

**ANALYSIS ON DIFFERENCE IN DISEASE BURDEN IN ADULTS
OF RURAL AND URBAN AREAS OF RAJASTHAN**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

In

Health Management

by

Dr. Priyanka Srivastava

Under the Supervision and Guidance of

Dr. Kajal Sitlani

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled “Analysis on difference in disease burden of adults and elderly individuals of rural and urban areas of Rajasthan” is the genuine documentation of my initial research efforts. I was interning with organization LASI where I did this secondary data analysis. I certify that it has not been applied for a degree or diploma from any other university or institution. Information that was taken from other people's published or unpublished work has been properly acknowledged in the text.

Priyanka Srivastava

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INTRODUCTION

India is a diverse country. Similarly, diversity is seen in the disease burden in the domain of rural and the urban parts of every state of India. The difference in the disease burden is because of various reasons which could be economical, social, political and financial. Also, demographics plays an important role like age, sex, occupation and marital status which differ greatly in the deeper context in rural and urban areas. A United Nations research claims that only 27% of Indians live in metropolitan regions, where 75% of the country's health infrastructure—including doctors, specialists, and other resources—is concentrated. A chronic dearth of adequate medical services exists even though over 70% of Indians live in rural areas.

India has become the most populated country in the world surpassing the China in the year 2023 with the population of 1.43 billion people which is approximately 17.7% of world's population. Out of total population 83.3 crore live in rural areas which is 72.19% while only 37.7crore stay in urban areas which is 31.16% according to India's 2011 Census while 75% of healthcare infrastructure, medical manpower and other health resources are concentrated in urban areas. The rural and

urban areas differ in various aspects and similarly the disease pattern in the adults of urban and rural adults differ significantly. In contrast to urban areas, where non-communicable diseases like hypertension, diabetes, cancer, blindness, accidents, and injuries are more prevalent, rural areas are characterized by contagious, infectious, and waterborne diseases like diarrhea, tuberculosis, whooping cough, breathing-related infections, pneumonia, and reproductive tract infections.

LITERATURE REVIEW

TITLE	SAMPLE SIZE	OBLECTIVE	KEY FINDINGS
1. Primary health care discrepancies between rural and urban locations have been studied.	Probability based sampling was used to examine 55,000 people.	To Examine the Differences in access of health resources in rural and urban areas of U.S.	Rural residents have lower access to primary health care facilities and doctors. This difference is because of sociodemographic reasons and due to structural barriers
2. Evidence from the Longitudinal Ageing Study in India (LASI)	LASI –1 wave data was utilized. The sample of 27,753 were	to investigate the relationship between many medical diseases and	Out of all the detected Multimorbid combinations, hypertension and high

shows that combinations of multimorbid conditions are associated with functional disability in older Indian persons.	used aged above 60 years	functional impairment in elderly Indian persons.	depressive symptoms (HDS) were the most common combination (10.3%). Additionally, more ADL-IADL (Activities of Daily Living) handicap is linked to the comorbidity of hypertension, rheumatoid arthritis, and HDS than to any other MMC.
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3 Chronic Disease and Drug Use in Older Oregonians: Rural-Urban Differences	Older age people who were above 85 years of age were considered in the study in which 121 were selected from OBAS (Oregon Brain Aging Study) & DPS (Dementia Ageing Project ,175 from KEAP (Klamath Exceptional Ageing Project)	To determine the prevalence of disease and the use of drugs among adults aged >85 in rural and urban areas	Rural individuals have a much higher disease burden than urban participants, according to the MCIRS (Modified Cumulative Illness Rating Scale). In the rural population, the MCIRS rate of accumulation increased by 0.2.
4. factors that affect how the elderly in India use healthcare differently in the rural and urban areas	Elderly people who self-reported having a recent illness within a 15-day (about two-week) recall interval were selected from a sample of 42,762 to be analyzed in relation to	to investigate the extent and the contributing causes of the disparity between rural and urban healthcare utilization among senior persons who have reported experiencing some disease	The senior population living in rural locations was found to have a 7-point greater healthcare use rate than the elderly population living in urban areas. Education level and economic

	healthcare utilization.	within the last 15 days (about 2 weeks).	standing are two factors that account for 41% of the difference between rural and urban healthcare utilization.
5. Quality of Life of Senior Citizens A Rural-Urban Comparison	830 elderly citizens from rural areas and 120 senior citizens from metropolitan areas were examined using multistage random selection.	Comparing and contrasting the sociodemographic characteristics, QOL, and population distribution of rural and urban locations.	Senior persons in rural parts of India have lower QOL than those in metropolitan areas. Additionally, rural places have a higher percentage of older persons or the elderly, but very few healthcare facilities.
6 Evidence from the Longitudinal Ageing Study in India, 2017–18 shows differences between rural and urban areas	This study includes data from the LASI. In this Study 60 years and above age respondents were considered (N=31,464)	To investigate the relationship between diarrhea and older persons in rural and urban India.	As diarrhea is more prevalent in rural regions, there is a 7.7% difference in the prevalence of diarrhea in older individuals

