



## ASSESSMENT OF HEALTH SEEKING BEHAVIOUR AMONG THE GERIATRIC POPULATION IN GUWAHATI CITY, ASSAM

**Jhankar Hazarika\***

Assistant Professor, Department of Community Medicine, Gauhati Medical College and Hospital, Guwahati, Assam\*Corresponding Author

**Bikash Kumar Das**

Associate Professor, Sri Venkateshwaraa Medical College Hospital & Research Centre-Puducherry

**KEYWORDS :** Morbidity- elderly- health seeking

### Introduction

Ageing is a natural process. In words of Seneca, "Old age is an incurable disease" but recently, Sir James Sterling Ross commented, "You do not heal old age. You protect it; you promote it; you extend it".

Increase in life expectancy with decrease in fertility has led to a demographic transition towards a higher proportion of older individuals in India. The proportion of elderly people is expected to rise from 5.6% in 1961 to 12.4% of the population by the year 2026<sup>1</sup>. The old age dependency ratio has increased from 10.9% in 1961 to 13.1% in 2001 and is projected to increase to 16.1% by 2021<sup>1</sup>. Traditionally, the joint family system in India has provided social and economic security to the elderly. However, the rapidly changing social scenario and the emergence of nuclear families are likely to expose the elderly in India to emotional, physical and financial insecurity in the future<sup>1</sup>. About 90% of the elderly do not have a regular source of income<sup>1</sup>. Other basic needs that affect their health status include a reduced ability to generate resources, economic dependency, poor housing, loneliness and lowered self-esteem<sup>2,4</sup>. The health status of elderly women is worse than men because of their low literacy rate, not being customary owners of property and their poor representation in the labour force during their prime age, particularly in the organized sector<sup>1</sup>.

Whereas robust maternal and child health services exist in developed and developing countries, health policies for the elderly are almost non-existent<sup>2</sup>.

It is a major challenge to create an environment for the elderly to lead a secure, dignified and productive life. Health-seeking behaviour is defined as 'any activity undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy<sup>3</sup>. The way people conceptualize the cause of their health problem and their perception of symptoms plays an important role in seeking healthcare<sup>6</sup>.

An individual who perceives himself or herself to be sick shows distinct behavioural changes including confining to the bed or staying away from routine activities or going to a health practitioner<sup>7</sup>.

Studies have shown that several important determinants of health seeking behaviour such as age, sex, poverty<sup>7</sup>, education and income<sup>6</sup>, historical patterns of use, illness type and severity, pre existing beliefs about illness causation, range and accessibility of therapeutic options and their perceived efficacy, convenience, cost and quality of services<sup>5</sup>. Delays in seeking healthcare have been attributed to ageing, low socioeconomic status, and a negative attitude of health workers to the care of elderly.

It is necessary to understand health seeking behaviour with its determinants to sensitise the elderly<sup>2</sup> towards their needs and priorities. We aimed to assess the health seeking behaviour of elderly people (>60 years of age) and study its effect in relation to their age, sex, education, employment status, poverty and marital status.

### Material and Methods

**1. Study design-** Community based cross sectional study.

**2. Study area-** Residential areas of Guwahati city.

**3. Study period-** 6 months; May, 2018 - October, 2018

**4. Study Population-** It comprised of 180 households residing in the residential areas of Ulubari, Rupnagar and Narakasur Hills.

**5. Sampling technique-** As per information obtained from the Gauhati Municipal Corporation Office, there are 60 wards in Guwahati city. Out of the 60 wards present, 3 wards were selected for based on random sampling. From each of these 3 wards, 60 subjects were selected in each area by undergoing house to house visits. The selected wards are Ulubari, Rupnagar and Narakasur Hills.

### 5. Inclusion criteria-

Persons belonging to the geriatric age group (aged 60 and above) who have been permanent residents of the respective area for at least 1 year. Persons willing to participate in the study.

### 6. Exclusion criteria-

- Seriously ill people who are not able to respond.
- If two elderly persons living in the same house, only one was included in the study.

**7. Data collection tool-** A pre designed and pre tested proforma, along with anthropometric measurements, stethoscope, weighing machine, sphygmomanometer, Modified Kuppuswamy's socio economic scale for determination of socio economic status, Mini Nutritional Assessment for assessment of nutritional status, Geriatric Depression Scale for assessment of depression.

