Journal of Cardiovascular Disease Research
ISSN: 0975-3583, 0976-2833 VOL15, ISSUE 1, 2024

Morbidity Pattern and Health-Seeking Behavior Among Elderly Residing in the Rural Area of Palakkad District, South India

[1]Sachin Kumar Patil, [2]Sreeshma Pavithran , [3]Lovely S Livingston

Assistant Professor, Department of Community Medicine, Manipal Tata Medical College, Manipal Academy of Higher Education, Manipal, India (sachin.patil@manipal.edu)

Assistant Professor, Department of Community Medicine, Manipal Tata Medical College, Manipal Academy of Higher Education, Manipal, India (sreeshma.pavithran@manipal.edu)

Assistant Professor, Department of Community Medicine, PK Das Institute of Medical Sciences, Palakkad, India (lovelyslivingston@gmail.com)

Corresponding Author: Sreeshma Pavithran, (sreeshma.pavithran@manipal.edu)

Conflict of Interest: None

Type of Study: Original Research Article

Date of Submission: 20 December 2023

Date of Review: 24 December 2023

Date of Acceptance: 30 December 2023

Date of Publication: 6 January 2024

Abstract:

Context: Old age is associated with multiple morbidities with varying severity. Understanding of morbidities and health-seeking behavior among the elderly is important for framing an acceptable healthcare system for them

Material and Methods: A community-based cross-sectional study was conducted among the 200 elderly people residing in rural areas of Palakkad district aged more than 60 years were interviewed by house-to-house survey using a predesigned structured questionnaire and data was assessed using SSPS software.Statistical analysis used: mean and percentage were used to analyse the data. Chi square test was applied.

Results: Majority participant belonged to age group of 60-70 years. 82% of elderly had at least one co-morbidity. Difficulty to concentrate was most common morbidity. Musculoskeletal disorders were significantly higher among females. 56.5% were hypertensive and 36.5 % had Diabetes mellitus. Allopathic medicines (94%) was most preferred system of medicine and private hospital were more visited for treatment. The most common reason for delayed in seeking health care was less perceived severity of illness.

Conclusions: The study reported high morbidity of chronic illness among elderly. Non-communicable illness are of serious concern in old age. Allopathic system of medicine and private hospitals were most opted by elderly for seeking treatment.

Key-words: Elderly, health seeking behaviour, chronic morbidity, health insurance

Introduction:

The elderly are a valuable treasure of the nation and a piggybank of experience and knowledge to our society. The nation holds a legacy that respects and protects the elderly and exhibits the highest level of equality. India, which is now a young nation will soon be home to 19% of the world's elderly citizens as per the current population projections. By the end of 2050, nearly one-third of the country's total population will be people aged more than 60 years. This also indicates that the growth in absolute number of older people is much faster compared to other regions of the world.[1]

The falling fertility rates and increased life expectancy in developing countries have added quality to our health parameters but also extended the challenges on the existing health infrastructure to tackle the needs of an aging population. Aging is a natural process, not a disease in itself. The elderly have their physiological vulnerability and suffer from multiple health concerns. Most health morbidities in old age are insidious in onset and long term mainly due to the debility of various body functions including the immune system. Common conditions include diabetes mellitus, hypertension, coronary heart disease, stroke & chronic obstructive pulmonary disease Degenerative disorders like Alzheimer's disease, osteoarthritis, osteoporosis, cataracts and macular degeneration also require long-standing care. The rising number of cancers in old age have significantly impacted the quality of life in them. [3,4] Understanding the range of morbidity can help in efficient planning and allocation of resources.

Health-seeking behavior can be defined as "any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill to find an appropriate remedy".[2] Health-seeking behavior usually depends on self-understanding and perception of one's own health status and knowledge, accessibility, and affordability of existing healthcare system and perceived severity of illness by an individual. In elderly, most symptoms as assumed as part of ageing process and neglected.

According to 2011 Census, 71 percent of the elderly live in rural India. Many rural areas are still remote with poor road and transport access. Income insecurity, lack of adequate support of family members, single elderly men or women, and poor knowledge regarding healthcare facilities are seen more among rural elderly than their urban counterparts.[1] Kerala the south state in India , have health indicators above the national average anyways the health status of rural elderly are less addressed.