in the prevalence of diarrhea among older persons.			living in rural and urban areas. In 80+ older adults, rural locations have a 13.6% greater prevalence of diarrhea than urban areas.
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7. Estimates of the prevalence of dementia at the national and state levels from a comprehensive study	For minor territories, 1000 samples were taken into consideration, while for larger territories, a large sample size proportional to the size of the state's population was taken into consideration.	to determine the connection between sociodemographic variables and dementia prevalence.	In India, dementia affects 7.4% of individuals 60 and older. Additionally, there are notable variances in dementia prevalence depending on factors including age, education, sex, urban/rural inequalities, and cross-state variations
8. non-communicable disease prevalence and risk factors in Jharkhand's rural areas	4579 samples were selected of age above 30 years and multistage sampling was done.	To find the prevalence of Non communicable diseases in rural areas of Jharkhand.	Diabetes prevalence was found to be 16.3%, whereas hypertension prevalence was determined to be 21.3% in the study population.

RESEARCH QUESTION

1. To investigate the prevalence of chronic diseases in adults in Rajasthan state.
2. How the diseases burden differs in adults of rural and urban areas of Rajasthan.

OBJECTIVE

The objectives of the study are

1. To identify the disease burden and the health status of adults in Rajasthan State.
2. To assess how disease burden differs in adults of the urban and rural areas of Rajasthan.

METHODOLOGY-

STUDY DESIGN-Descriptive

STUDY ESTABLISHED- Rural and urban areas of Rajasthan.

SAMPLE SIZE – Data of LASI wave-1 of Rajasthan State.

DATA COLLECTION METHOD – Secondary data

DATA COLLECTION TOOL – Data will be extracted from factsheets of LASI WAVE-1 of Rajasthan State

LASI – Longitudinal ageing Study of India

The LASI is a comprehensive nationwide scientific survey that examines the factors that influence population ageing in India from a health, economic, and social perspective. The LASI is a nationally representative survey of 72,250 senior persons who are 45 years of age or older in all Indian states and union territories. For the next 25 years, LASI is expected to be performed every two years. The LASI is a nationally representative survey of 72,250 senior persons who are 45 years of age or older in all Indian states and union territories. the first and largest longitudinal ageing study ever carried out in India. It is in an advantageous position to assess how altering policies may affect Indian behavior. The LASI is a nationally representative survey of 72,250 senior persons who are 45 years of age or older in all Indian states and union territories. The LASI contains statistics that have been collected using international standards, enabling analyses of social behaviors, economic position, and ageing across states and countries. These analyses serve as the basis for national and state-level policies to address the problems presented.

To compare health disorders that have been measured and self-reported, as well as to give a comprehensive assessment of the entire burden of diseases.

To comprehend the societal causes and risk factors for both communicable and non-communicable diseases

To research factors such as death causes, life expectancy at advanced ages, etc. related to the demographics of the ageing transition.

RESULTS

In Rajasthan, the survey was conducted in 2199 households, out of which 1683 were in rural areas & 516 were in urban areas. A total of 2244 individuals were interviewed. Sex ratio is 7.6. The extent of consumption of tobacco is 8.8%. Prevalence of CVD is 28.7%, HTN is 27.2%, CHD is 2.6% & STROKE is 1.2%. Prevalence of Neurological & psychiatric problem is 1.2%. Prevalence of eye related condition is 35.6%. Prevalence of dementia is 0.13%.

Health risk behavior of current smoking in rural and urban areas is 26% & 13% respectively. Prevalence of diagnosed CVD is 25.8% in rural & 37.2% in urban areas. Also, prevalence of HTN, chronic heart diseases & stroke is 24.7%, 1.8% & 1.1% in rural areas & 34.6%, 5% & 1.5% in urban areas respectively. Self-reported prevalence of neurological problems in rural areas is 1% & in urban areas is 1.8%. Self-reported prevalence of oral health problems is 42.7% in rural areas & 29% in urban areas. For Endemic diseases Self-reported prevalence for vector borne diseases is 30% for rural areas & 24% for urban areas & for water borne disease prevalence is 35% for rural areas & 26% for urban areas.