**8. Data collection technique-** House to house visit by interview method, extensive history taking with clinical examination of the study population. Consent was taken prior to beginning the examination after clearly explaining the procedure.

Initially a pre-testing was conducted amongst ten elderly participants in the Rupnagar area in order to test the accuracy of the schedule prepared. These participants were not included in the main study.

**9. Statistical analysis-** Computer applications like Microsoft Word and Excel were used for typing, tabulating and for making a graphical presentation of the data collected.

### Results

The study was conducted in Guwahati City in 3 municipality areas- Narakachal Hill (Municipality Ward 17C), Rupnagar (Ward 18A), Ulubari (Ward 18B). Out of all respondents 51.66% were males and 49.44% were females. Among the males 15% were aged between 60 to 64 years, 13.89% were aged between 65 to 69 years, 8.33% were aged between 70 to 74 years, 7.22% were aged between 75 to 79 years and 6.11% were aged above 79 years. Among the females 17.22% were aged between 60 to 64 years, 16.67% were aged between 65 to 69 years, 6.11% were aged between 70 to 74 years, 5.56% were aged between 75 to 79 years and 3.89% were aged above 79 years. The finding shows that majority of elderly population( both male and female) were aged between 60 to 64 years.

In the present study, it was observed that most frequent symptom of morbidity is diminution of vision which was seen in 22.77% of the males and 26.67% of the females, followed by joint pain in 6.67% of

males and abdominal pain in 6.67% of females.. Difficulty in breathing was complained of by 1.67% of males and a significant 12.22% of females. About 4.44% males and 2.77% females experienced dizziness while loss of memory was seen in 0.56% of males and 1.11% of females. The mean number of morbidity symptoms was significantly higher in female elderly (60.55%) as compared to those in male elderly (46.67%).

**Table 1 Distribution of respondent according to morbidities**

Sl. No.	Symptoms	Male		Female	
		No.	Percentage	No.	Percentage
1	Osteoarthritis	5	2.78%	4	2.22%
2	Cataract	27	15%	30	16.67%
3	Presbycusis	6	3.33%	3	1.67%
4	Hypertension	28	15.56%	38	21.11%
5	Diabetes Mellitus	12	6.67%	13	7.22%
6	Enlarged prostate	2	1.11%	0	0%
7	Asthma	7	3.89%	5	2.78%
8	Gastritis	11	6.11%	3	1.67%
Total		97	53.89%	96	53.33%

In table 1 Out of the 180 respondents, 5 males (2.78%) and 4 females (2.22%) suffer from osteoarthritis, 27 males (15%) and 30 females (16.67%) from cataract, 6 males (3.33%) and 3 females (1.67%) from presbycusis, 28 males (15.56%) and 38 females (21.11%) from hypertension, 12 males (6.67%) and 13 females (7.22%) from diabetes mellitus, 2 males (1.11%) from prostate enlargement, 7 males (3.89%) and 5 females (2.78%) from asthma, 11 males (6.11%) and 3 females (1.67%) suffer from gastritis.

**Table 2 Distribution of respondents according to addiction pattern and sex**

Sl. No.	Habits	Male		Female	
		Number	Percentage	Number	Percentage
1	Smoking	13	7.23%	0	0%
2	Alcohol	28	15.56%	1	0.55%
3	Betel nut	51	28.34%	29	16.12%
4	None	28	14.45%	30	16.67%
Total		120	66.66%	60	33.34%

Table 2 shows Out of the 180 elderly people interviewed, 13 males (7.23%) were found to be smokers while all the females were non-smokers. It was also observed that 28 males (15.56%) and 1 female (0.55%) intake alcohol on a regular basis. Chewing of betel nut was seen in 51 males (28.34%) and 29 females (16.12%). Lastly, 26 males (14.45%) and 27 females (15%) were not found to have any addiction at all.

