



Original Research Article

MORBIDITY PATTERN, HEALTH SEEKING BEHAVIOUR AND ITS RELATED FACTORS AMONG THE ELDERLY URBAN DWELLERS OF NAGAON TOWN, ASSAM, INDIA

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ABSTRACT

Background: Context/Background: With India projected to have nearly 20% of its population in the geriatric age group, the changing demographic structure underscores the crucial role of older adults in nation-building through community engagement, knowledge dissemination, and shared experiences. Ensuring graceful ageing requires health-promotional activities like recreational activities, physical activity, and social contact, etc. Comprehensive geriatric assessment and coordinated screening programs are necessary for an independent life in later stages. This study aims to assess the prevalence of morbidity patterns and their related factors and health-seeking behaviour of elderly people, while also fostering awareness about health-promotional activities.

Materials and Methods: A community-based cross-sectional study was conducted from May to October among elderly (≥ 60) people in urban areas of Nagaon town, Assam. A sample size of 384 was taken from 9 wards, selected randomly from 28 registered wards. Data was collected using a pre-designed, pre-tested and semi-modified proforma by interviewing the elderly after taking informed consent. Ethical clearance was obtained from the Institutional Ethical Committee. Elderly not willing to participate and giving incomplete information were excluded.

Results: Total 54.7% males and 45.3% females were included in the study. Majority (64.6%) were from 60–74 years age group. Overweight was found 42.9% and 16.6% were obese. Hypertension was commonest (63.8%) among the elderly, followed by DM (37.5%). About 16.4% elderly had at least two comorbidities. Hypertension among the people above 85 years was more prevalent (80%) than the other age groups.

Conclusion: Hypertension and diabetes were the commonest morbidity among the participants. Overweight and obesity were also common. In our study, most of the elderly lacked physical activity. This study implies that there is a need to create awareness among the general public highlighting the importance of physical activity for healthy ageing.

Keywords: Elderly, Physical activity, Morbidity, Health seeking behaviour, Urban dwellers.

INTRODUCTION

The demographic structure is changing worldwide with a gradual shift towards a higher proportion of

older people. The number of older people in the low-income countries is expanding rapidly. By 2050, India is going to have 20% of the population as Geriatric population. Healthy older persons are a resource for all. They make major

contributions to the society. Older people play a critical role through volunteer work, promoting knowledge, helping the community and families by sharing their experiences towards building a strong nation.^[1]

The development can only be ensured if older persons enjoy healthy, happy and contented life. These elderly people need more of health promotional activities which include recreational, physical activity, social contact, psychological support etc. Regular physical activity (both moderate- and vigorous-intensity) “is proven to help prevent and manage non communicable diseases such as heart disease, stroke, diabetes and several cancers. It also helps prevent hypertension, maintain healthy body weight, and can improve mental health, quality of life and well- being”.^[2]

Since the joint family and traditional support structure of the family is breaking down, the children are unable to take care of their parents, millions of elderly face destitution. In a study at Dharan, Nepal suggest that most of the elderly people (64%) deprived of the health care due to ignorance.^[3]

Comprehensive geriatric assessment with a coordinated screening program and control of chronic diseases become important for this group so that they remain active and independent till their later ages.^[4]

Objectives: This study aimed to assess the prevalence of morbidity pattern and its related factors e.g. physical activities, recreational activities, Body Mass Index (BMI) and health seeking behaviour of elderly people and thereby generate awareness about health promotional activities.

MATERIALS AND METHODS

A community based cross-sectional study was carried out from May, 2024 to October, 2024 among the elderly (60 & above) people in Urban areas of Nagaon town, Assam. The calculated sample size of 384 was taken from 9 wards, which was selected randomly from 28 registered ward.

Data was collected in a pre-designed, pre-tested and semi-modified proforma by interviewing the elderly after taking informed (verbal) consent from them. Ethical clearance was taken from Institutional Ethical Committee. Elderly not willing to participate

and giving incomplete information were excluded from the study.

