

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

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INTRODUCTION

India has become the most populated country surpassing the China in the year 2023 with the population of **1.43** billion population

According to 2011 Census, 72% of population resides in rural areas while only 32% population resides in urban areas .But, 75% of healthcare facilities are concentrated in urban areas .

The urban and rural adults vary in their lifestyle ,traditions, occupation, socio-economic status and in their disease patterns. So, to combat the disease burden identification of rural and urban areas disease prevalence is very important .

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) shows that combinations of multimorbid conditions are associated with functional disability in older Indian persons.	LASI –1 wave data was utilized. The sample of 27,753 were used aged above 60 years	to investigate the relationship between many medical diseases and functional impairment in elderly Indian persons.	Out of all the detected Multimorbid combinations, hypertension and high 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.

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 healthcare utilization.	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 within the last 15 days (about 2 weeks).	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 standing are two factors that account for 41% of the difference between rural and urban healthcare utilization.

RESEARCH QUESTION

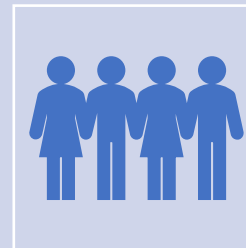
- How the disease burden differs in adults of urban and rural areas of Rajasthan



OBJECTIVES



To assess the disease burden and health status of adults in Rajasthan State



To assess the difference in disease burden in adults of rural and urban 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



RESULTS

Individual-Level Key Indicators		Age		Sex		Residence		Total
		45-59 years*	60 years & above	Male	Female	Rural	Urban	
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
Health ⁴⁴								
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

<i>Self-reported Prevalence of Diagnosed Other Chronic Risk Conditions</i>								
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
<i>Self-reported Prevalence of Diagnosed Chronic Lung Diseases</i>								
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
<i>Self-reported Prevalence of Diagnosed Bone/Joint Diseases</i>								
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
<i>Self-reported Prevalence of Diagnosed Oral Health Problems</i>								
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
<i>Self-reported Health Condition due to Natural and Man-made Disasters⁵⁹</i>								
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

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
<i>Self-reported Prevalence of Endemic Diseases</i>							
125 Any endemic disease (%) ⁶¹	46.6	47.7	45.5	48.4	49.4	40.3	47.1
<i>Vector-borne Diseases</i>							
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
<i>Water-borne Diseases</i>							
130 Any water-borne disease (%) ⁶³	32.3	32.7	31.2	33.4	34.7	26.0	32.5
131 <u>Diarrhoea</u> /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
<i>Other Infectious Diseases</i>							
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



DISCUSSION

- The secondary data analysis was conducted on the factsheets of LASI-WAVE1 of Rajasthan State.
- Results reveal that there is unequal distribution of diseases in adults of rural and urban areas of Rajasthan.
- There is more self-reported prevalence of chronic disease like CVD's, hypertension, stroke in adults of urban areas while self-reported prevalence of infectious disease is more common in rural areas.

CONCLUSION

- Disease burden differs significantly according to the place of residence .
- Difference in disease burden is due to variation in socio-economic status, literacy rate, education level, lifestyle patterns , traditions, occupation etc.
- Problems of the rural and urban areas must be addressed differently according to the needs of the people .



RECOMMENDATION



With the increasing disease burden and its different trends in rural and urban areas. Public health care system needs to be strengthened according to the current health needs of the area.



Government should increase their share of GDP in the contribution of healthcare facilities.



The system should bring about the changes at policy level not only for curing the disease but also for preventing through primary health care services.

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THANK YOU