

Chronic Ailment among Senior Citizens in India

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Abstract

In this paper, an attempt is made to understand the levels and patterns of chronic morbidity among senior citizens in India, and their hospitalisation using the National Sample Survey (71st round) which was conducted in 2014. This paper also explores the gender and spatial dimensions of chronic morbidity in India. Evidences suggested that urgent steps are required to reduce the prevalence rate of chronic morbidity among elderly in the country.

Keywords: Chronic ailment; Senior citizens; India

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Introduction

India has an elderly population of 140 million, who crossed 60 years in 2020. Most of these elderly have health issues and many often their problems are accompanied by the lack of regular income, and family support. Previous studies have pointed out that the levels of various disabilities are beyond the desired level (Menon et al., 2014; Nandita et al., 2016; Pandey, 2012; Prakash, 2003; C. R. Reddy & Pavani Sree, 2015). This is serious, since most of the old aged people have no social security (S. V. Kumar, 2003).

Old aged people are more exposed to various illness and diseases. Older persons have relatively higher levels of morbidity and mortality. They have both chronic and infectious diseases. In fact, irrespective of the socio-economic characteristics, older aged population is generally more exposed to chronic morbidity than infectious diseases (Baker et al., 2000; Marengoni et al., 2008; Molarius & Janson, 2002; Penninx et al., 1996). There are a few studies which examined the morbidity condition of older persons (Agrawal & Arokiasamy, 2010, 2010; Arokiasamy et al., 2012; Bharati et al., 2011;

Datta et al., 2013; Dsouza et al., 2014; Joshi et al., 2003; Karmakar et al., 2014; V. Kumar, 2003; Nandi et al., 1997; Purty et al., 2006; N. B. Reddy et al., 2012; Seby et al., 2011; Sharma et al., 2013; Singh et al., 1997; Tiwari et al., 2014). Many of these studies found that older persons have multiple diseases.

Most of the previous studies in older persons were based on small samples and covers limited areas. However, it gives some indication in the diseases patterns of the elderly at various places and various points of time. It is not possible to compare different studies because of the differences in the sampling procedures and the different concepts they used during the period of the study. In such a situation, it is necessary to use the nationally representative sample surveys which are solely design to understand the morbidity patterns of the older persons in India. In this context, this study was conducted using a nationally representative survey conducted by the Government of India.

The main objective of the paper is to understand the chronic morbidity condition of elderly in India, their health care utilization. Also, to understand the gender and spatial dimensions of chronic morbidity among elderly in India.

Materials and Methods

The data for the analysis came from NSSO 71st round which was conducted in 2014. In this survey, a question was asked to understand whether old aged persons were suffering from any chronic ailment. In the survey, the condition of chronic ailment was based on the symptoms that persist among elderly for more than one month on the date of survey; indicating any problem caused by an ailment affecting any organ of the body. In the survey, those with minor skin ailment, cases of headache, body ache, and minor gastric discomfort after meals, even if of a long standing nature, unless the patient insists that they cause restriction of his/her activity, disability such as congenital blindness are excluded from the criteria of considering the chronic ailment condition.

Result, Analysis and Discussion

Table 1 shows the chronic ailments among the older persons in India by Sex. In India, the prevalence of chronic ailment is 23.7 percent. The prevalence rate of chronic ailment among older women is relatively higher than that of older males. Among the females the prevalence rate was 23.9 percent while that of the males it was 23.6 percent. Prevalence rate widely varies across the states. Among the states, the highest level was observed in Kerala with 58.1 percent and the lowest level was observed in the state of Tripura with 0.1 percent. Among the union territories the highest level was observed in Dadra and Nagar Haveli with 51.1 percent and the lowest level was observed in Delhi (5.8 percent)

Table 1: State wise prevalence of Chronic ailment among elderly in India by Sex, 2014 (%)

State/Union Territory	Sex		Total
	Male	Female	
State			
Andhra Pradesh	55.0	49.3	52.1
Arunachal Pradesh	12.8	0.7	8.4
Assam	2.1	3.9	3.0
Bihar	8.9	11.4	9.9
Chhattisgarh	9.8	8.2	9.1
Goa	36.6	57.3	44.0
Gujrat	27.3	25.0	26.1
Haryana	12.0	16.0	14.0
Himachal Pradesh	6.7	32.0	20.1
Jammu & Kashmir	21.2	14.9	18.2
Jharkhand	5.9	9.3	7.6
Karnataka	26.6	30.0	28.3
Kerala	57.3	58.7	58.1
Madhya Pradesh	15.0	7.1	10.7
Maharashtra	12.7	13.7	13.2
Manipur	5.5	6.2	5.9
Meghalaya	0.9	4.4	2.4
Mizoram	4.8	2.0	3.3
Orissa	18.8	10.7	15.0
Punjab	21.4	39.0	30.6
Rajasthan	13.0	13.3	13.2
Sikkim	10.4	15.9	12.9
Tamil Nadu	40.8	36.8	38.8
Telangana	28.1	28.3	28.3
Tripura	0.1	0.2	0.1
Uttar Pradesh	15.8	10.5	13.2
Uttaranchal	3.4	20.6	13.8
West Bengal	35.5	39.9	37.7

