸ Injury include injuries sustained due to any traffic accident, violence, animal attack or fall in the past 2 years (any one or more).

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
Self-reported Health Conditions due to Natural and Man-made Disasters⁵⁹								
121	Health problems due to natural and man-made disaster (%) ⁶⁰	3.5	3.6	4.0	3.2	4.4	1.7	3.5
122	Permanent physical disability (%)	0.3	0.4	0.4	0.2	0.4	0.2	0.3
123	Psychological and mental health problems (%)	2.3	2.3	2.5	2.2	2.9	1.0	2.3
124	Chronic illness (%)	0.7	0.6	0.8	0.5	0.8	0.4	0.6
Self-reported Prevalence of Endemic Diseases								
125	Any endemic disease (%) ⁶¹	25.5	27.1	26.4	26.1	29.6	19.0	26.3
Vector-borne Diseases								
126	Any vector-borne disease (%) ⁶²	10.4	10.8	10.5	10.7	12.0	7.5	10.6
127	Malaria (%)	7.7	8.6	8.4	7.9	10.0	4.1	8.1
128	Dengue (%)	1.1	1.0	0.9	1.2	0.9	1.3	1.1
129	Chikungunya (%)	2.7	2.2	2.2	2.6	2.2	3.1	2.4
Water-borne Diseases								
130	Any water-borne disease (%) ⁶³	18.0	19.6	18.7	18.7	21.7	12.3	18.7
131	Diarrhoea/Gastroenteritis (%)	12.0	14.8	13.6	13.0	15.3	8.8	13.3
132	Typhoid (%)	6.1	5.5	5.3	6.2	6.9	3.4	5.8
133	Jaundice/Hepatitis (%)	3.1	2.5	3.0	2.7	3.2	2.0	2.8
Other Infectious Diseases								
134	Tuberculosis (%)	0.9	1.1	1.3	0.7	1.0	0.9	1.0
135	Urinary Tract Infection (%)	2.0	2.5	2.4	2.2	2.3	2.2	2.3
Self-reported Prevalence of Symptom based Health Conditions⁶⁴								
136	Angina (symptom based) (%) ⁶⁵	5.4	6.2	4.7	6.6	6.6	3.9	5.8
137	Sleep problems (%) ⁶⁶	10.9	14.8	11.9	13.2	13.6	10.6	12.7
Self-reported Prevalence of Reproductive Health (Only for Females)								
138	Any reproductive health problem (%) ⁶⁷	15.8	na	na	15.8	17.1	13.5	15.8
139	Undergone Hysterectomy (%)	12.5	9.9	na	11.4	9.6	15.1	11.4
140	Undergone Pap Smear Test (%) ⁶⁸	2.7	0.9	na	2.0	0.9	4.2	2.0
141	Undergone Mammography (%) ⁶⁸	2.1	0.9	na	1.6	0.9	3.1	1.6
Family Medical History: Prevalence of Chronic Health Conditions among Family Members⁶⁹								
142	Hypertension (%)	26.2	18.1	21.8	23.0	18.5	31.1	22.5
143	Diabetes (%)	17.9	13.2	14.9	16.3	11.3	25.4	15.7
144	Heart disease (%)	9.8	6.4	8.3	8.2	6.7	11.7	8.2
145	Stroke (%)	6.7	4.9	6.3	5.5	5.6	6.3	5.9
146	Cancer (%)	4.9	5.4	4.9	5.3	4.4	6.6	5.1

* Including spouse irrespective of age. na "not applicable".

⁵⁹ Reference period for natural and man-made disaster is past 5 years.

⁶⁰ Health problems due to natural and man-made disaster refers to permanent physical disability, psychological and mental health problems or chronic illness (any one or more).

⁶¹ For prevalence of endemic diseases in India, the reference period is past 2 years (any one or more).

⁶² Any vector-borne disease includes malaria, dengue or chikungunya (any one or more).

