

Chronic Morbidity and Health Seeking Behaviour among Elderly in a Rural Area of Thrissur District

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ABSTRACT

BACKGROUND

Elderly people are often neglected in the society particularly with regards to the healthcare service delivery in Indian context. Most of them live with certain forms of morbidities. The consequences of these illnesses in terms of severity affect their willingness to seek help from health care services. Therefore, understanding the morbidities and their health seeking behaviour is a prerequisite for providing essential need-based healthcare services to this marginalised population. A cross sectional study was conducted to understand the pattern of comorbidities and factors of health seeking behaviours of the elderly in a rural area of Thrissur district, Kerala.

METHODS

A total of 243 elderly participants who were above 60 years was selected from a rural area of Thrissur district to participate the study. SPSS Ver. 16.0 was used to carry out analysis of the data. Descriptive statistics were used to express the pattern of chronic morbidity, and assess the health seeking behaviour and associated factors in the above population.

RESULTS

Our findings revealed that majority of the study population (82.7 %) was suffering from at least one chronic health problem; among them, 44 % had hypertension, 35.8 % had diabetes mellitus and 23.5 % had musculoskeletal diseases. 60.5 % were not doing any kind of exercise. Health seeking behavior was highest for diabetes and hypertension (100 % and 97.1 %). It was lowest for urinary disorders (72.72 %) followed by visual problems and respiratory problems (82.75 % and 83.3 %). Most common reasons for not seeking health care were that they consider the illness to be insignificant or they believe it to be a part of ageing process (37.5 %).

CONCLUSIONS

Prevalence of chronic morbidity is high among the elderly. Health seeking behavior is better in Kerala compared to other states.

KEYWORDS

Chronic Morbidity, Healthcare Seeking Behaviour, Morbidity, Elderly, Kerala

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BACKGROUND

As a result of increase in longevity and declining fertility, age distribution is slowly but steadily shifting towards the older populations across the globe.¹ India, being the second most populous country, the absolute number of the geriatric population increased from 76 million in 2001 to 100 million in 2011.² According to the 2011 census, people above 60 years constitute 13 % of the state's population of 33.4 million compared to the national figure of 8.2 % and is projected to be 18.3 % by 2021. The demographic transition in India is moving from the middle transitional stage to the late transitional stage. The unique achievements of the state Kerala have already placed it in the late transitional stage and are gradually moving towards the fourth post-translational stage.^{3,4}

Population aging is an inevitable phenomenon and generates many challenges and concerns about the pace of future economic growth, the operation and financial integrity of healthcare and pension systems, and the well-being of the elderly.⁵

Morbidity burden among geriatric age group is an important concern for the health authorities at global level. The rising geriatric population which is mainly driven by an increased life expectancy and falling fertility rates in the developing countries will have far-ranging impact on our health parameters and will place a heavy burden on health infrastructure in the foreseeable future. While aging itself is not a disease, increasing age relates to increased risk of morbidity, often with multiple chronic conditions present at the same time.⁶

Aging is associated with increased occurrence of diseases with the common co-morbidities in context of Kerala being hypertension, visual impairment, urinary symptoms, diabetes mellitus and dementia.⁷ The type of morbidity is also different in different countries with differences between rural and urban areas.⁸

A geriatric person was defined as anyone above the age of 60 (WHO).⁹ Health Seeking Behaviour (HSB) can be defined as any action or inaction undertaken by an individual to maintain, attain and regain good health and prevent illness.^{10,11} The decision taken by the individuals on seeking healthcare is influenced by various factors with respect to individual, the disease and the healthcare service domains. The studies have documented determinants related to the individual seeking healthcare are age, gender, income, educational status and occupation. The relevant characteristics of the disease include severity, expected treatment outcome, pre-existing beliefs about the illness and factors pertaining to healthcare service include accessibility, quality and cost. An accurate idea of HSB of the population is needed in order to ensure success of the various health services available to them.^{12,13}

In Kerala, the HSB of elderly in particular is important as their morbidity rate is higher than that of the general population. It impacts both the individual and the community. In case of the individual, it influences the quality of life.¹⁴ In the community it has varied implications. For example, HSB that leads to early detection and treatment of

diseases will lessen the disease burden on the population. A part of this disease burden is healthcare cost.

