Original Research Article

Morbidity pattern in the elderly population attending geriatric OPD at the rural health centre of a Tertiary care Medical College Hospital in Central India: A Descriptive study

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Abstract

Background: India is an ageing nation, with 8 % of its population being more than 60 years old. There is a need to be focus on the medical and socioeconomic problems that are being faced by older adults. A thorough examination of geriatric morbidity factors are required to improve the delivery of health care to the elderly. **Aim** & **Objective**:To assess the morbidity pattern in the elderly population attending geriatric OPD at the rural health centre of a Tertiary care Medical College Hospital in Central India. **Method:**A hospital-based cross-sectional study was conducted at the geriatric OPD of rural healthcentre.A total of 172 people above 60 years were selected and interviewed,and complete clinical examinations were performed.**Result:**Among the 172 study subjects, 91 (52.9%) were males, and 81 (47.1%) were females, 65.7% of the study population belong to the age group of 60 – 69. The significant morbidities were dental, cataract, hypertension, and musculoskeletal problems. Most of the study population feels neglected and expecting support form their family. In the age group >80, hearing loss and 60-69 age group cataract and dental problems are the most common issues. **Conclusion:**Degenerative diseases were the common morbidities in this elderly population. The most common problems were dental and followed by cataract, hypertension, musculoskeletal. In the above 80 years of age group loss of hearing and 60-69 age group cataract, loss of teeth were significant problems.

Keywords: Elderly population, Morbidities,Geriatric OPD

Introduction

Ageing is a natural process. Seneca has described it as an incurable disease. While Sir James Sterling Ross has described it as something you cannot heal but Protect, promote and extend[1]. India is the second-most populous county in the world, and is going through demographic transition over the last five decades and the people aged > 60 years have almost tripled[2].

"National policy on older persons" classifies age groups 60 years and above as the elderly population [3-5].

15 % of the total world population will be > 60 and above by the year 2025[2]., and the ratio will be doubling by 2050 in Asia.[2,4,6]. India will constitute 10% of the total population by 2021[7].

According to 2001 statistics for India 75% of elderly persons resided in rural areas [6], one-third belonged to below poverty line [8,9], and 66% had inadequate access to food, clothingand shelter[9].

India is an ageing nation where > 60 years age group population is around 7.7 % of its population[2,6];

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there is a need to address their medical and socioeconomic problems At least 50% of the elderly in India have chronic diseases with significant higher chances of increased morbidities with increasing age[10]. A thorough assessment of morbidities and related risk factors in elderly people are required to improve the delivery of health care to them. In the geriatric population, the life expectancy and quality of life can be increase by providing better health care, improving living conditions, awareness regarding morbidities, and counselling, i.e., tobacco cessation counselling, nutrition, and exercise[11,12]. These preventive therapies, in addition to lifestyle changes, can lower health risk, delay onset of disease, and reducing the cost of treating disease in the elderly population[12].

In consideration of the above facts, the present study was an attempt to assess morbidity profile of the elderly people attending weekly geriatric OPD at the rural health centre of a Tertiary care Medical College Hospital in Central India with expectation that the study results will give insights in planning the services for the elderly.

Aim: To assess morbidity pattern in the elderly population attending geriatric OPD at the rural health centre of a Tertiary care Medical College Hospital in Central India

Materials & Methodology

Study Design: The present was a descriptive cross-sectional hospital-based study.

Study Area: Geriatric OPD of a Tertiary care Medical College Hospital in Central India

Study Duration: The study duration was Jan 2017 to March 2017

Sampling Method: Universal Sampling Method was used where in all the study subjects attending the Weekly geriatric clinic during study duration & meeting the inclusion criteria were included in the study.

Sample size: A total of 172 subjects were included as per the inclusion criteria.

Inclusion criteria: The study subjects were the elderly population age 60 years and above attending geriatric OPD of rural health centre.

Exclusion criteria: Participants who did not consent to take part in the study.

Methodology

The purpose of the study was explained to the participants, and written informed consent was obtained.The participants were interviewed with the help of a predesigned & structured Performa, and a complete clinical examination was done. Demographic profiles, i.e., age, educational qualifications, religion, BMI[13]and occupation, were noted.

The socioeconomic status was recorded and classified according to the modified BG Prasad scale[14].

Patient's morbidity, addictions, and other clinical status were recorded.In clinical examination, most common clinical conditions were taken, i.e., Visual examination by simple torch and counting finger, hearing (Tuning fork method)Anemic conditions (based on clinical examination), musculoskeletal pain (based on patient's complaint), Diabetes Mellitus(based on who were treatment taking), and hypertension based on JNC VIII classification or on treatment[15].

Statistical Analysis: Data was entered & analyzed in a Microsoft Excel spreadsheet using Microsoft Excel.

Ethics :The study was approved by the Institutional ethics committee.

Results

Table 1: Demographic profile of participants

Factors	Male 91(52.9)	Female 81(47.1)	Total (172)
Age (in years)			
60 – 69	61 (53.98)	52 (46.02)	113(65.7)
70 - 79	26 (54.17)	22 (45.83)	48 (27.9)
>=80	04 (36.36)	07 (63.63)	11 (6.4)
Educational Status			
Illiterate	12(25)	36(75)	48(27.90)
Primary	47(59.49)	32(40.51)	79(45.94)
Secondary	27(75)	09(25)	36(20.93)
HS and above	05(55.55)	04(44.44)	09(5.23)
Religion			
Hindu	65 (53.72)	56 (46.28)	121 (70.3)
Muslim	14 (53.8)	12 (46.15)	26 (15.12)
Others	12 (48)	13 (52)	25 (14.15)
BMI			
Under weight	22 (59.46)	15 (40.54)	37 (21.51)
Normal	44 (51.16)	42 (48.84)	86 (50)
Overweight	18 (46.15)	21 (53.85)	39 (22.67)
Obese	07 (70)	03 (30)	10 (5.81)
Socio Economic Status			
Lower	75 (43.6)		
Lower middle	38 (22.09)		
Middle	31 (18.02)		
Upper middle	20 (11.63)		
Higher	08 (4.65)		
Occupation			
Agriculture	42 (24.42)		
Laborer	64 (37.21)		
Business	32 (18.6)		
None	34 (19.7)		
Type of Family			
Nuclear	73(42.44)		
Joint	61(35.47)		
Three generation	38 (22.09)		