⁶³ Any water-borne disease includes diarrhoea/gastroenteritis, typhoid, jaundice or hepatitis (any one or more).

⁶⁴ For symptom based prevalence of health conditions, the reference period is past 2 years.

⁶⁵ Angina pectoris refers to, "a chest pain or discomfort with all the following symptoms: (a) the pain must include either the sternum (any level) or the left arm and left anterior chest (defined as the anterior chest wall between the levels of clavicle and lower end of sternum), (b) pain must be provoked by either hurrying or walking uphill (or by walking on the level, for those who never attempt more), (c) when pain occurs on walking it must make the person either stop or slacken pace, (d) pain must disappear on a majority of occasions in 10 min or less from the time when the person stands still.

⁶⁶ Sleep problems refer to difficulty in falling asleep or staying asleep throughout the night and also feeling unrested during the day (any one or more).

⁶⁷ Reproductive health problems include hot flashes, irregular vaginal discharge, uterine prolapse, fibroids, cysts and vaginal dryness in the past 2 years (any one or more).

⁶⁸ The reference period for Pap Smear and Mammography is past 2 years.

⁶⁹ Biological family members include -father, mother, brother, sister, children and grandchildren.

Individual-Level Key Indicators	Age		Sex		Residence		Total	
	45-59 years*	60 years & above	Male	Female	Rural	Urban		
Functional limitations: Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) Limitations⁷⁰								
147	Any ADL limitation (%) ⁷¹	9.3	23.8	14.7	16.8	16.7	14.2	15.9
148	Any IADL limitation (%) ⁷²	25.7	48.0	28.1	41.6	39.6	27.9	35.9
149	Persons who need helpers for ADL and IADL limitations (%) ⁷³	13.7	24.8	21.7	19.8	19.4	23.6	20.4
Persons Using Aids or Supportive Devices								
150	Any aid or supportive device (%) ⁷⁴	30.3	43.2	40.3	33.3	30.1	49.6	36.2
151	Hearing aid (%) ⁷⁵	0.3	0.7	0.7	0.3	0.4	0.7	0.5
152	Spectacles/Contact lenses (%) ⁷⁵	29.2	37.4	36.3	30.6	26.2	47.6	33.0
153	Denture (%) ⁷⁵	1.5	3.1	2.6	2.0	1.6	3.6	2.2
154	Walker/Walking stick (%) ⁷⁵	0.6	8.3	5.2	3.3	4.8	2.7	4.1
Mental Health: Cognition and Depression								
Cognition								
155	Mean score for immediate word recall ⁷⁶	5.5	4.7	5.2	5.1	4.9	5.6	5.1
156	Mean score of delayed word recall ⁷⁷	4.3	3.4	4.0	3.8	3.7	4.4	3.9
Depression								
157	Prevalence of depression based on CIDI-SF (%) ⁷⁸	7.2	8.3	7.0	8.2	8.5	5.8	7.7
Biomarkers: Measured Prevalence of Health or Health Risk Conditions based on Direct Health Examinations								
Measured Prevalence of Hypertension								
158	Hypertension (%) ⁷⁹	25.2	36.2	31.7	29.2	28.4	34.3	30.2
159	Undiagnosed hypertension (%) ⁸⁰	17.7	21.6	21.6	17.9	19.5	19.4	19.5
160	Untreated hypertension (%) ⁸¹	10.7	10.0	12.1	9.3	12.2	7.7	10.3
161	Undertreated hypertension (%) ⁸²	27.2	35.8	33.0	31.6	30.1	34.9	32.1
162	Adequately treated hypertension (%) ⁸³	35.8	42.3	38.4	40.2	35.3	45.4	39.5

* Including spouse irrespective of age.

⁷⁰ Refers to functional limitations lasting more than 3 months.

⁷¹ Activities of Daily Living (ADL) includes dressing, putting on *chappals* or shoes, walking across a room, bathing, eating difficulties, getting in or out of bed (any one or more).