Table 1: (Continued..)

State/Union Territory	Sex		Total
	Male	Female	
Union Territory			
Andaman & Nicobar Islands	15.9	59.1	31.6
Chandigarh	42.1	47.5	45.5
Dadra & Nagar Haveli	58.5	43.5	51.1
Daman & Diu	3.5	33.3	19.6
Delhi	7.7	4.2	5.8
Lakshadweep	37.4	36.9	37.2
Puducherry	36.0	44.6	41.1
India	23.6	23.9	23.7

Source of Data: National Sample Survey (2014)

Among the males, the highest level of chronic morbidity was observed in Kerala with 57.3 percent followed by the Andhra Pradesh (55.0%) and Tamil Nadu (40.8). The lowest level of morbidity among males was observed in Tripura with 0.1 percent followed by Meghalaya (0.9%) and Assam (2.1%). In case of females, the highest level was observed in Kerala with 59.1 percent followed by Goa (57.3%) and Andhra Pradesh (49.3%). The lowest level of chronic morbidity among females was observed in

the state of Tripura (0.2%), followed by Arunachal Pradesh (0.7%), Mizoram (2%) and Assam (3.9%). Around ten states in India have a chronic prevalence higher than that of the all India. The states which have better social development and health infrastructure has generally reported higher levels of chronic ailment as compared to others. The south Indian region reported the highest level of chronic morbidity as compared to other regions (Table 2).

Table 2: Age Specific Prevalence of Chronic ailment among elderly in India by Region and Sex, 2014 (%)

Age Group	Region						Total
	North	Central	East	Northeast	West	South	
Male							
60-69	10.9	13.8	15.3	1.4	13.5	42.7	21.2
70-79	17.8	15.4	31.7	4.7	21.7	40.7	26.9
80-89	24.3	20.2	32.8	0.7	33.2	46.9	31.1
90+	16.5	45.0	13.4	0.8	46.6	24.5	28.2
Combined	14.2	15.1	20.3	2.4	17.6	42.1	23.6
Female							
60-69	20.3	8.5	20.3	5.3	17.3	41.2	23.5
70-79	17.9	10.0	27.0	1.0	17.1	38.1	22.9
80-89	24.6	13.2	23.9	1.7	22.3	48.6	29.3
90+	24.4	20.4	23.8	12.7	13.5	52.1	28.2
Combined	20.2	9.4	22.3	3.6	17.6	41.2	23.9
Total							
60-69	15.7	11.1	17.6	3.2	15.5	41.9	22.4
70-79	17.9	12.8	29.4	2.9	19.4	39.5	25.0
80-89	24.5	17.0	28.6	1.3	27.2	47.9	30.1
90+	23.1	31.6	17.9	5.9	26.9	39.1	28.2
Combined	17.3	12.3	21.2	3.0	17.6	41.6	23.7

Notes: Chronic Morbidity is defined as the number of elderly experiencing any chronic ailment to the total elderly in the aged group expressed in percentage.

The states were classified into six regions: **North** = Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Uttarakhand; **Central** = Chhatisgarh, Madhya Pradesh, Uttar Pradesh; **East** = Bihar, Jharkhand, Odisha, West Bengal; **Northeast** = Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura; **West** = Dadra & Nagar Haveli, Daman & Diu, Goa, Gujarat, Maharashtra; **South** = Andaman & Nicobar Islands, Andhra Pradesh, Karnataka, Kerala, Lakshadweep, Puducherry, Tamil Nadu, Telangana

Source of Data: National Sample Survey (2014)

The north eastern region showed the lowest prevalence rate. Perhaps, this implies that health awareness and health care infrastructure facilities have some impact on the prevalence rate and reporting morbidity.

Table 3 shows the prevalence of chronic ailment among elderly in India by education. People who have more education have reported higher prevalence rate than that of the less educated people. Irrespective of the male or female this found more or less same.