Rajasthan -Key Indicators

Household-Level Key Indicators		LASI-Wave 1, 2017-18		
Household Population Profile ¹		Rural	Urban	Total
1	Mean Household Size	6.1	5.9	6.1
<i>Age Distribution in Years (%)</i>				
2	0-14	31.7	25.0	30.1
3	15-44	46.7	53.8	48.4
4	45-59	10.1	10.9	10.3
5	60-69	6.6	6.0	6.5
6	70-79	3.2	3.1	3.1
7	80+	1.7	1.3	1.6
8	60-74	8.5	8.1	8.4
9	75+	3.1	2.2	2.9
<i>Sex Ratio (Females per 1000 Males)</i>				
10	All ages	1013	915	990
11	60 + population	1157	1168	1159
<i>Death Rate (per thousand population)²</i>				
12	All ages	8.0	6.7	7.6
13	60 + population	42.5	47.0	43.3

Household-Level Key Indicators ³		Rural	Urban	Total
Housing and Environment				
14	Households with improved sanitation (%) ⁴	59.1	94.0	68.4
15	Households practicing open defecation (%) ⁵	40.9	4.6	31.2
16	Households with water facility inside dwelling/own yard (%)	54.9	94.8	65.5
17	Households with improved drinking water source (%) ⁶	89.0	99.8	91.9
18	Households with electricity (%)	89.5	100.0	92.3
19	Households using clean cooking fuel (%) ⁷	31.9	91.9	47.8
20	Households exposed to indoor pollution (%) ⁸	13.6	2.2	10.5
21	Households with <i>pucca</i> house (%) ⁹	75.3	95.0	81.1
Household Consumption				
22	Household Monthly Per Capita Consumption Expenditure (MPCE) in INR ¹⁰	2612	3615	2882
23	Household Per Capita Food Expenditure as a share of MPCE (%)	47.5	45.9	47.0
24	Household Per Capita Health Expenditure as a share of MPCE (%)	12.5	10.5	11.8

Health Risk Behaviour								
83	Currently smoking (%) ³⁹	21.8	24.0	43.2	8.0	26.3	12.7	22.9
84	Currently consuming tobacco (%) ⁴⁰	8.8	8.7	13.8	5.1	7.9	11.3	8.8
85	Prevalence of heavy episodic drinking (%) ⁴¹	2.0	2.0	4.7	-	1.8	2.6	2.0
Physical Activity								
86	Physically active (%) ⁴²	62.4	49.3	54.9	56.5	58.6	47.5	55.8
87	Yoga practice, meditation, <i>asana</i> and <i>pranayama</i> (%) ⁴³	12.9	11.9	16.7	9.3	10.9	17.0	12.4
Health⁴⁴								
88	Poor Self Rated Health (SRH) (%) ⁴⁵	12.7	20.6	17.0	16.4	16.5	16.9	16.6
Self-reported Prevalence of Diagnosed Cardiovascular Diseases								
89	Cardiovascular diseases (CVDs)	24.7	32.7	25.2	31.3	25.8	37.2	28.7
90	Hypertension or high blood pressure (%)	22.9	31.4	22.9	30.3	24.7	34.6	27.2
91	Chronic heart diseases (%)	2.5	2.8	3.5	2.0	1.8	5.0	2.6
92	Stroke (%)	0.84	1.5	1.4	1.0	1.1	1.5	1.2

Self-reported Prevalence of Diagnosed Other Chronic Risk Conditions								
93	Diabetes or high blood sugar (%)	6.9	9.3	10.9	6.1	6.3	13.5	8.1
94	High Cholesterol (%)	0.75	1.1	0.75	1.0	[0.16]	3.1	0.90
95	Anaemia (%)	4.1	3.8	2.2	5.2	3.9	4.0	3.9
Self-reported Prevalence of Diagnosed Chronic Lung Diseases								
96	Chronic lung diseases (%) ⁴⁷	5.6	15.0	12.4	8.7	10.5	9.7	10.3
97	Chronic Obstructive Pulmonary Disease (COPD) (%)	1.0	3.0	2.4	51.7	1.6	3.2	2.0
98	Asthma (%)	4.8	12.4	10.6	7.0	9.0	7.2	8.6
Self-reported Prevalence of Diagnosed Bone/Joint Diseases								
99	Bone/Joint diseases (%) ⁴⁸	8.4	14.8	9.8	13.0	11.3	12.5	11.6
100	Arthritis (%)	4.6	7.6	5.9	6.3	6.0	6.5	6.1
101	Osteoporosis (%)	1.3	2.1	1.6	1.7	1.8	1.4	1.7