⁷² Instrumental Activities of Daily Living (IADL) includes preparing a hot meal, shopping for groceries, making telephone calls, taking medications, doing work around the house or garden, managing money (paying bills and keeping track of expenses) and getting around or finding address in unfamiliar place (any one or more).

⁷³ Helper refers to any person/s assisting respondent in any ADL/IADL limitations.

⁷⁴ Aids or supportive devices include spectacles and dentures and devices to help you in moving or sitting (such as, walker, walking sticks, wheel chair, adjustable showers stools/ commodes, back/neck collar, orthosis/prosthesis).

⁷⁵ Among those respondents who reported using any aid or supportive device(s) to assist them in the activities of daily living.

⁷⁶ Immediate word recall refers to total number of words recalled from the given list of 10 words immediately.

⁷⁷ Delayed word recall refers to total number of words recalled from the same given list of 10 words after some delay.

⁷⁸ Based on Composite International Diagnostic Interview-Short Form (CIDI-SF); respondent who reported that they felt sad, blue or depressed for two-weeks period during last 12 months for all the day long or most of the day.

⁷⁹ Prevalence of measured hypertension refers to those measured with systolic blood pressure of ≥ 140 mmHg or diastolic blood pressure of ≥ 90 mmHg or both.

⁸⁰ Prevalence of undiagnosed hypertension refers to those undiagnosed by a health professional but whose measured systolic blood pressure was ≥ 140 mmHg or diastolic blood pressure was ≥ 90 mmHg or both.

⁸¹ Untreated hypertension refers to those who reported that they have been diagnosed with hypertension by a health professional and currently measured with hypertension but currently not taking treatment

⁸² Undertreated hypertension refers to those who reported that they have been diagnosed with hypertension by a health professional and currently measured with hypertension but currently taking treatment.

⁸³ Adequately treated hypertension refers to those reported that they have been diagnosed by health professional and currently taking treatment and whose measured systolic blood pressure was < 140 mmHg and diastolic blood pressure was < 90 mmHg.

Individual-Level Key Indicators	Age		Sex		Residence		Total	
	45-59 years*	60 years & above	Male	Female	Rural	Urban		
Measured Prevalence of Vision Test								
163	Low vision (%) ⁸⁴	25.7	37.1	28.1	32.9	33.4	25.1	30.9
164	Low near vision (%) ⁸⁵	23.9	32.2	24.4	30.1	30.0	22.4	27.7
165	Low distance vision (%) ⁸⁶	3.9	14.7	8.9	8.8	10.0	6.3	8.9
166	Blindness (%) ⁸⁷	0.6	3.8	2.0	2.2	2.4	1.3	2.1
Measured Prevalence of Chronic Lung Diseases⁸⁸								
167	Restrictive lung disease ⁸⁹	39.7	39.7	40.3	39.2	36.7	47.5	39.7
168	Obstructive lung disease ⁹⁰	8.4	9.2	11.7	6.1	8.9	8.1	8.7
Measured Prevalence of Anthropometric Indicators								
169	Underweight (%) ⁹¹	15.6	26.7	22.6	19.2	25.6	9.2	20.6
170	Overweight (%) ⁹¹	24.0	16.7	17.9	22.6	15.9	31.6	20.7
171	Obesity (%) ⁹¹	9.0	5.5	3.4	10.2	4.1	15.0	7.4
172	High-risk waist circumference (%) ⁹²	29.4	23.6	9.1	39.4	19.8	42.8	26.8
173	Metabolic risk: Prevalence of high-risk waist-hip ratio (%) ⁹³	74.0	75.3	73.7	75.2	71.8	80.8	74.6
Grip Strength(kg)								
174	Mean grip strength in dominant hand (kg) ⁹⁴	23.9	19.5	27.0	18.2	21.9	21.9	21.9
Health Care Utilization, Financing and Insurance								
Health Care Utilization								
In-Patient Care in the Past 12 Months								
175	Hospitalization in past 12 months (%)	6.3	7.9	7.5	6.7	6.8	7.6	7.1
Type of Facility Visited during the Last Hospitalization in the Past 12 Months								
176	Public facility (%) ⁹⁵	32.3	37.6	34.0	35.9	37.7	29.9	35.1
177	Private facility (%) ⁹⁶	65.8	59.1	63.3	61.5	59.9	67.1	62.3
Out-Patient Care in the Past 12 Months								
178	Sought out-patient care in the past 12 months (%)	54.2	59.2	53.8	58.5	57.4	54.5	56.5
179	Persons who consumed any medicine without consulting healthcare provider (%) ⁹⁷	43.5	43.4	44.3	42.9	44.3	41.5	43.4