Material and Methods:

This is cross-sectional study conducted among elderly people residing in Arani Shornur town, Palakkad which was the field practice area under, Department of Community Medicine, PKDIMS. Sample size (N) was calculated using formula $N=4pq/l^2$. the prevalence (p) of morbidity among elderly was taken as 89.2% [5] and admissible error of 5% . Calculated sample size was 169 and 200 elderly persona were included in the study. The inclusion criteria included One elderly person (elder most) from one house aged more than 60 years by house to house visit by random sampling. Deliberately ill/ bedridden were excluded. After taking informed consent the participants were interviewed using a predesigned structured questionnaire. Information was collected regarding demographic profile, health-seeking behavior and health morbidity. The data was analyzed using SPSS Software

Results:

Among 200 elderly who participated in this study, 60.5% were aged between of 60-70 years. 60% were females. A significant number of women (90%) were unemployed and 75% were fully dependent on other family members compared to males .58% of participants belong to APL (Table no.1).
82% of elderly had at least one co-morbidity. Difficulty to concentrate was the most common morbidity in nearly 84% followed by forgetfulness(76%). Musculoskeletal issues like difficulty in bending and changing posture and weakness on standing or walking was seen in more 40% of participants and significantly more among females.(Table no.2) 56.5% were hypertensive and 36.5 % had Diabetes mellitus.63% reported impaired vision and 75.5% were using spectacles.60% had impaired hearing and 3.5%were using hearing aids. Dental caries was reported among 60%.Other co-morbidities included persistent cough(16%), difficulty in breathing (16.5%).(Table no 2)

Allopathic medicines (94%)was most preferred system of medicine and private hospitals were preferred over government hospital by participants. Most common reason for preference was accessibility and less waiting time.12.5%% got their health checkup done annually and the majority,(58.5%) got it done only when they fell ill.
The commonest reason for delay in seeking health care was less perceived severity of illness (16%). Less than 50% of participants were enrolled in health insurance schemes. (Table no .3)
Estimation of blood pressure and blood sugar estimation were screening tests done by nearly 25% of the elderly in the last year only 33% of them had undergone ocular examination. (Fig 1)

Discussion:

The study showed a high prevalence of chronic morbidity (82%) among elderly residing in rural area of Kerala state with more than 50% with more than one morbidity. This agrees with a similar other studies done within state like study by Mini SS & et al (80.2%) [3,] Binu . Areekal & et al (82.2%)[4] and R. Anil Das & et al (89.2%)[5] and also Comparable with studies in other parts states in India like the study by Nitin Joseph & et al in Karnataka (94.2%)[6], Preeti Usha & et al in Uttarakhand (97.5%)[7], Deepak Sharma & et al in Shimla hills (84%)[8] and Kabita. B & et al (78.4%) in Assam[9].

Majority of similar studies done reported Musculoskeletal morbidities or eye disorders as most common morbidity in elderly where as we found Difficulty concentrating (82%) and forgetfulness (76%) was most common morbidity among the elderly which will have a significantly effecting their Quality of life. A similar impairment in memory was found by Choudary Mahesh & et al[10]. Impaired vision was second most common morbidity (63%) followed by dental caries and hearing impairment (60%). We found nearly 40% of participants suffered from musculoskeletal problems and finding were comparable with results of studies by Shraddha. K & et.al (30.2%)[11], Mini SS & et al (36.2%) and Deepak Sharma & et al (55%). Musculoskeletal problems was significantly higher among females compared to males, similar was finding by Kabita.B & et al [9]and Shraddha . K & et.al[11].

Visual impairment was found in 63% of elderly and prevalence was similar in both male and female. Similar increased prevalence of visual problems was reported by Rahul. Prakash & et al (70%) [10]and Choudary Mahesh & et al (80%)[11].75.5% were using spectacles for the correction of visual defects and the majority (45%) were using it for less than 5 years. 34% were depend on spectacle through out day others were using while reading or watching television. Dental hygiene and oral health is of great concern in all ages. Dental caries was found to be 60%, the study done by Harsha Bardhan & et al[12] also reported dental problems in rural areas.

56.5 % of elderly were known hypertensive and 95.7% (111) of them were on medication. The finding was comparable with finding of Mini SS & et al, Binu Areekal & et al [4]and R. Anil Das & et al[5] done in Kerala state.. Diabetes mellitus was reported among 36.5% of elderly and similar to the findings by Binu Areekal & et al [4]and R. Anil Das & et al[5] .

Majority, i.e. 84% perceived their health status as very good or good and only 10% perceived their health poor or very poor. Similar was finding by Nitin Joseph & et al in Karnataka. Self -understanding of ones health status and assessment of severity of health problem by themselves is a important factor that determine health seeking behavior of all individual and procuring health as a felt need.