RESULTS

Total of 384 elderly individuals included in the study where 54.7% (210) males and 45.3% (174) females. The highest participants (64.6%) were from 60-74 years group followed by 75-85 years (30.2%) and >85 years (5.2%). Among the study subjects 75.5% belongs to Hinduism and 24.5% Islam and majority (37%) were matriculate followed by intermediate 33.1%, below matriculate 15.1% and only 10.4% elderly were found graduate & above. In this study, majority 72.7% belongs to nuclear family and 40.6% from middle class family. Among the 384 elderly 42.9% were found overweight and 16.6% were obese. Only 37.5% were normal BMI and 3% falls underweight (< 18.5) categories [Table1].

In this study Hypertension was the commonest (63.8%) morbidity among the elderly followed by DM (37.5%), ARI (34.4%), COPD/ Asthma (23.4%), Accident/ Injuries (21.1%), arthritis (20.8%) and CVD, CKD, CLD and Cancer were 4.9%, 2.6%, 6.8% and 3.1% respectively. About 16.4% elderly having at least two morbidities [Table2].

According to our study findings physical activity was not so common. Majority of study subjects (73.7%) watching TV as recreational activity. Regular walking among the elderly was 43% followed by gardening 12.5%, household work 25%, reading books 14.1% and handcraft 3.9% [Table3].

In our study, 93.7% said to use allopathic care, among them 75.8% used to go private hospital and only 19.5% goes to Govt. Hospital for health care [Table4].

Hypertension among the people above 85 years is more prevalent (80%) than age group 75-85 years (70.7%) and 60-74 years (59.3%). There is a significant association between age and hypertension ($p < 0.05$). Diabetes is more (46.7%) among the over weight and obese people than normal or low BMI peoples (23.9%) which is statistically significant ($p < 0.001$). We also found that over weight and obese are less (46%) among the people who used to do physical activity like walking or gardening as compared to people with other recreational activities (76.6%), which is showing strongly significant ($p < 0.001$) [Table5].

Table 1: Socio-demographic characteristics of study subjects (n = 384)

Variables	Categories	Male (%)	Female (%)	Total (%)
Age	60-74 yrs	134	114	248 (64.6%)
	75-85 yrs	64	52	116 (30.2%)
	>85	12	8	20 (5.2%)
Religion	Hinduism	160 (41.7)	130 (33.8)	290 (75.5)
	Islam	50 (13)	44 (11.5)	94 (24.5)
Education	Graduate & above	29 (7.6%)	11 (2.9%)	40 (10.4%)
	Intermediate	88 (22.9%)	39 (10.2%)	127 (33.1%)
	Matriculate	62 (16.1)	80 (20.8)	142 (37%)
	Below matriculate	25 (6.5)	33 (8.6)	58 (15.1)
	Illiterate	6 (1.2%)	11 (2.9%)	17 (4.4%)

Family type	Nuclear family	162	117	279 (72.7)
	Joint family	48	57	105 (27.3)
Socio-economic class	Upper middle	67	31	98 (25.5)
	Middle	87	69	156 (40.6)
	Lower	56	74	130 (33.9)
BMI	Underweight (<18.5)	5 (1.2)	7 (1.8)	11 (3)
	Normal (18.5–24.9)	80 (20.8)	64 (16.6)	144 (37.5)
	Overweight (25–29.9)	91 (23.8)	73 (19)	165 (42.9)
	Obese (≥30)	34 (8.9)	30 (7.8)	64 (16.6)

Table 2: Distribution according to morbidity pattern. (Multiple responses)

Morbidity	Male	Female	Total (n=384)
Hypertension	133 (34.6%)	112 (29.2%)	245 (63.8%)
Diabetes	85 (22.1%)	59 (15.4%)	144 (37.5%)
CVD	12 (3.1%)	7 (1.8%)	19 (4.9%)
CKD	7 (1.8%)	3 (0.8%)	10 (2.6%)
CLD	21 (5.5%)	5 (1.3%)	26 (6.8%)
Cancer	5 (1.3%)	7 (1.8%)	12 (3.1%)
Accident / Injury	46 (12%)	35 (9.1%)	81 (21.1%)
COPD / Asthma	39 (10.2%)	51 (13.3%)	90 (23.4%)
Arthritis	31 (8.1%)	49 (12.8%)	80 (20.8%)
ARI	73 (19%)	59 (15.4%)	132 (34.4%)
Multimorbidity	35 (9.1%)	28 (7.3%)	63 (16.4%)