* Including spouse irrespective of age.

⁸⁴ Low vision refers to either low near vision or low distant vision in the better eye with best correction available with the respondent.

⁸⁵ Low near vision refers to near vision equal to or poorer than 20/80 and equal to or better than 20/400 in the better eye with best correction available with respondent.

⁸⁶ Low distance vision refers to distance vision equal to or poorer than 20/80 and equal to or better than 20/200 in the better eye with best correction available with respondent.

⁸⁷ Blindness refers to those with vision less than 20/200 in distance or could not count finger or perceive light.

⁸⁸ Estimates are based upon acceptable spirometry test and Global lung function initiative (GLI) equation 2012. Caution is necessary in interpreting the results.

⁸⁹ Restrictive lung disease is characterized by reduction in the total volume of air that the lungs are able to hold, and is often due to a decrease in the elasticity of the lungs themselves or caused by a problem related to the expansion of the chest wall during inhalation.

⁹⁰ Obstructive lung disease is characterized by chronic obstruction of lung airflow that interferes with normal breathing and is not fully reversible.

⁹¹ Body Mass Index (BMI) refers to weight in kilograms divided by height in meter square (kg/m²). BMI levels have been classified according to WHO classifications: underweight ≤ 18.4; normal=18.5 to 24.9; overweight=25.0 to 29.9; obese ≥30.0.

⁹² Metabolic complications: critical limit classification for high risk waist circumference for male is ≥102 cm and for female is ≥88cm.

⁹³ WHO criteria of classification of waist- hip ratio (WHR)

Male	Female	Risk level
<0.90	<0.85	Low
≥0.90	≥0.85	High

⁹⁴ Grip strength measures bodily muscle strength and is an overall marker of health among elderly population. Mean grip strength is an average of two readings for dominant hand.

⁹⁵ Includes health post/sub centers, primary health center/urban health center, community health center, district/sub-district hospital, government/tertiary hospital or government AYUSH hospital.

⁹⁶ Includes private hospital/nursing home, private clinic (OPD based services), NGO/Charity/Trust/Church-run hospital/Private AYUSH hospital. It also includes health care services availed partially from either private or government or NGO.

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
Type of Facility Visited for the Last Out-Patient Visit in the Past 12 Months								
180	Public facility (%)	22.6	22.8	23.4	22.1	24.0	19.5	22.6
181	Private facility (%)	64.5	63.3	62.6	64.8	59.9	73.0	63.9
Health Care Financing								
Expenditure on Last In-Patient Visit in the Past 12 Months by Type of Facilities Visited (in INR)⁹⁸								
182	Mean expenditure on last hospitalization	50493	22797	49455	25498	18935	69166	36212
183	Mean expenditure on last hospitalization (Public Facility)	9930	8028	11179	7112	7962	11081	8877
184	Mean expenditure on last hospitalization (Private Facility)	71227	31930	70744	36433	25976	96314	52017
Sources of Finance for Health Care Services during the Last Hospitalization								
185	Income (%) ⁹⁹	84.4	82.9	83.3	83.9	83.6	83.7	83.6
186	Savings (%)	18.4	22.5	19.5	21.4	20.4	20.9	20.6
187	Loans (banks/friends/relatives) /selling assets and properties (%)	20.8	18.1	21.5	17.7	22.0	14.2	19.4
188	Insurance coverage/reimbursement from employer (%)	4.4	5.2	6.9	3.2	4.2	6.0	4.8
Expenditure on Last Out-Patient Visit in the Past 12 Months by Type of Facilities Visited (in INR)¹⁰⁰								
189	Mean expenditure on last out-patient visit	1170	1317	1315	1190	1183	1360	1239
190	Mean expenditure on last out-patient visit (Public Facility)	758	824	885	723	831	667	790
191	Mean expenditure on last out-patient visit (Private Facility)	1424	1636	1620	1461	1484	1588	1522
Health Insurance								
192	Health insurance coverage (%)	22.8	18.2	21.6	20.0	21.3	19.4	20.7

