



## MORBIDITY PATTERN OF GERIATRIC POPULATION AMONG TEA GARDEN COMMUNITY OF DIBRUGARH DISTRICT, ASSAM

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**ABSTRACT** Aging is a complex and inevitable process that begins prior to birth and continues throughout the life. As the age increases the burden of their health morbidity is on a rise. This paper attempts to assess the morbidity pattern and study the health-seeking behavior of geriatric population among tea garden community of Dibrugarh district, Assam. A cross-sectional, community based study was conducted among tea garden community of Dibrugarh district, Assam. A total of 130 geriatric people aged 60 years and above were selected from Majjan Tea Estate of Dibrugarh district, Assam by using simple random sampling. Data analysis was done by using Excel, IBM SPSS 20.

**KEYWORDS :** Health status, health-seeking behavior, geriatric population, tea garden community

### INTRODUCTION

Aging is a complex, multifactorial, and inevitable process, which begins before birth and continues throughout the life<sup>1</sup>. In India, like other countries in Asia, is experiencing rapid demographic transition, which has resulted in an increasingly aging population<sup>2</sup>.

The report by United Nations showed that the population of geriatric people is growing worldwide at a rate of 2.6% per year, whereas the population as a whole is increasing by just 1.1% annually.

In India, there is a gradual increase in geriatric population of both male and female together, which increased from 12.06 million in 1901 to 77 million in 2001. These changes can present with complicated implications on health, social, and family life<sup>3</sup>.

The 2011 census shows that the older population (age 60+) of India reached 100 million. The United Nations statistical projection indicates that the size of India's population aged 60 years and above is expected to increase to 117 million in 2015, 193 million in 2030, and further to 335 million in 2050. The proportion is likely to reach 13% population in 2030 and 20% in 2050<sup>2</sup>. A growing aging population in any country carries great social, economic, and public health implications. The burden of morbidity and mortality in the population will also undergo change from burden profiles dominated by infectious diseases to those affected by chronic non communicable diseases<sup>4</sup>.

The geriatric are one of the most susceptible and high risk groups in terms of health condition and their health care-seeking behaviour is vital in any society.

### MATERIALS AND METHOD

A cross-sectional, community-based study was conducted among tea garden community of Dibrugarh district, Assam. A total of 130 geriatric people aged 60 years and above were selected from Majjan Tea Estate consisting of Rajgarh Borline, Rajgarh Chotline and Pathartoli of Dibrugarh district, Assam by using simple random sampling. Data analysis was done by using Excel, IBM SPSS 20.

### RESULTS AND DISCUSSION

**Table 1: Demographic characteristics and living status among geriatric population of tea garden community**

Age group (years)	Male		Female		Total	
	No	%	No	%	No	%
60-64	31	42.5	14	24.6	45	34.6
65-69	19	26	28	49.1	47	36.2
70-74	13	17.8	12	21.1	25	19.2
75-79	7	9.6	3	5.3	10	7.7
80-84	3	4.1	0	0	3	2.3
<b>Educational status</b>						
Illiterate	59	80.8	50	87.7	109	83.8
Class I-IV	12	16.4	7	12.3	19	14.6
Class V-VIII	2	2.7	0	0.0	2	1.5

Type of family	No	%	No	%	No	%
Nuclear Family	55	75.3	43	75.4	97	74.6
Joint family	18	24.7	14	24.6	32	24.6
<b>Living Status</b>						
With children	28	38.4	2	3.5	30	23.1
With spouse	2	2.7	32	56.1	34	26.2
With spouse and children	38	52.1	22	38.6	60	46.2
With relatives	5	6.8	1	1.8	6	4.6

Table 1 shows socio demographic and living status of geriatric population of tea garden community of Dibrugarh district, Assam. Of the total 130 respondents, 56.2% were male and 43.8% were female. Majority of the geriatric population were in the age group of 65-69 years (36.2%). Among the geriatric population of tea garden community 83.8% being illiterate, of which 80.8% are males and 87.7% of females. Almost 3/4<sup>th</sup> of the geriatric live in nuclear families (74.6%) followed by joint families (24.6%). The study reveals that 46.2% geriatric populations were living with their spouse and children followed by 26.2% with spouse, 23.1% were living with their children respectively (Table 1).