Table 3: Activities among the study subjects (Multiple responses)

Activity	Male	Female	Total (n=384)
Watching TV	160 (41.7%)	123 (32%)	283 (73.7%)
Walking	93 (24.2%)	72 (18.8%)	165 (43%)
Gardening	34 (8.9%)	14 (3.6%)	48 (12.5%)
Household work	19 (4.9%)	77 (20.1%)	96 (25%)
Reading	45 (11.7%)	9 (2.3%)	54 (14.1%)
Handcraft	2 (0.5%)	13 (3.4%)	15 (3.9%)

Table 4: Utilization of health care services

Facility used	Male	Female	Total (n=384)
Allopathic care	192 (53.3%)	168 (46.7%)	360 (93.7%)
Others	18 (75%)	6 (25%)	24 (6.3%)
Govt Hospital	47 (62.7%)	28 (37.3%)	75 (19.5%)
Private Hospital	152 (52.2%)	139 (47.8%)	291 (75.8%)
Both Govt & Private	11 (61.1%)	7 (38.9%)	18 (4.7%)

Table 5: Test of Association

A. Hypertension (HTN) with Age Group				
Variables	HTN	Nil	Total	Chi sq value
60–74 yrs	147 (59.3%)	101 (40.7%)	248 (100%)	6.86
75–85 yrs	82 (70.7%)	34 (29.3%)	116 (100%)	P = <0.05
>85 yrs	16 (80%)	4 (20%)	20 (100%)	
B. Diabetes Mellitus (DM) with Body Mass Index (BMI)				
Variables	DM	Nil	Total	Chi sq value
Normal BMI	37 (23.9%)	118 (76.1%)	155 (100%)	20.6
Overweight / Obese	107 (46.7%)	122 (53.3%)	229 (100%)	P = <0.001
C. Overweight/Obese with Physical Activity				
Variables	Overweight / Obese	Nil	Total	Chi sq value
Walking	98 (46%)	115 (54%)	213 (100%)	36.8
Gardening	—	—	—	P = <0.001
Others activity	131 (76.6%)	40 (23.4%)	171 (100%)	

DISCUSSION

The present study was undertaken with the objective to access the Prevalence of morbidity pattern among the elderly people residing in the urban areas of Nagaon, Assam, India. This study also tried to find out the related factors associated with morbidity and their health seeking behaviour.

Out of total study subjects 64.6% were from 60-74 years group, 30.2% from 75-85 years and only 5.2% were from >85 years. In this study we found 75.5%

belongs to Hind community and 24.5% from Islam community. A similar study in Assam Barua K et al.,2017, shows 62.4% of elderly were Hindus and 27.2% were Muslims.^[5] As per qualification, only 10.4% elderly were found graduate & above, 37% were matriculate followed by intermediate 33.1%, below matriculate 15.1% and illiterate 4.4%. Higher qualification is more among man as compared to women but illiteracy was more among the women, similar result like Illiteracy was more among elderly women (60%) than elderly men (40%) was found in

Baruah K et al.^[5] In this study, majority 72.7% belongs to nuclear family which is slightly more than the national average of urban nuclear family ie. 61.3%.^[6]