Heath seeking behavior was assessed by understanding their preference of health care system, preferred hospital and enrollment in health insurance schemes.94% preferred allopathic system of medicine in treatment, even studies done by Binu Areekal & et al , R. Anil Das & et al, Deepak Sharma & et al and Rupali A Patle & et al[13] had found allopathic system of medicine most preferred, though the percentage of elderly preferring allopathic medicine was lesser in studies done outside Kerala. 16.5% choose government hospital for treatment , majority visited private hospitals. Similar preference was reported by Binu Areekal & et al[4], where as government hospital were more preferred in studies by Vimala Thomas & et al[14] and Deepak Sharma & et al. only less than 50% were enrolled in health insurance scheme. Though age, gender, literacy level and socioeconomic profile were found to have relation in health-seeking behavior in studies by Mukesh sukhla & et al[15], but no significant relation was found in this study.

Screening for common morbidities of the elderly is essential for early detection and disability limitation in old age. 0nly 22% had undergone screening for hypertension & 28.5% for Diabetes mellitus. Concerning common cancers mammography was done by only 2 elderly women and None had undergone PAP smear examination and Rectal examination.

The National Program for health care of the Elderly (NPHCE) has a holistic approach to delivering affordable, accessible, and high-quality services for the aging population and is in an attempt to create a new "architecture" for Ageing. The program incorporates AYUSH and other programs and is catering service at all levels of healthcare.[18] With adequate sensitization and capacity building of the existing health care system, the needs of elderly can addressed effectively.

CONCLUSION:

Chronic morbidity is very high among elderly age group with high prevalence of memory issues, musculoskeletal disorders , visuals problems, and dental problems. Higher prevalence of morbidities are seen among females. Allopathic system of medicine was most preferred. Private hospital were more preferred for treatment. More efforts to be made to provide satisfactory services for elderly at public sectors and also standardize services provided at private sector for elderly in terms of cost and quality.

References:

1.United Nations Population Fund 2017. ‘Caring for Our Elders: Early Responses’ - India Ageing Report –2017. UNFPA, New Delhi, India

2.Editorial Health Seeking Behaviour in Context. 2003.

3. Mini S S , Dr Anuja U. A Study on Health, Social and Economic Problems of Elderly Population in An Urban Setting Kerala. JMSCR 2017 ;05(05): 21651-21655.

4.Jebmh, & Com, & Areekal, Binu & Veepanattu, Pranav. (2020). Chronic Morbidity and Health Seeking Behaviour among Elderly in a Rural Area of Thrissur District. Journal of Evidence Based Medicine and Healthcare. 7. 2349-2562. 10.18410/jebmh/2020/572.

5.Das RA, Kumar SG, Roy G. Morbidity pattern and its relation to functional limitations among old age rural population in Kerala, India. J Family Med Prim Care. 2017 Apr-Jun;6(2):301-304. doi: 10.4103/2249-4863.220015. PMID: 29302537; PMCID: PMC5749076.
6.Joseph N, Nelliyanil M, Nayak SR, Agarwal V, Kumar A, Yadav H, Ramuka G, Mohapatra KT. Assessment of morbidity pattern, quality of life and awareness of government facilities among elderly population in South India. J Family Med Prim Care. 2015 Jul-Sep;4(3):405-10. doi: 10.4103/2249-4863.161339. PMID: 26288782; PMCID: PMC4535104.
7.Usha P, Kishore S, Singh M, Jain B, Kumar D, Kumar Reddy NK, Rehan A, Ranjan SK. A study of morbidity profile among geriatric population in Uttarakhand: A community based cross-sectional study. J Family Med Prim Care. 2020 Jul 30;9(7):3677-3681. doi: 10.4103/jfmpc.jfmpc_256_20. PMID: 33102350; PMCID: PMC7567185.
8.Sharma D, Mazta SR, Parashar A. Morbidity Pattern and Health-seeking Behavior of Aged Population residing in Shimla Hills of North India: A Cross-Sectional Study. J Family Med Prim Care. 2013 Apr;2(2):188-93. doi: 10.4103/2249-4863.117421. PMID: 24479077; PMCID: PMC3894043.
9. Barua K, Borah M, Deka C, Kakati R. Morbidity pattern and health-seeking behavior of elderly in urban slums: A cross-sectional study in Assam, India. *J Family Med Prim Care*. 2017;6(2):345-350. doi:10.4103/2249-4863.220030
10.Prakash, Rahul & Choudhary, SK & Singh, Uday. (2004). A Study of Morbidity Pattern among Geriatric Population in An Urban Area of Udaipur Rajasthan. Indian Journal of Community Medicine. 29.
11. Choudhary M, Khandhedia S, Dhaduk K, Unadkat S, Makwana N, Parmar D. Morbidity pattern and treatment seeking behaviour of geriatric population in Jamnagar city. J Res Med Den Sci 2013;1:12-16.
12. Shraddha K, Prashantha B, Prakash B. Study on morbidity pattern among elderly in urban population of Mysore, Karnataka, India Int J Med Biomed Res 2012;1(3):215-223
13.Bardhan H, Dixit AM, Agarwal R, Jain PK, Gupta S, Shukla SK. Morbidity profile of elderly population in Ghaziabad district: a cross-sectional study. Int J Med Sci Public Health 2016;5:1098-1102
14. Patle RA, Khakse GM. Health-seeking behaviour of elderly individuals: A community-based cross-sectional study. Natl Med J India. 2015 Jul-Aug;28(4):181-4. PMID: 27132725.
15. Vimala Thomas, Lavanya.K.M, Muraleedhar .Morbidity profile and health seeking behaviour of the elderly in urban slums of hyderabad, andhra pradesh, India – a cross sectional study Int J Cur Res Rev, Oct 2012 / Vol 04 (19):174-180
16. Shukla, Mukesh & Ahmad, Siraj & PD, Brajesh & Ranjan, Rakesh. (2017). A study on health care seeking behaviour among elderly in a rural area of eastern Uttar Pradesh. National Journal of Multidisciplinary Research and Development. 2. 15-18.
17. Choudhary M, Khandhedia S, Dhaduk K, Unadkat S, Makwana N, Parmar D. Morbidity pattern and treatment seeking behaviour of geriatric population in Jamnagar city. J Res Med Den Sci 2013;1:12-16.