Table 2: Morbidity pattern among geriatric population

Morbidity	Male (n=91)	Female(n=81)	N=172
Cataract	57 (62.64)	51 (62.96)	108 (62.79)
Musculoskeletal pain	29 (31.87)	42 (51.85)	71 (41.27)
Anaemia	18 (19.78)	33 (40.74)	51 (29.65)
Hypertension	46 (50.54)	35 (43.21)	81 (47.09)
Diabetes Mellitus	21 (23.08)	17 (20.99)	38 (22.09)
Hearing problem	28 (30.77)	24 (29.63)	52 (30.23)
Loss of teeth and Dental caries	65 (71.43)	48 (59.26)	113 (65.69)
Type of Addiction (n=172)			
Alcohol Consumption	52 (30.23)		
Tobacco	68 (39.53)		
Smoking	36 (20.93)		

Table 3: Distribution morbidities of the study population concerning age

Morbidities	Age			
	60-69 (n=113)	70-79 (n=48)	≥80 (n=11)	Total (n=172)
Cataract	69 (61.06)	31(64.58)	08 (72.7)	108 (62.79)
Musculoskeletal pain	40(35.40)	26(54.17)	05(45.45)	71 (41.27)
Anaemia	26(23)	22(45.83)	07(63.64)	51 (29.65)
Hypertension	56(49.56)	22(45.83)	03(27.27)	81 (47.09)
Diabetes Mellitus	22(19.47)	14(29.17)	02(18.18)	38 (22.09)
Loss of teeth and Dental caries	69(61.06)	35(72.92)	09(81.82)	113 (65.69)
Hearing	23(20.35)	19(39.58)	10(90.91)	52 (30.23)

Table 4: Distribution of participants according to family relation

Perception	N=172
Change of attitude of family Members	31(18.02)
Expect support from family	35 (20.34)
Expect family support for daily activity	29 (16.86)
Loss of income & occupation	59 (34.03)
Feeling of neglect	68 (39.53)
Feeling of loneliness	43 (25)

Discussion

65.7% of the study participants belonged to the age group of 60 – 69 years. The majority participant's educational status was primary level; literacy was high in females, most belong to lower socioeconomic status and Hindu religion. The significant morbidities were dental, cataract, hypertension, and musculoskeletal problems. Most of the study population feels neglected and expecting support from their family. In the age group >80, hearing loss and 60-69 age group cataract and dental problems are the most common issues.The hearing impairment followed by visual impairment are the two most common morbidities in the elderly as per Chronic Morbidity profile in elderly. However, different studies show varied results in the morbidity pattern.

Table 5: Comparison with other studies

	Kumar et al. [16]	Sharma D et al. [17]	Kalaiselvi etal.[18]	Kulwant Singh et al.[19]	Bardan H et al. [20]	Jadhav VS et al. [21]	Dharamvir et al.[22]	Our study
Cataract	36.8	30	-	19.55	55.61	40.16	-	62.79
Musculoskeletal pain	31.2	55.0	45.2	-	59.08	13.44		41.27
Anemia	20.8	16.5	-	-	-	8.32	86	29.65
Hypertension	-	40.5	-	19.6	22.04	21.6	47.7	47.09
Diabetes Mellitus	-	5.8	6.6	7	10	30.92	43	22.09
Loss of teeth and Dental caries	-	13.0	-	2	58.7	-	-	65.69
Hearing	33.2	-	-	4	22.44	24.8		30.23

According to ICMR report, hearing impairment was the most common morbidity in the elderly population followed by visual impairment[6].However, the percentage varies by different studies ranges from 15 to

50. A study by Kumar et al. the hearing impairment was 33.2%, Bardhan H et al. 22.44%, Jadhav VS et al, it was 24.8%, and in the current study, it was found 30.23%. As reported in a study done in rural Pondicherry decreased visual acuity due to cataract and refractive errors were found in 57% of the elderly second common morbidity reported was pain & stiffness in the joints in 43.4% elderly while 42% had complaints related to Dental health , and hearing impairment was reported in 15.4% elderly . Other morbidities reported were hypertension, chronic cough, skin diseases, diarrohea, cardiovascular disease, diabetes mellitus, asthma, and urinary complaints[22]. A study conducted in rural and urban areas of Chandigarh, Haryana among 200 elderly people observed that 87.5% elderly suffered from minimal to severe disabilities. The most reported morbidity was anaemia, followed by dental problems, hypertension, COAD, cataract, and osteoarthritis[23].

Conclusion

Degenerative diseases were the common morbidities in this elderly population. The most common problems were loss of dentures and dental carries and followed by cataract, hypertension, and musculoskeletal problems. In above 80 years age group loss of hearing and in 60-69 age group cataract, loss of teeth were major problems.The study provided us baseline information to plan various interventions in the domain of clinical preventive services for the elderly.

Limitation of the study

The current study was conducted in the single rural health centre of the tertiary care medical college in rural central India, so the study findings cannot be generalized to other areas hence the external validity of the study is limited.

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