* Including spouse irrespective of age.

⁹⁷ Among those who sought out-patient care in the past 12 months and this includes modern allopathic medicines, AYUSH medicines, traditional herbs or medicine, excluding any health supplements.

⁹⁸ The expenditure on last in-patient visit includes consultation charges, medicine charges, test/investigation charge, nursing home charges, surgery and related charges, transportation charges and any other charges.

⁹⁹ Income includes personal income as well as income from any of the household members.

¹⁰⁰ The expenditure on last out-patient visit includes consultation charges, medicine charges, test/investigation charge, nursing home charges, surgery and related charges, transportation charges and any other charges.

Household Section

Figure 1: Share of household food, non-food and healthcare expenditure of monthly per capita consumption expenditure (MPCE) by place of residence (%), India

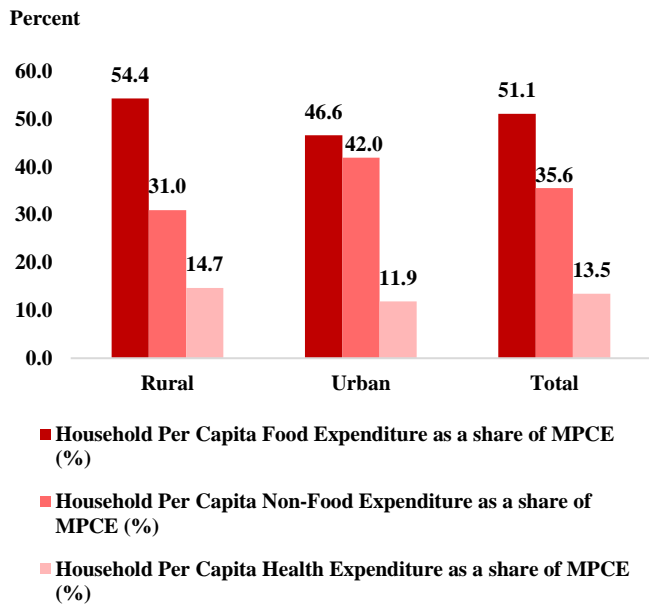
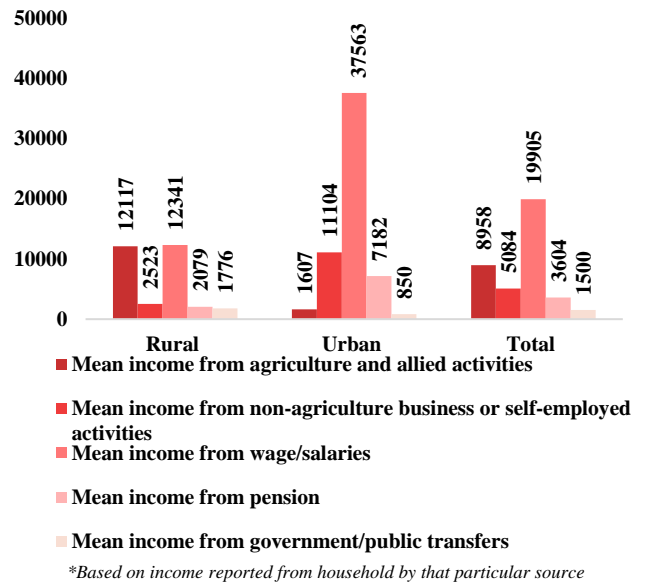