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
Self-reported Prevalence of Diagnosed Neurological or Psychiatric Problems								
102	Neurological or psychiatric problems (%) ⁴⁹	0.00	1.5	1.4	1.0	1.0	1.8	1.2
103	Depression (%)	0.48	[0.19]	[0.15]	0.47	[0.20]	[0.75]	0.33
104	Alzheimer's disease and dementia (%)	[0.26]	-	[0.08]	[0.17]	[0.18]	-	[0.13]
105	Psychiatric problems (%) ⁵⁰	[0.23]	-	[0.07]	[0.15]	[0.05]	[0.30]	[0.11]
106	Neurological problems (%) ⁵¹	[0.22]	1.1	1.1	0.35	0.75	[0.37]	0.66
107	Self-reported prevalence of diagnosed Cancer or Malignant Tumor (%) ⁵²	[0.17]	0.59	0.47	[0.32]	0.34	[0.50]	0.38
108	Self-reported prevalence of diseases or conditions related to urogenital systems (%) ⁵³	3.6	6.8	8.1	3.1	5.4	4.5	5.2
Self-reported Prevalence of Diagnosed Eye or Vision & Ear related Conditions								
109	Eye or vision related conditions or problems (%) ⁵⁴	26.6	44.6	38.9	33.2	31.5	47.9	35.6
110	Cataract (%)	3.6	20.1	12.1	11.7	11.2	13.7	11.8

111	Glaucoma (%)	0.91	3.0	1.9	2.0	1.5	3.2	1.9
112	Refractive error (%) ⁵⁵	22.1	25.6	26.9	21.6	20.6	33.4	23.8
113	Hearing or ear-related problems (%)	3.3	6.4	6.3	3.8	4.3	6.5	4.9
Self-reported Prevalence of Diagnosed Oral Health Problems								
114	Common oral health problems (%) ⁵⁶	36.0	42.6	38.1	40.2	42.7	29.0	39.3
115	Dental caries (%)	13.4	12.8	12.4	13.6	13.6	11.8	13.1
116	Periodontal disease (%) ⁵⁷	18.0	17.6	16.8	18.5	19.5	12.8	17.8
117	Partial edentulism (%)	45.4	65.4	55.8	55.1	57.8	48.3	55.4
118	Complete edentulism (%)	2.0	12.7	8.5	6.5	7.8	6.1	7.4
119	Injuries (%) ⁵⁸	9.4	11.1	10.2	10.3	10.7	9.0	10.2
120	Fall (%)	9.6	12.4	10.4	11.4	11.1	10.5	11.0
Self-reported Health Condition due to Natural and Man-made Disasters⁵⁹								
121	Health problems due to natural and man-made disaster (%) ⁶⁰	1.3	2.3	2.0	1.6	2.0	1.2	1.8
122	Permanent physical disability (%)	[0.32]	0.45	[0.23]	0.49	0.38	[0.40]	0.38
123	Psychological and mental health problems (%)	0.44	0.89	0.65	0.67	0.83	[0.17]	0.66

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Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
124	Chronic illness (%)	[0.34]	0.81	1.0	[0.30]	0.51	[0.79]	0.58
Self-reported Prevalence of Endemic Diseases								
125	Any endemic disease (%) ⁶¹	46.6	47.7	45.5	48.4	49.4	40.3	47.1
Vector-borne Diseases								
126	Any vector-borne disease (%) ⁶²	27.4	29.3	26.8	29.4	29.7	24.1	28.3
127	Malaria (%)	21.7	25.2	22.4	24.2	26.2	15.3	23.5
128	Dengue (%)	1.2	1.3	0.72	1.6	1.4	[0.76]	1.2
129	Chikungunya (%)	6.1	4.0	4.9	5.2	3.6	9.3	5.1
Water-borne Diseases								
130	Any water-borne disease (%) ⁶³	32.3	32.7	31.2	33.4	34.7	26.0	32.5
131	Diarrhoea/Gastroenteritis (%)	28.3	30.0	28.1	29.9	31.4	22.4	29.1
132	Typhoid (%)	5.3	3.8	4.7	4.4	4.5	4.6	4.5
133	Jaundice/Hepatitis (%)	2.9	1.2	2.6	1.7	2.2	1.7	2.0
Other Infectious Diseases								
134	Tuberculosis (%)	0.93	0.58	1.2	0.46	1.0	-	0.76
135	Urinary Tract Infection (%)	1.6	2.7	2.9	1.6	2.2	1.8	2.1