On an average, Indian households pay 60 – 70 % of healthcare costs out of pocket.¹⁵ A similar scenario exists in Kerala too, with most of the payments being made by out of pocket spending or borrowing. The elderly population, being largely economically dependent on their children or spouses, could place additional pressure on healthcare spending in the state. Studies which documents the morbidity pattern can help in planning for strengthening the existing infrastructure to meet the challenges of coming years.¹⁶ The health seeking behaviour of elderly has far-reaching implications in healthcare decision making.

A cross sectional study was conducted which aims to determine the pattern of chronic morbidity and ascertain the factors contributing the health seeking behaviour among elderly in a rural area of Thrissur district.

METHODS

A community based cross-sectional study was carried out in Thrissur district among geriatric population to find out chronic morbidity and health seeking behaviour among elderly population. In order to estimate the sample size, a formula $4pq/d^2$ was applied, and the anticipated prevalence of the study was considered to be 31.6 % based on a previous study titled "Morbidity pattern among the geriatric population in south India: an observational study" by Divyamol KS et al conducted among the same population in southern part of India. The allowable error was taken as 6 %. Thus, the sample size was determined as minimum of 240. The data collection tool was in the form of a semi structured proforma. Ethical permission of the study was obtained from the Institutional ethics Committee of GMC Thrissur, B6 / 155 / 2019 / MCTCR. The study participants were identified as per the eligibility criteria and data collection was carried out in different households at Avanur panchayath ward 4 and 5, Thrissur district by adopting the convenience sampling technique. A participant information sheet which contains all relevant information about the study was explained and the written consent was obtained from participants who were willing to be part of the study. After receiving clearing from Institutional Research Committee, data collection was done by the medical students with the help of a semi-structured proforma after receiving an informed written consent.

The data was properly coded and entered in Microsoft excel. The analysis was carried out by using statistical software SPSS version 17.0. The prevalence was explained as percentage and confidence intervals. For associations chi-square test was used. For statistical significance P value of less than 0.05 was used.

RESULTS

A total of 243 participants were included in the study among elderly in Avanur Panchayat, Thrissur district. The baseline

information on socio demographic factors are shown in Table 1. Majority of the study participants were males (56.8 %) had a mean age 69 years, followed Hindu religion (87.2 %). Among the participants 47 % had the basic education up to 10th standard. Most of them were unemployed (49.4 %), married (73 %), and resides in a nuclear family (46.5 %). The mean income of the population was found to be 18577.94, and majority (44.9 %) were earning less than 10000 per month.

It was found that 60.50 % of study participants had no involvement in any type of daily physical activities or health promotional activity whereas 29 % used to follow walking as an exercise on a daily basis. 4.5 % used yoga as a health promotional activity, 4.9 % used farming as a method and 0.8 % used other methods.

Among total of 243 participants 201 of them were suffering from at least one medical morbidity. So, the prevalence of at least one chronic morbidity among study population was found to be 82.7 %. Among the 201 study participants who reported to have at least one chronic morbidity, 44 % had hypertension, 35.8 % had diabetes mellitus and 23.5 % had musculoskeletal diseases followed by visual morbidity (11.9 %) and respiratory morbidity (9.9 %) Figure 1. Most of them followed modern medicine system for their treatment especially for diseases like diabetes mellitus (96.55 %) and hypertension (96.26 %) whereas Ayurveda was popular with musculoskeletal disorders (57.89 %), urinary disorders (63.63 %) and skin disorders (36.36 %). None in the study group were using homeopathy for the treatment for their morbidities.

Figure 3 depicts the percentage seeking health care among those with chronic morbidity and we found that for illnesses like diabetes mellitus, cardiovascular disorders and cancer everyone decided to opt for seeking healthcare. Modes of treatment modalities followed include home remedies, private clinic, government hospital, private hospital, pharmacy and others. The majority of people seek their health care in private hospitals closely followed by government hospitals for their ailments. But a sizable number of persons with hypertension and diabetes get their treatment directly forms pharmacies which is disturbing (24.1 % of diabetics and 18.4 % of hypertensives). Home

remedies are being used by a section of the elderly especially for respiratory, musculoskeletal and urinary disorders. In some morbidities like musculoskeletal and gastrointestinal morbidities some follow private clinics also. Among those who does not seek health care in any one of the morbidities (n = 24), reasons identified were lack of money, nobody to accompany, considers illness to not be significant or perceives symptoms as part of ageing. Among all the participants we found that most of them seek healthcare in the private sector in all the identified chronic morbidities.