Figure 2: Per Capita Annual Household Income (PCI)* (in INR) by source, India



Individual Section

Figure 3: Age distribution of individuals interviewed (%), India

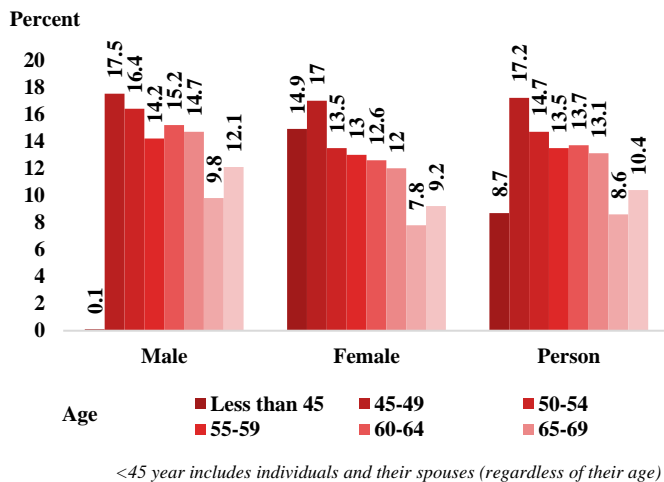


Figure 4: Currently working by years of schooling and sex among older adults age 45 and above (%), India