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Self-reported Prevalence of Symptom based Health Conditions ⁶⁴								
136	Angina (symptom based) (%) ⁶⁵	4.7	5.7	5.2	5.2	5.2	5.2	5.2
137	Sleep problems (%) ⁶⁶	7.9	10.1	8.5	9.3	8.9	9.3	9.0
Self-reported Prevalence of Reproductive Health (Only for Females)								
138	Any reproductive health problem (%) ⁶⁷	9.2	na	na	9.2	10.3	6.0	9.2
139	Undergone Hysterectomy (%)	7.3	5.9	na	6.7	6.8	6.2	6.7
140	Undergone Pap Smear Test (%) ⁶⁸	0.93	[0.44]	na	0.70	0.68	[0.76]	0.70
141	Undergone Mammography (%) ⁶⁸	0.91	[0.40]	na	0.67	0.73	[0.48]	0.67
Family Medical History: Prevalence of Chronic Health Conditions among Family Members ⁶⁹								
142	Hypertension (%)	21.4	11.2	16.6	16.1	13.9	23.6	16.3
143	Diabetes (%)	10.5	9.2	10.1	9.7	7.9	15.7	9.8
144	Heart disease (%)	5.6	4.1	5.4	4.4	4.2	6.8	4.9
145	Stroke (%)	3.2	1.6	2.8	2.1	2.5	2.2	2.4
146	Cancer (%)	4.5	3.2	4.3	3.5	4.1	3.0	3.8
Functional limitations : Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) Limitations ⁷⁰								
147	Any ADL limitation (%) ⁷¹	2.0	7.5	4.3	5.0	4.5	5.2	4.7
148	Any IADL limitation (%) ⁷²	11.4	31.1	12.6	27.6	23.5	14.3	21.2

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
149	Persons who need helpers for ADL and IADL limitations (%) ⁷³	12.7	25.1	24.1	20.9	21.1	24.8	21.7
150	Any aid or supportive device (%) ⁷⁴	25.1	40.7	40.1	27.6	28.6	45.8	32.9
151	Hearing aid (%) ⁷⁵	0.86	1.3	1.4	0.88	1.0	1.4	1.1
152	Spectacles/Contact lenses (%) ⁷⁵	23.2	32.0	33.9	23.0	22.8	42.0	27.6
153	Denture (%) ⁷⁵	0.73	2.6	2.3	1.2	1.6	1.9	1.6
154	Walker/Walking stick (%) ⁷⁵	0.78	11.4	6.5	5.8	6.5	4.7	6.1
Mental Health: Cognition and Depression								
Cognition								
155	Mean score for immediate word recall ⁷⁶	5.2	4.4	5.0	4.7	4.6	5.4	4.8
156	Mean score of delayed word recall ⁷⁷	3.8	2.9	3.6	3.2	3.2	4.0	3.4
Depression								
157	Prevalence of depression based on CIDI-SF (%) ⁷⁸	6.6	5.6	7.0	5.5	6.5	5.0	6.1

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Biomarkers: Measured Prevalence of Health or Health Risk Conditions based on Direct Health Examinations								
<i>Measured Prevalence of Hypertension</i>								
158	Hypertension (%) ⁷⁹	19.7	31.9	25.8	25.6	25.2	27.2	25.7
159	Undiagnosed hypertension (%) ⁸⁰	12.5	19.0	17.3	14.5	16.2	14.1	15.7
160	Untreated hypertension (%) ⁸¹	11.5	14.0	12.4	13.2	13.8	11.1	12.9
161	Undertreated hypertension (%) ⁸²	20.3	27.4	25.6	23.8	23.3	26.6	24.4
162	Adequately treated hypertension (%) ⁸³	32.0	38.8	36.5	35.6	34.0	40.0	35.9
<i>Measured Prevalence of Vision Test</i>								
163	Low vision (%)	51.5	45.5	28.6	45.7	57.4	56.4	57.2
164	Low near vision (%) ⁸⁵	30.2	39.8	25.1	42.1	36.7	29.6	35.0
165	Low distance vision (%) ⁸⁶	4.2	14.0	7.9	9.9	9.9	6.3	9.0
166	Blindness (%) ⁸⁷	0.76	5.7	2.8	3.5	3.2	3.3	3.2