**Table 3 . Distribution of respondents according to symptoms of morbidities:**

Sl. No.	Symptoms of Morbidity	Male		Female	
		No of respondents	Percentage	No of respondents	Percentage
1	Headache	3	1.67%	2	1.11%
2	Dizziness	8	4.44%	5	2.77%
3	Pain/Fullness of abdomen	9	5%	12	6.67%
4	Joint pain	12	6.67%	8	4.44%
5	Diminution of vision	41	22.77%	48	26.67%
6	Diminished hearing	5	2.77%	10	5.56%
7	Burning micturition	2	1.11%	0	0%
8	Difficulty in breathing	3	1.67%	22	12.22%
9	Loss of memory	1	0.56%	2	1.11%
Total		84	46.67%	109	60.55%

Table 3 shows : Out of 180 respondents, Symptoms of Headache are seen in 3(1.67%) males and 2(1.11%) females, Dizziness is seen in

8(4.44%) males and 5(2.77%) females, Pain/Fullness of abdomen is seen in 9(5%) males and 12(6.67%) females, Joint pain is seen in 12(6.67%) males and 8(4.44%) females, Diminution of vision is seen in 41(22.77%) males and 48(26.67%) females, Diminished hearing is found in 5(2.77%) males and 10(5.56%) females, Burning micturition is present in 2(1.11%) males, Difficulty in breathing is seen in 3(1.67%) males and 22(12.22%) females and Loss of memory is observed in 1(0.56%) male and 2(1.11%) females.

## Discussion

In our study, majority (75%) are Hindus, 18.89% are Muslims and only 6.11% are Christians by religion. This result was so because the areas we visited were with Hindu majority. This corresponds to the study by Mukesh Shukla et al<sup>12</sup>. 68% of the population are married and were living with their partners. 28% of them were widowed and 0.02% of them were unmarried. This is similar to that in study by Mukesh Shukla et al<sup>12</sup>. In terms of family structure, 55.56% of the respondents belong to a joint family while 44.44% belong to a nuclear family. This corresponds to the results of a study by Deepak Sharma et al<sup>11</sup>.

We also found that 12.22% of the respondents were illiterate while 87.78% were literate, amongst which the highest percentage (22.22%) included respondents who completed education till primary school. 16.67% of respondents completed middle school, 11.67% completed high school, 6.67% has passed HSLC, 8.89% has completed higher secondary. Graduates include 17.22% of the respondents while 4.44% are post graduates respectively.

Considering the type of housing the respondents lived in, 26.11% lived in kutch houses and 73.89% lived in pucca houses.

According to our study, 15.56% of the elderly population had no income of their own, 35% of them received pension, 1% were dependent on savings, 23.89% were dependent on their children, 8.89% were dependent on rents and 6.67% were dependent on daily allowances for their income. According to our study, majority of the respondents (43.89%) received more than 5000 rupees per month while 21.67% of the respondents received less than 500 rupees per month. 1% of the respondents received between 500 to 1000 rupees, 7.22% received between 1000 to 2000 rupees and 17.22% received incomes between 2000 to 5000 rupees per month.

By evaluation of the socioeconomic status using the Kuppaswamy scale which takes into account the literacy score, occupation score and the monthly family income, most of the population (42.78%) were from the upper middle class, followed by 22.78% in the lower middle class and 16.67% in the upper lower class. The percentage of population belonging to the upper class was 10% while only 7.78% of the respondents were from the lower socio economic class.

Regarding personal habits and addiction patterns, it was observed that most of elderly males (28.34%) were addicted to betel nut while in females, 16.12% of them consumed the same regularly. Among females, only 0.55% were found to be alcoholics whereas in males, alcoholism was prevalent in 15.56%. However in the study performed by Shukla et al<sup>13</sup>, it was seen that only 4.8% of elderly male had the habit of alcohol. In the present study, smoking in males was prevalent in 7.23% males while all the females were non-smokers. The overall prevalence of any kind of addiction in males was found to be 51.13% while in females, it was only 16.67%. This is consistent with the study performed by Shukla et al<sup>12</sup>, where it was seen that 51.6% male elderly had some type of addiction and while in females the percentage was 38.1%.

Regarding the physical activity performed, it was seen that most of the individuals (48.34%) walk on a regular basis while 15% jog habitually. About 5% of the respondents also lift weight and 13.34% of them do other exercise regularly. However, about 11.12% of the population do not do any exercise on a regular basis.