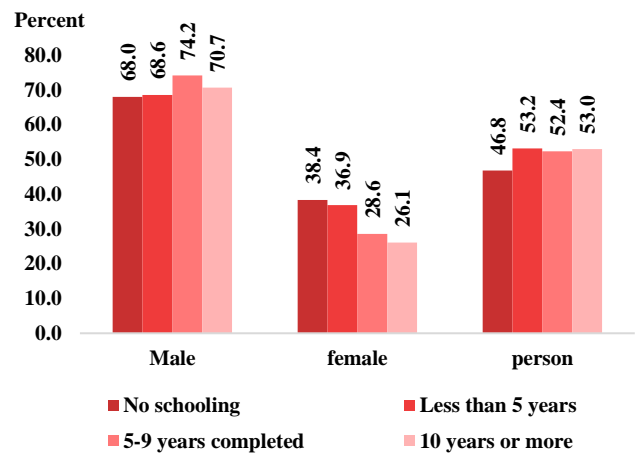


Figure 5: Living arrangements by place of residence (%), India

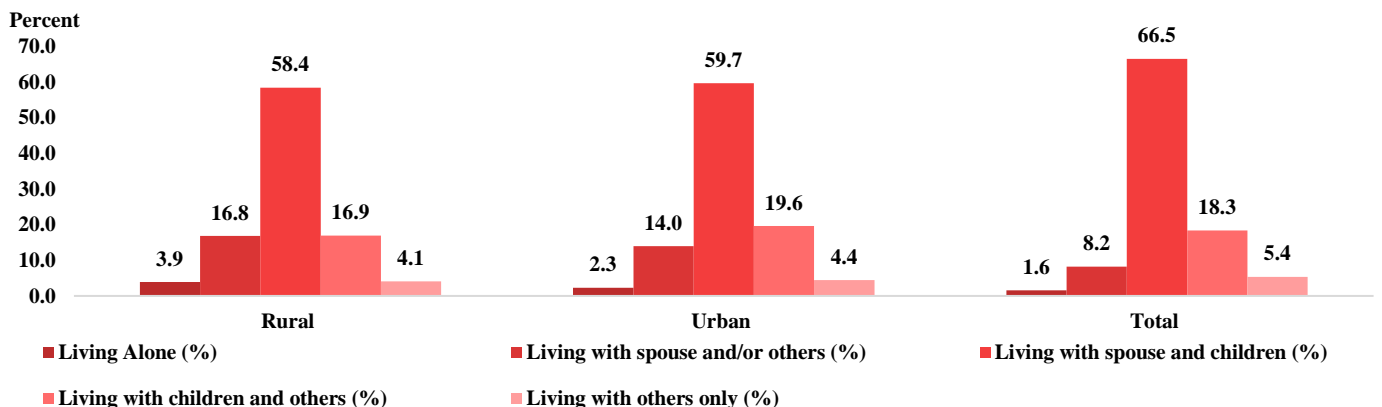


Figure 6: Self-reported prevalence of diagnosed chronic diseases by age, India

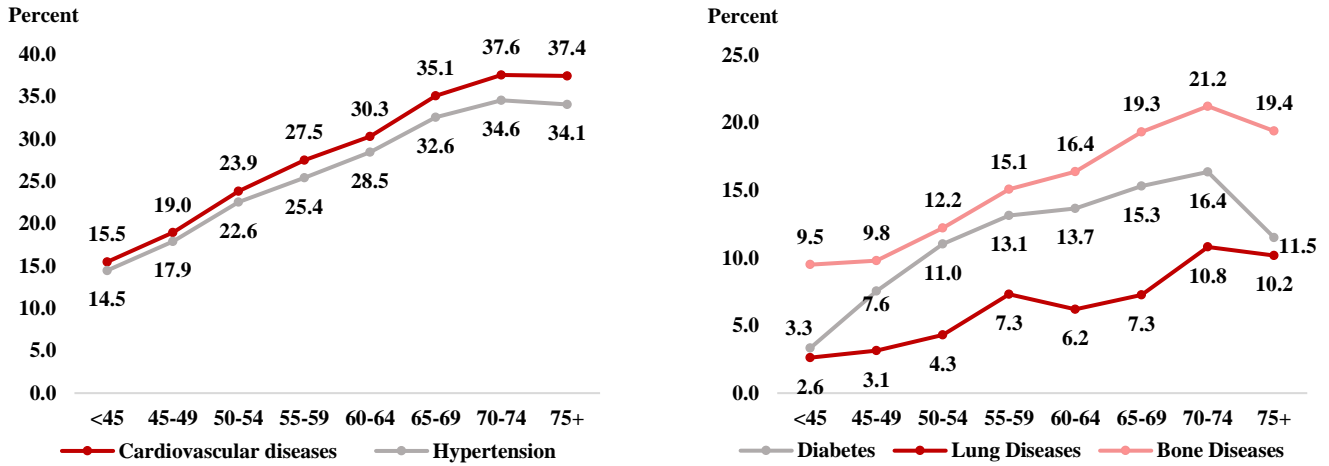


Figure 7: Functional Health: Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL) and using any aid support or device by age, India