**Table 2: Morbidity pattern among geriatric population of tea garden community**

Morbidity	Male		Female		Total	
	No.	%	No.	%	No.	%
Hypertension	23	9.3	28	11.6	51	10.5
Chronic Bronchitis	16	6.5	3	1.2	19	3.9
Musculoskeletal problem	37	15.0	34	14.1	71	14.6
Piles	3	1.2	2	0.8	5	1.0
Cataract	7	2.8	9	3.7	16	3.3
Hearing problems	18	7.3	25	10.4	43	8.8
Vision problem	23	9.3	24	10.0	47	9.7
Heart problem	13	5.3	12	5.0	30	6.2
Skin problem	30	12.2	33	13.7	63	12.9
Tuberculosis	5	2.0	3	1.2	8	1.6
Urinary problem	16	6.5	16	6.6	32	6.6
Dental problems	19	7.7	21	8.7	40	8.2
Swelling	9	3.7	4	1.7	13	2.7
Asthma	2	0.8	6	2.5	8	1.6
Night blindness	4	1.6	3	1.2	7	1.4
Boil	3	1.2	5	2.1	8	1.6
Wound	7	2.8	2	0.8	9	1.8
Stress	7	2.8	9	3.7	16	3.3
Goitre	4	1.6	2	0.8	6	1.2

Table 2 highlights the morbidity pattern among geriatric population of tea garden community. Among the males, musculoskeletal problem was found to be highest (15.0%) followed by skin problem (12.2%), hypertension and vision problem (9.3%), dental problems (7.7%), hearing problems (7.3%), chronic bronchitis, urinary problems (6.5%) while on the other hand in females, musculoskeletal problem (14.1%)

was found to be highest followed by skin problem(13.7%), hypertension(11.8%), hearing problem(10.4%), vision problem (10.0%), dental problems respectively.

**Table 3: Distribution of Health seeking behavior of geriatric population of tea garden community**

Source of treatment	Men		Women		Total	
	No.	%	No.	%	No.	%
Government Hospital	54	37.0	49	39.2	103	38.0
Private Hospital(Tea garden hospital)	53	36.3	55	44	108	39.9
Pharmacy	14	9.6	10	8	24	8.9
Traditional healers	13	8.9	2	1.6	15	5.5
AYUSH	3	2.1	4	3.2	7	2.6
No treatment	9	6.2	5	4	14	5.2

Table 3 shows out of 130 geriatric population of tea garden community who sought treatment for their chronic illness. Majority of them sought treatment from Private Hospital (Tea garden hospital) (39.9%) followed by Government hospital(38%), pharmacy (8.9%), traditional healer(5.5%) and AYUSH (2.6%) while 5.2% didn't access any treatment

**Table 4: Economic Dependence among geriatric population of tea garden community**

Economic dependence	Male		Female		Total	
	No.	%	No.	%	No.	%
Totally dependent	25	34.2	20	35.1	45	34.6
Partially dependent	27	37.0	21	36.8	48	36.9
Totally independent	21	28.8	16	28.1	37	28.5

Table 4 shows that the economic dependence among geriatric population in which partially dependent (36.9%) is found to be highest followed by totally dependent (34.6%) and totally independent (28.5%).