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
	Measured Prevalence of Anthropometric Indicators							
167	Underweight (%) ⁸⁸	19.1	26.0	23.6	21.7	26.3	10.8	22.5
168	Overweight (%) ⁸⁸	18.8	14.4	14.8	17.9	13.2	27.2	16.6
169	Obesity (%) ⁸⁸	4.9	5.1	2.1	7.0	3.4	10.0	5.0
170	High-risk waist circumference (%) ⁸⁹	22.1	24.9	8.6	34.2	19.9	34.7	23.5
171	Metabolic risk: Prevalence of high risk waist-hip ratio (%) ⁹⁰	78.3	81.8	77.8	81.7	77.7	87.5	80.0
	Grip Strength(kg)							
172	Mean grip strength in dominant hand (kg) ⁹¹	23.4	19.3	26.3	17.9	21.2	21.8	21.4
173	Hospitalization in past 12 months(%)	7.2	9.7	9.5	7.6	8.2	9.1	8.4
174	Public facility (%) ⁹²	41.9	48.9	44.2	47.6	45.5	47.1	45.9

175	Private facility (%) ⁹³	57.0	51.1	55.8	51.6	53.9	52.9	53.6
176	Sought out-patient care in the past 12 months (%)	56.0	61.7	58.5	59.1	60.7	53.3	58.9
177	Persons who consumed any medicine without consulting healthcare provider (%) ⁹⁴	56.7	51.5	53.7	54.2	54.1	53.7	54.0
178	Public facility (%)	42.8	44.3	45.7	42.0	46.7	33.0	43.6
179	Private facility (%)	50.1	48.9	47.8	50.7	45.5	63.2	49.5
180	Mean expenditure on last hospitalization	17691	15685	20164	13205	13832	23873	16542
181	Mean expenditure on last hospitalization (Public Facility)	8414	9053	11666	6354	9836	6108	8804
182	Mean expenditure on last hospitalization (Private Facility)	24686	22034	26885	19603	17267	39711	23239

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
	Sources of Finance for Health Care Services during the Last Hospitalization							
183	Income (%) ⁹⁶	44.7	68.9	62.0	54.1	61.4	48.5	57.9
184	Savings (%)	32.5	36.6	19.3	50.3	35.6	32.2	34.7
185	Loans (banks/friends/relatives) /selling assets and properties (%)	11.9	15.8	13.2	14.8	14.3	13.1	14.0
186	Insurance coverage/reimbursement from employer (%)	[2.4]	[2.4]	[3.6]	[1.1]	[1.8]	[3.9]	[2.4]
	Expenditure on Last Out-Patient Visit in the Past 12 Months by Type of Facilities Visited (in INR) ⁹⁷							
187	Mean expenditure on last out-patient visit	1035	919	924	1010	891	1279	973
188	Mean expenditure on last out-patient visit (Public Facility)	427	453	466	423	444	428	442
189	Mean expenditure on last out-patient visit (Private Facility)	1481	1372	1360	1474	1363	1595	1426
	Health Insurance							
190	Health insurance coverage (%)	40.5	39.6	40.1	40.0	41.1	36.9	40.1

Household Section

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

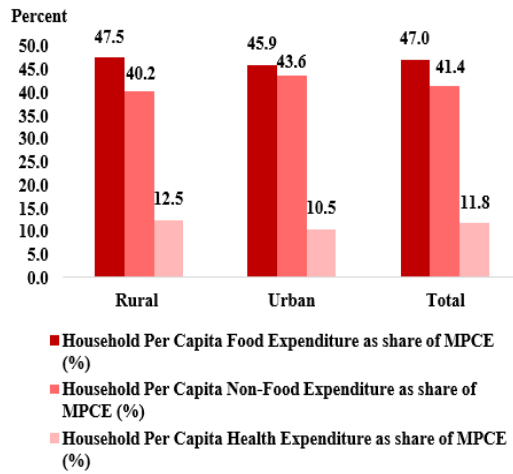


Figure 2: Per Capita Annual Household Income (PCI)* in INR by source, Rajasthan

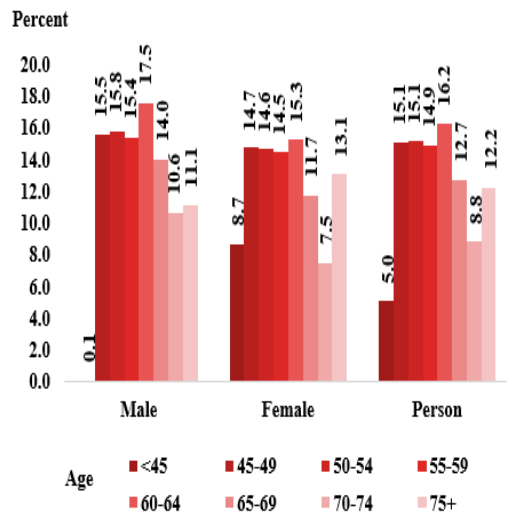


* Based on income reported from household by that particular source

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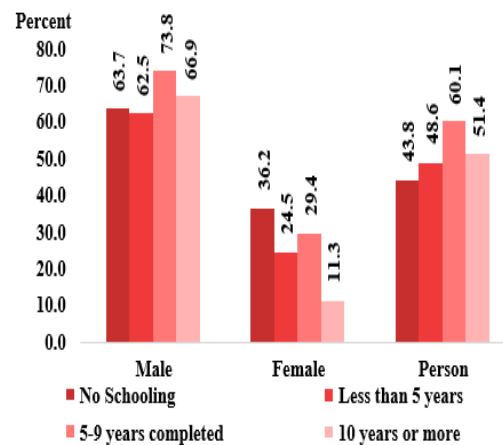
Individual Section