Characteristics	Frequency (N)	Percentage (%)
Gender		
Male	138	56.8
Female	105	43.2
Age		
60 - 70	155	63.80
71 - 80	56	23.00
81 - 90	28	11.50
91 - 100	3	1.20
100 and above	1	0.40
Mean \pm SD 69 \pm 8.234 years		
Religion		
Hindu	212	87.2
Muslim	0	0
Christian	31	12.8
Educational Status		
No formal education	13	5.7
1 st to 5 th standard	56	23
6 th to 10 th standard	111	45.5
11 th to 12 th standard	14	5.8
Graduate	41	16.9
Post graduate	8	3.3
Occupational Status		
Unemployed	120	49.4
Employed	38	15.6
Retired	85	35
Monthly family income		
10,000 and below	109	44.90
10,001 - 20,000	56	23.00
20,001 - 30,000	42	17.30
30,001 - 40,000	15	6.20
40,001 and above	21	8.60
Mean \pm SD	18,577.94 \pm 17,747.69	
Marital Status		
Unmarried	7	2.9
Married	178	73.3
Separated	2	0.8
Widow / Widower	56	23
Type of Family		
Nuclear	113	46.5
Three generation	84	34.6
Joint	46	18.9

Table 1. Socio Demographic Factors of the Participants (n = 243)

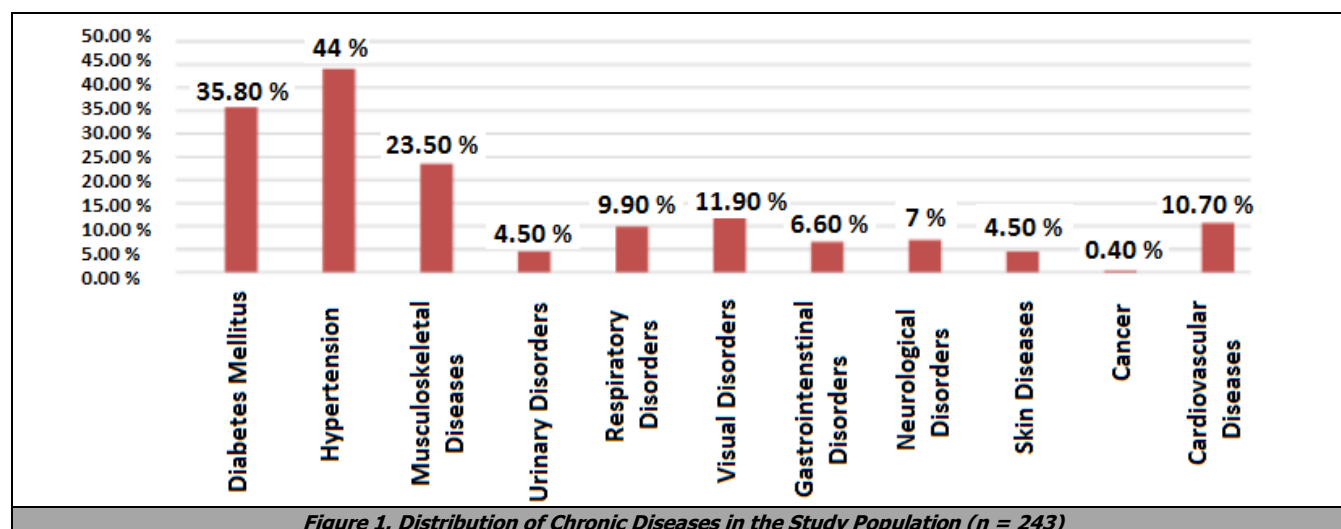


Figure 1. Distribution of Chronic Diseases in the Study Population (n = 243)