## DISCUSSION

In the present study 36.2% of the geriatric populations were found in the age group 65 to 69 years, with males and females contributing 56.2% and 43.8% respectively for that age group. Similar studies conducted by Narapureddy, B *et al* that 59.6% of the geriatric were found in the age group 60 to 69 years, with males and females contributing 57.0% and 62.4% respectively. Again, Davalagi Shubha *et al* studied that 70% of the geriatric were found in the age group 60 to 69 years; maximum numbers of geriatric (50%) were in the age group of 60-64 years. Present study depicts that majority (74.6%) of the geriatric lived in nuclear families followed by joint families (24.6%). Among the geriatric population of tea garden community 83.8% being illiterate, of which 80.8% are males and 87.7% of females. The study revealed that 46.2% geriatric populations were living with their spouse and children followed by 23.1% were living with their children respectively. Hakmaosa A. *et al* revealed that 69.5% were illiterate, 19.7% studied upto primary level, 5.9% studied till middle school, 13.8% studied till high school, 0.8% were HSLC passed and 0.3% was post-graduate. Narapureddy, B. *et al* found about nearly 34% of the geriatric were living in joint families, 33.3% living in three generation families, 28.4% living in nuclear families and 7.2% geriatric living alone. Purty *et al* also found similar high percentage of illiterates 78.7% among geriatric person from rural Tamil Nadu. High percentage of illiterates was also found in the studies of Kant *et al*, Goswami *et al* and Purohit *et al*. The present study reveals that 46.2% geriatric populations were living with their spouse and children followed by 23.1% were living with their children respectively (Table 1). Bhatia *et al* in urban area (2007) found that 3.7% of geriatric were living alone and 49.85 were living with spouse and children. Kishore *et al* in rural area (1997) found that 6.5% of the study subjects were living alone, 68.3% with spouse and 20% were living with their children.

In the present study, musculoskeletal problem was found to be highest (14.6%) followed by skin problem (12.9%), hypertension (10.5%), vision problem(9.7%), hearing problems(8.8%), dental problems(8.2%) respectively. Similar studies by Jain Swapnil *et al* studied out of 600 subjects majority 65.3% had hearing impairment, followed by anaemia (62.2%), Hypertension (46.2%), joint pain (42.3%), dental problems (41.0%), cataract (38.7%), chronic bronchitis (31.9%), APD (27.3%), Diabetes mellitus (11%), skin diseases (7.5%), piles (7.2%), Benign prostatic hyperplasia (3.7%), Tuberculosis (1.0%). Kumar R *et al* found that prevalence of various

morbidity being hypertension (13.12%), arthritis (11.25%), cataract (11.87%), dental problems (4.37%). There was wide variation in distribution of morbidities among geriatric persons in various studies conducted in different parts of India, Qadri S. *et al* found that majority were anaemic (64.5%) and had dental problems (62.2%), followed by joint pains (51.4%), cataract (46.8%), hypertension (44.5%) respectively.

In the present study, out of 130 geriatric population of tea garden community who sought treatment for their chronic illness was from Private Hospital(Tea garden hospital) (39.9%) followed by Government hospital(38%), pharmacy (8.9%), traditional healer(5.5%) and AYUSH (2.6%) while 5.2% didn't access any treatment. Different studies like Hakmaosa A. *et al* revealed that 72% sought treatment for their chronic illness and 51.5% sought treatment from Government hospital followed by private hospital (25.7%), pharmacy (22.1%) and quack (0.7%). Deepak Sharma *et al*. conducted study in Shimla Hills of North India reported that most of the older persons (60.7%) preferred going to a PHC/CHC/Govt. hospital for treatment for their illness, 26.7% sought treatment from private practitioner and 12.6% took over the counter drug.

Present study reveals that the economic dependence among geriatric population are mostly partially dependent (34.6%) followed by totally dependent (36.9%) and totally independent (28.5%). Similar studies conducted by Narapureddy, B. *et al* that economic dependence among geriatric population was totally dependent (48.4%) followed by partially dependent (26.0%) and totally independent (25.6%).

## CONCLUSION

The study enlightens that almost all geriatric population among tea garden community had reveals to have one or the other health problem. As the age increases chances of co morbidities also increases. Hence, there is an urgent need of dealing the geriatric health problems in good compliance and compressive among tea garden community. There is a need to generate awareness among the tea garden community, general public, and policy makers regarding multiple issues related to the ageing. There should be separate Hospital for the geriatrics for their special care and attention. Further studies are needed to explore the possibility of starting mobile geriatric clinics to reduce the problem of accessibility for tea garden community.

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