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



<45 year includes individuals and their spouses (regardless of their age)

Figure 4: Currently working by years of schooling and sex (%), Rajasthan



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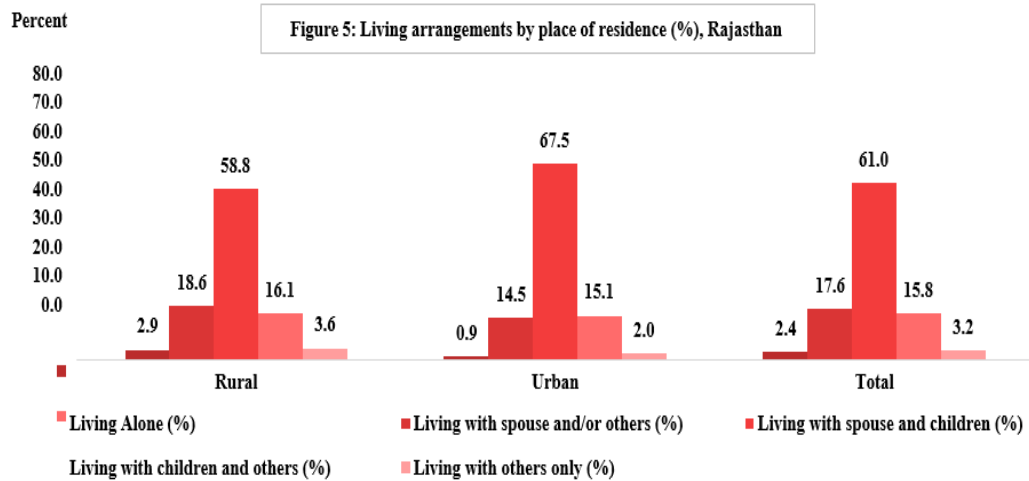


Figure 6: Self-reported prevalence of diagnosed chronic diseases by age, Rajasthan

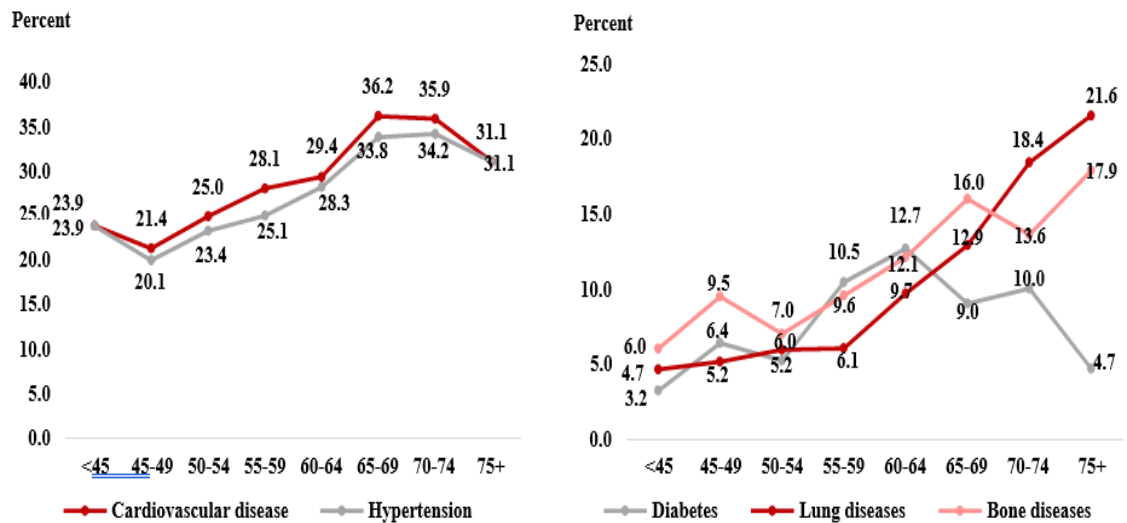


Figure 7: Functional Health: Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL) and using any aid support or device by age, Rajasthan