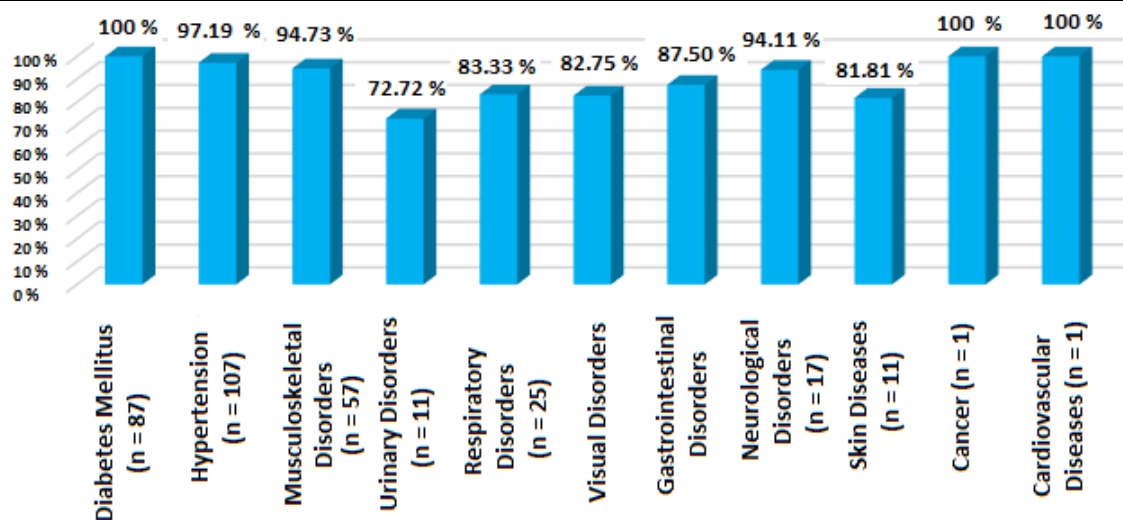


Figure 2. Percentage Seeking Health Care among Those with Chronic Morbidity (n = 243)

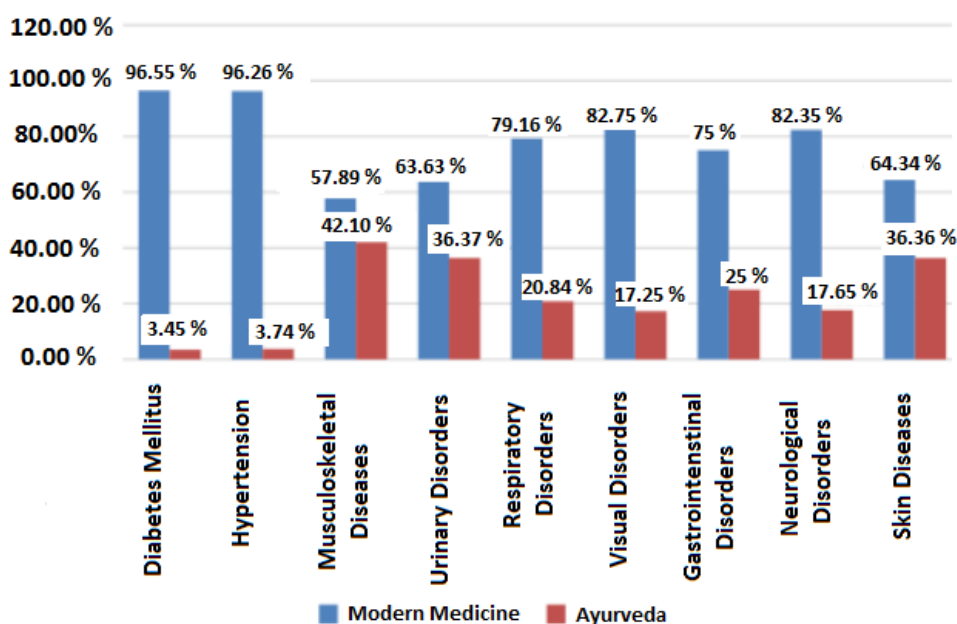


Figure 3. System of Medicine Followed for Chronic Morbidities.(n = 243)

	Home Remedies	Private Clinics	Govt. Hospital	Private Hospitals	Pharmacy	Others
Diabetes mellitus (n = 87)	1.1 %	3.4 %	32.2 %	36.8 %	24.1 %	2.3 %
Hypertension (n = 107)	3.7 %	4.7 %	37.4 %	32.7 %	18.7 %	2.8 %
Musculoskeletal disorders (n = 57)	10.5 %	14.0 %	28.1 %	38.6 %	8.8 %	0.0 %
Urinary tract infections (n = 11)	27.3 %	0.0 %	9.1 %	36.4 %	27.3 %	0.0 %
Respiratory tract infections (n = 24)	25.0 %	4.2 %	20.8 %	37.5 %	12.5 %	0.0
Visual impairments (n = 29)	17.2 %	10.3 %	24.1 %	31.0 %	17.2 %	0.0
Gastrointestinal disorders (n = 16)	12.5 %	18.8 %	18.8 %	37.5 %	12.5 %	0.0
Neurological disorders (n = 16)	6.3 %	0.0 %	37.5 %	31.3 %	25.0 %	0.0
Dermatological problems (n = 11)	18.2 %	9.1 %	27.3 %	36.4 %	9.1 %	0.0