Table 3: Prevalence of Chronic ailment among elderly in India by Education, 2014 (%)

General education	Sex		Total
	Male	Female	
Not Literate	19.4	19.5	19.5
Primary	27.3	35.8	30.6
Upper Primary/Middle	23.2	31.8	25.9
Secondary	27.2	38.0	29.6
Higher Secondary	26.8	29.2	27.3
Diploma/Certificate Course (Up To Secondary)	28.2	41.4	31.9
Diploma/Certificate Course (Higher Secondary)	55.2	13.7	47.3
Diploma/Certificate Course (Graduation & Above)	22.4	82.7	32.2
Graduate	30.6	34.9	31.6
Postgraduate And Above	31.5	32.7	31.7
Total	23.6	23.9	23.7

Source of Data: National Sample Survey (2014)

Hospitalisation

Table 4 shows the proportion of hospitalised elderly population by chronic ailment, place of residence and sex. It is clear from the table that health care utilization among elderly is

low. The reasons for the low level of health care utilizations are many and it varies across states. The proportion of hospitalized elderly during the last 365 days prior to the date of survey by their status of chronic ailment shows some interesting

Table 4: Proportion of hospitalized elderly population by chronic ailment, place of residence, and sex, India

Age Group	Whether Suffering From Any Chronic Ailment								
	Yes			No			Total		
	Sex		Total	Sex		Total	Sex		Total
	Male	Female		Male	Female		Male	Female	
Rural									
60-69	13.5	13.7	13.6	4.4	4.8	4.6	6.1	6.6	6.3
70-79	18.5	14.0	16.6	5.7	6.3	6.0	8.9	7.8	8.3
80-89	19.3	16.6	18.0	8.0	6.0	7.0	11.4	8.7	10.0
90+	31.1	17.8	23.0	8.2	4.3	5.8	14.8	7.9	10.5
Total	16.0	14.1	15.1	5.0	5.3	5.2	7.3	7.1	7.2
Urban									
60-69	14.8	11.4	12.9	5.5	6.8	6.1	8.1	8.3	8.2
70-79	23.8	18.3	21.2	7.1	8.4	7.7	12.4	11.4	11.9
80-89	26.2	23.5	24.6	15.3	7.5	10.8	19.0	13.3	15.6
90+	23.5	10.6	16.3	6.8	12.5	9.6	11.4	11.9	11.7
Total	18.4	14.1	16.1	6.5	7.3	6.9	10.0	9.5	9.8
60-69	14.0	12.7	13.3	4.7	5.4	5.0	6.7	7.1	6.9
70-79	20.4	15.7	18.3	6.1	6.8	6.5	10.0	8.9	9.4
80-89	21.5	19.7	20.5	10.0	6.5	8.1	13.6	10.4	11.9
90+	28.6	15.7	21.0	7.8	6.2	6.8	13.6	8.9	10.8
Total	16.9	14.1	15.5	5.4	5.8	5.6	8.2	7.8	8.0

Source of Data: National Sample Survey (2014)

facts. As per the survey, around 7.2 percent of the elderly in rural India, and 9.8 percent of the elderly in urban areas were hospitalized in the reference period in 2014. It is worth to mention that the current hospitalization rates are relatively higher while compared to that in the previous rounds of NSSO data-the figures of 52nd and 60th round of NSSO (NSSO, 2014). Regardless of rural or urban, hospitalization rate is more among males than females.

Around 15.1 percent of the elderly, living in rural areas, with chronic ailment was hospitalized in India. Hospitalization among elderly with no chronic ailment was only 5.2 percent. In the urban India, hospitalization rate for chronic ailed elderly was around 16.1 percent and among the non-chronic ailed elderly, only 6.9 percent hospitalized. This statistics shows that chronic ailment, and hospitalization rates are highly correlated in old ages. As age increases the hospitalization rate is also increasing in rural India. Whereas in the urban India, hospitalization rate increases up to the age of 90 years, then it marginally decreases.

Conclusion

This paper permits us to understand that chronic morbidity rate among elderly is relatively high and thus it accounts a major chunk of the general morbidity rate in India. Perhaps, the higher levels of chronic illness among many of the elderly may be an outcome of their past unhealthy life style coupled with poor food habits. It is possible that many of the elderly with chronic ailment have gone through unhealthy condition during their infancy, childhood, adolescents and adult period. In the light of health evidences, more scientific studies are needed to explore life histories of elderly and more policy interventions are required to minimise the prevalence of chronic morbidity among elderly in the country.

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