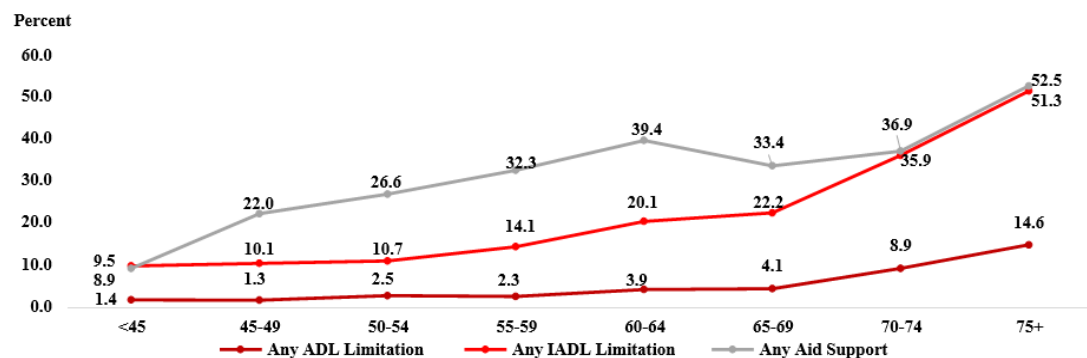


Figure 8: Self-reported prevalence of diagnosed organ related diseases by age, Rajasthan

DISCUSSION

The study focuses on the disparities between the disease burden in Rajasthan State's rural and urban districts. There are notable disparities in the disease share between rural and urban residents, according to a descriptive study, especially among the elderly adults who are above 60 years of age. There is 9% more self-related health prevalence of cardiac disorder in urban adults as compared to rural adults which includes CVD's, Stroke, hypertension, chronic heart disease which may be attributed to adoption unhealthy lifestyle among the urban residents which include sedentary lifestyle, unhealthy food habits, adoption of western lifestyle while the self- related prevalence of endemic disease ,and other infectious diseases is more prevalent in rural areas which may be because of poor sanitation & water availability and open defecation . Also, health risk related behavior including smoking is seen twice in rural adults due to their tradition of consuming tobacco in the form of bidi, Jarda, hukkah etc., then urban adults while alcohol consumption is seen more in the urban adults due to increase trend of clubs, pubs & parties' Rural folks self-report having twice as many diagnosed common oral health issues as urban adults do. because of poor oral hygiene, less awareness and casual attitude towards oral health and excessive consumption of tobacco which is seen both in males and females. Self- reported prevalence of diagnosed neurological is more in rural areas which might be attributed to poor education as one of its causes. Also, Self- reported prevalence of eye related conditions is seen more in rural adults which may because of lack of awareness about poor vision and availability of the health-related facilities and their willingness to cure the eye related disorder. The most common ailment reported in both urban and rural adults is hypertension and diabetes, but hypertension is more common in rural areas while diabetes is more common in urban areas. Also, the study

reveals that the disease burden varies according to the place of residence (urban / rural).

CONCLUSION

Significant differences are seen in the disease burden of the rural and the urban adults of Rajasthan. Residents of urban areas who are above 45 years of age suffer more from the cardiac disorders including Stroke, CVDs and hypertension, while rural adults suffer more from infectious endemic disease including water, air borne and other oral health related and eye related disorders. The difference is majorly because of differences in socio-economic status, literacy rate, education status, availability of health facilities, income level awareness and lifestyle. With the Increasing disease burden and its different trend in rural and urban areas. Public investment in the health sector must increase in order to improve the quality and accessibility of public health care. Different policies & strategies need to be framed according to prevalence of diseases and the need of the area. The problems of the rural and urban areas need to be addressed differently with a paradigm shift to bridge the gap between the current health needs and the health services.

RECOMMENDATION

The public health system should put more of an emphasis on enacting reforms at the policy level for not only preventing diseases but also preventing disease through coordinated action at the society level.

Increasing awareness among rural people about the free healthcare schemes run by the government and about the importance of preventive healthcare programs, so they can take proactive steps to prevent illness before they occur. So, they do not have to do any out-of-pocket expenditure.

By Introducing screening programs for the hidden silent diseases like cancer, diabetes, hypertension etc. Early detection helps in reducing the disease burden, especially in rural areas where people are unaware about their health status.

Government should fasten their efforts to provide clean drinking water services in rural areas. Also, open defecation should be completely eradicated as major disease burden in the rural areas is because of infectious diseases.

There is also a need for empowering the primary healthcare teams to prevent and treat maternal and child health conditions as maternal mortality and infant mortality is one of major concerns in rural areas.

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