Table 2. Mode of Treatment Followed (n = 243)

DISCUSSION

The current study recorded high prevalence of chronic morbidity (82.7 %) among the study population. This is in agreement with findings of similar studies which were carried out in rural areas of northern India, like Mathurkar et al in Maharashtra where the prevalence of more than 1 chronic morbidity was 81 %.¹⁷ Similar findings were seen in studies from north India like in Sharma et al in Shimla where the prevalence of at least a single morbidity was 84 % and Shankar et al in Varansai,¹⁸ but the findings were different from the study conducted by Surekha Kishore et al. The prevalence of any one chronic morbidity was only 50.4 %.¹⁹ This difference could be probably due to the difference of morbidity conditions applied to measure the magnitude of the illnesses.

The most common chronic diseases seen in our study were hypertension (44 %), diabetes mellitus (35.08 %) and musculoskeletal disorders (23.5 %). This is in agreement with findings of similar studies which were carried out in rural areas of northern India. The percentage of hypertension is consistent with previous studies Sharma et al and Jain et al.^{2,17} However we observed high percentage of diabetes among the study population, so this unique finding clearly justifies the reason why state Kerala is being known as the diabetic capital of the country. The prevalence of musculoskeletal problems was little lesser compared to previous studies in different settings, Rupali et al and Kishore et al and Sharma et al.^{11,19}

The present study found that majority of people seek their health care in private hospitals closely followed by government hospitals for their ailments. Home remedies are being used by a section of the elderly especially for respiratory, musculoskeletal and urinary disorders. In some morbidity like musculoskeletal and gastrointestinal morbidities some follow private clinics. On contrary to our findings a similar study conducted in Uttarakhand found that most of the people approached a Government doctor / hospital and homemade remedies or self-medication practices.¹⁹ Our study also determined the potential causes for not seeking healthcare for chronic morbidities and we identified that majority perceive that they suffer illness as part of ageing process (37.5 %), this results shows the findings are consistent with the previous study held in northern part of India, Sharma et al.

Health seeking behaviour varies among individuals, it is an individualized phenomenon. Exploring the health seeking behaviour and pattern especially in elderly is significant in determining cure and mortality rates, and also for providing the need based essential healthcare services to this vulnerable population. Due to the technological advancement in healthcare there has been an increase in life expectancy, so the percentage of elderly population increases. However, we often fail to provide a good quality of life and social security to geriatric population who are at the uttermost need of it. In our study we tried to assess the health-seeking behaviour of elderly people in a rural area of Thrissur district in terms of the type of healthcare accessed. Previous studies conducted among elderly have shown varying estimates of health seeking behaviour practices, in southern part of India. These variations could be due to regional differences in the socioeconomic factors, availability and accessibility of healthcare systems.

CONCLUSIONS

The higher load of morbidity among elderly highlights the need to strengthen healthcare for them. The healthcare system has to be redesigned to meet the needs of the population in the midst of a significant and rapid change in demographic and epidemiological transition. With demographic transition underway, the elderly population is projected to rise to 12 % of the total population by 2025. Geriatric population is considered as one of the most vulnerable populations and needs care at the maximum

level. They need support from the medical fraternity; unfortunately, geriatric care is often neglected and is conspicuously missing from the medical education curriculum. Although most of our study participants seek healthcare, they opined that it's based on their perception of the quality of care delivered by the healthcare services. Strengthening the quality of care and monitoring could be an ideal platform for policy makers, decision makers, and scientists to allow more informed decisions about the health system funding, utilization of allocating the resources, and formulate the policies which are beneficial to this marginalized population.

Recommendations

Our study highlights the requirement of further holistic in-depth research in the context of geriatric health. A strong competent, multidisciplinary team trained to meet the essential needs of this geriatric population should be created.

Data sharing statement provided by the authors is available with the full text of this article at jebmh.com.

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