In the present study, it was observed that most frequent symptom of morbidity is diminution of vision which was seen in 22.77% of the males and 26.67% of the females, followed by joint pain in 6.67% of males and abdominal pain in 6.67% of females. However, in the study performed by Sharma et al<sup>11</sup>, the most common morbidity was found to be joint pain, seen in 55% of the subjects. Difficulty in breathing was complained of by 1.67% of males and a significant 12.22% of females. About 4.44% males and 2.77% females experienced dizziness while

loss of memory was seen in 0.56% of males and 1.11% of females. The mean number of morbidity symptoms was significantly higher in female elderly (60.55%) as compared to those in male elderly (46.67%).

Among the morbidities, the most common is hypertension seen in 15.56% males and 21.11% females followed by cataract, which was seen in 15% males and 16.67% of the females and diabetes, prevalent in both males (6.67%) and females (7.22%). Occurrence of osteoarthritis was almost equal in both males and females. About 1.11% of the male elderly were having an enlarged prostate. The mean number of morbidities was almost equal in both males (53.89%) and females (53.33%)

Out of 180 subjects interviewed, majority of them (67.22%) did not have any history of fall while 32.78% of them gave a positive history in this regard.

Majority of the subjects (93.3%) do not use any artificial prosthesis while 8.3% of them do use it.

Based on the distance to the nearest health facility, most of the respondents (39.45%) have such a facility located within 0.5-1 km of their house followed by 27.22% of the subjects, who have a hospital situated at a distance of 1-2 km and 18.89% individuals, with a health facility at a distance of 2-5km. About 12.22% individuals have a hospital within 500 meters of their house while only 2.22% of them do not have any such facility within 5km.

Among the households under study, 51 (28.33%) respondents reach the health facility by walking, 60(33.33%) use public transport, while most of them i.e., 69(38.33%) use private transport.

As per the study, 62(34.44%) had no health check-ups done over the past one year, while 43(23.89%) had health check-ups done once over the past one year, 39(21.67%) had check-ups done twice, 17(9.44%) had check-ups done thrice and 19(10.56%) had check-ups done more than 3 times in past one year.

Regarding the use of health check-ups for preventive purpose among the elderly under study, it was found that only 44(24.44%) of them use health check-ups for preventive purpose, while 136(75.55%) do not use it.

As found out from the study, among the 180 respondents, 151(83.89%) of them were not hospitalised over past one year, and the remaining 29 were hospitalised. Out of these 29, 19(10.56%) were hospitalised once, 7(3.89%) were hospitalised twice, 1(0.55%) was hospitalised thrice and 2(1.11%) were hospitalised more than 3 times over past one year. 53.3% of the respondents attended government hospitals and 46.7% attended private hospital during the last episode of illness. We have also found that all the individuals have health care facility in their area. 60.5% of the respondents have government, 18.3% have private 7.7% have ayurvedic and 13.5% have homeopathic health care facility in their area. Among the respondents to our study, 82.78% prefer going to an allopathy facility (similar to the study by Deepak Sharma et al 11 where 81.4% prefer allopathy), 15.56% prefer homeopathy, 1.66% prefer ayurveda.

On being asked, if they have emergency contact number of Doctor, 67.2% of the respondents have and 32.8% do not have any contact number of Doctor.

It is found from our study that only 6.1% respondents are aware of government health scheme and geriatrics. Of all the respondents, 7.78% respondents were using hearing aid/walking aid and 92.22% were not using any of the following. 27.22% of our respondents purchase medicine from government run stores and rest 72.78% prefer to purchase from private stores.

On being asked, who maintain their charts/ timeline, 70.56% maintained their charts by themselves, 9.44% were maintained by their spouse, 17.22% by their children, none were maintained by their neighbours and 2.78% were maintained by others.

In our study, when mid upper arm circumference (MUAC) of respondents were measured, it is found that 16.67% have a MUAC of less than 21 cm, 56.67% have between 21 to 22 cm and 26.67% have

more than 22 cm. When calf circumference of the respondents were measured, it is found that 14.44% have less than 31 cm and 85.66% have more than 31 cm.

It is found in our study that 85% of the respondents were not suffering from depression, 12.22% were suggestive of depression and 2.78% were indicative of depression.

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