In our study 42.9% elderly were found overweight and 16.6% were obese. Only 37.5% were normal BMI and 3% falls underweight (< 18.5) categories. Similar results were found in a study, S.Pengpid, K. Peltzer. et al where 20.8% were underweight, and 42.5% had overweight or obesity.^[7] As per previous studies in India overall prevalence of Hypertension, Arthritis is about 33% and DM is about 20%.^[4] In this study Hypertension was the commonest (63.8%) morbidity among the elderly followed by DM (37.5%), ARI (34.4%), COPD/ Asthma (23.4%), Accident/ Injuries (21.1%), Arthritis (20.8%) and CVD, CKD, CLD and Cancer were 4.9%, 2.6%, 6.8% and 3.1% respectively. Similar study Rajeev K et al. Shows that hypertension (77.1%) was the most common chronic condition in the study population, followed by dyslipidemia (65%) and diabetes mellitus (63.7%). Arthritis (35.8%).^[8] In an analysis from the Longitudinal Ageing Survey of India (2017–2018) shows that 27.39% had multimorbidity. The prevalence of one morbidity and multimorbidity increased from younger to the older age groups. Female older adults had a higher share in multimorbidity (28.93%) than men (25.57%). The older adults living in urban areas had a higher prevalence of multimorbidity (36.43%).^[9] But in our study only 16.4% elderly having at least two morbidities where male 9.1% and female 7.3% [Table2].

According to our study findings physical activity among the elderly was not so common. Majority of study subjects (73.7%) watching TV as recreational activity. Regular walking among the elderly was 43% followed by gardening 12.5%, household work 25%, reading books 14.1% and handcraft 3.9%. A study by De S et al (2018) on the elderly population in an urban slum area of West Bengal in India, reported that 24% of the participants were involved in physical activity of vigorous intensity, 36% in physical activity of moderate intensity.^[10] In another study S.Pengpid, K. Peltzer. et. al shows that almost one in four middle-age and older adults (23.8%) were inactive, 12.9% had low, 7.6% moderate, and 55.7% high physical activity.^[7] In the vigorous category, the progress report (USDHHS, 1998) indicated 23% of the adult population exercised vigorously at the goal of three or more days per week for 20 or more minutes per occasion (Men = 26%, Women = 20%).^[11] There were similar findings in the present study, with 24.2% of males and 18.8% of females engaged in walking for 30 minutes a day [Table 3]. In our study, 93.7% said to use allopathic care, among them 75.8% used to go private hospital and only 19.5% goes to Govt. Hospital for health care. But in a community based study in Maharashtra shows that only 48% of the study subjects chose an allopathic practitioner.^[12]

Hypertension among the people above 85 years is more prevalent (80%) than age group 75-85 years (70.7%) and 60-74 years (59.3%). There is a significant association between age and hypertension ($p < 0.05$). Diabetes is more (46.7%) among the over weight and obese people than normal or low BMI peoples (23.9%) which is statistically significant ($p < 0.001$).

We also found that over weight and obese are less (46%) among the people who used to do physical activity like walking or gardening as compared to people with other recreational activities (76.6%), which is showing strongly significant ($p < 0.001$). The proportion of older adults with increasing moderate Physical activity levels had a lower prevalence of multimorbidity. The older adults who were never engaged and with a low level of PA had a higher prevalence of multimorbidity.^[9]

Strength and Limitation: Strengths of the study

The study was community-based and conducted in an urban setting, thereby providing a realistic picture of morbidity patterns and health-seeking behaviour among elderly residents of Nagaon town. A fairly large sample size ($n = 384$) with random selection of wards enhanced the representativeness of the study population and improved the generalizability of the findings to similar urban settings in Assam.

Limitations of the study

Being a cross-sectional study, causal relationships between morbidity patterns, health-seeking behaviour, and related factors could not be established.

The study relied largely on self-reported information, which may be subject to recall bias and under- or over-reporting of morbidities and health-seeking practices.

CONCLUSION

Hypertension and diabetes were the commonest morbidity among the participants. Overweight and obesity also more prevalent among the study subjects. The men were more physically active than the women in the study sample. In the current study, the majority of the participants were physically inactive. The female participants were found to be more physically inactive than the male population. This study implies that there is a need to create awareness among the general public regarding the importance of physical activity for healthy aging. More specifically, health promotion strategies and interventions should be directed at the elderly population. and encourage them to take part in activities which stimulate physical activity.

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