18. National programme for health care of the elderly, Ministry of health and family welfare, Delhi https://main.mohfw.gov.in/?q=major-programmes/Non-Communicable-Diseases/Non-Communicable-Diseases-1

Tables and Figures:

Table no 1 Showing demographic profile of Participants

Demographic profile	**Variables**	**No.of participants(N=200)**	**Percentage (%)**
Age	60-70	121	60.5%
	70-80	50	25%
	>80	29	14.5%
Sex	Male	80	40%
	Female	120	60%
Education	Illiterate	7	4%
	Primary	64	32%
	High school	96	49%
	PUC	13	6.5%
	Diploma	6	0.5%
	Graduate & above	14	8%
Current employment status	Self employed	15	7.5%
	Unemployed	134	67%
	Retired pensioner	51	25.5%
Socio- economic status	APL	116	58%
	BPL	84	42%

Table no. 2 showing relation between prevalence of co-morbidities and gender in elderly population.

Co morbidities	Number of Female(%)	Number of Male (%)	Total(%)	P value
Hypertension	70(58.3)	43(53.8)	113(56.5)	0.5
Diabetes mellitus	38(31.7)	35(43.8)	73(36.5)	0.08
Difficulty in breathing	24(20)	9(11.3)	33(16.5)	0.18
Persistent cough	20(16.7)	12(15)	32(16)	0.12
Bloating of abdomen /gastritis	**52(43.3)**	**23(28.8)**	**75(37.5)**	**0.03**
Weakness on standing or walking	**68(56.7)**	**31(38.8)**	**99(49.5)**	**0.01**
Difficulty in bending and changing posture	**58(48.3)**	**27(33.8)**	**85(42.5)**	**0.04**
Impaired vision	76(63.5)	50(62.5)	126 (63)	0.8
Impaired hearing	66(55.6)	54(67.5)	120(60)	0.03
Difficulty to concentrate	98(83.1)	68(85.0)	166(83.8)	0.134
Forgetfulness	91(75.8)	61(76.3)	152(76)	0.14
Urinary incontinence	13(16.3)	27(22.5)	40(20)	0.83
Skin problem (dryness/rashes)	16(13.3)	12(15)	28(14)	0.09
Dental caries	78(65%)	42(52.5)	120(60)	0.07

Table 3 showing Distribution of participants based on their health seeking behaviour.

Health seeking behaviour		No. of participants	Percentage. (%)
Frequency of medical check-up	1. Fortnightly 2. Once a month 3. Once in 3 months	5 15 13	2.5 7.5 6.5

	4. Once in 6 months 5. Once a year 6. Only when fell ill	25 25 117	12.5 12.5 58.5
Preference of system of medicine	1. Allopathy 2. Ayurveda 3. Homeopathy	188 12 10	94 6 5
Preference of medical centre for treatment	1. Government hospital 2. Private hospital	33 167	16.5 83.5
Reasons for not/ delayed seeking medical service	1. Illness not severe 2. Distance of health care facility 3. lack of money 4. Nobody to accompany 5. No delay in seeking heath	32 2 8 10 148	16 0.1 4 5 74
Enrolled in health insurance scheme	1. Yes 2. No	95 105	47.5 52.5

Fig no 1 showing the distribution of elderly people according to screening test done in last one year.