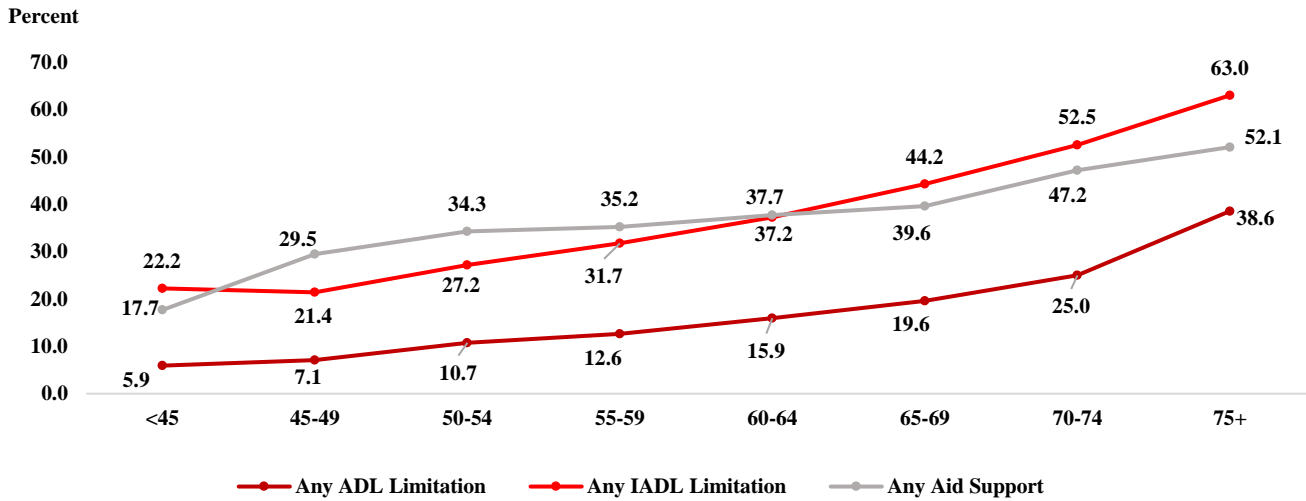
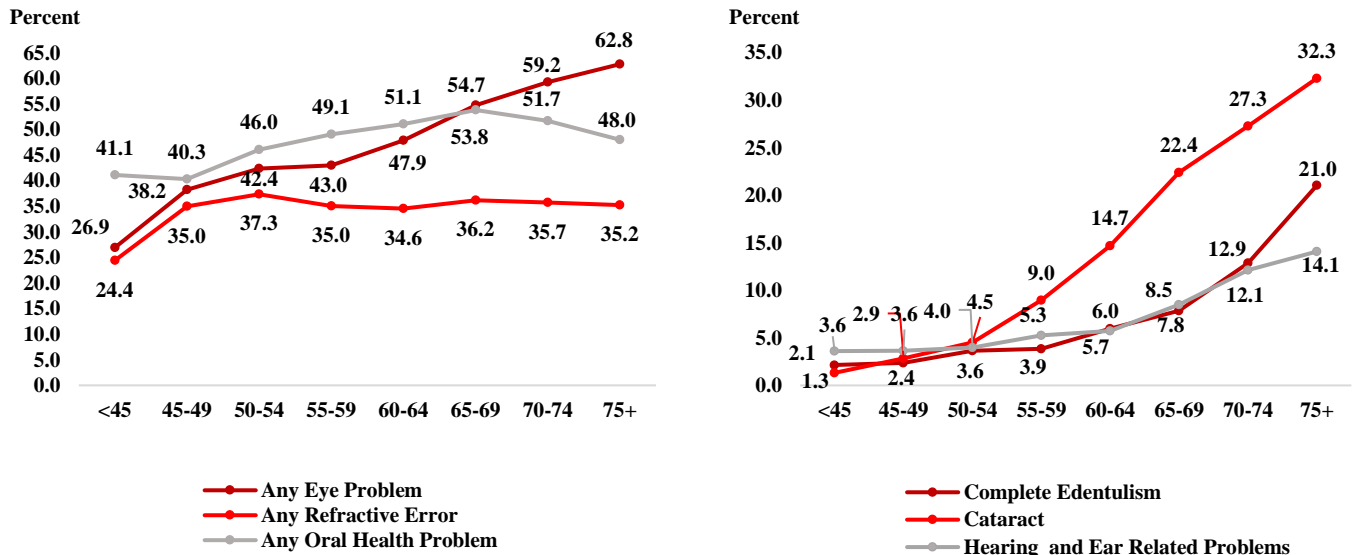


Figure 8: Self-reported prevalence of diagnosed organ related diseases by age, India



Longitudinal Ageing Study in India (LASI)

Wave-1



**National Program for Health
Care of Elderly, Ministry of
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