Economic Dependence, Psychosocial Status and Morbidity Pattern of Elderly in Udaipur, Rajasthan, India

Mohnish N. Tundia[1], Dhara V. Thakrar[1], Bhanwarlal Vyas[2], Shashikant Nagaonkar[3], Abhilasha Mali[4]

[1]Assistant Professor, [2]Professor, [3]Professor and Head, [4]Statistician, Community Medicine Department,
American International Institute of Medical sciences, Udaipur, Rajasthan, India

Correspondence : Dr. Dhara V. Thakrar, E mail: drdharathakrar@gmail.com

Abstract :

Introduction: The proportion of the world's population aged 60 years or over increased in last four decades. Poor health care add to the degree of disability among the elderly which may leads to social isolation and psychological problems. The old age dependency ratio is also showing an upward trend in India. **Objectives:** To find out the economic dependence, psychosocial status and morbidity pattern in elderly. **Method:** A cross-sectional study was conducted from September to November 2018 at the field practice area of rural health training center situated at Chhota-guda, Udaipur, Rajasthan with sample size of 400. Elderly persons aged 60 years and above were interviewed. **Results:** Out of total unemployed elderly, 80.78% were financially dependent. In this study, 46.44%, 55.33%, 31.25% and 19.75% elderly felt neglected, burden to family, lonely and depressed respectively. 74% had chronic morbidities during the study period. Among elderly having morbidity, 52.70% sought health advice and treatment. **Conclusion:** Joint pain was found to be the most common morbidity. Health-seeking behaviour was shown more by elderly males with statistical significance. Elderly educated up to middle schools demonstrated highest seeking towards healthcare but was not statistically significant. Employment status of elderly was not found to be associated significantly with their health-seeking behaviour.

Key Words : Dependency, Elderly, Morbidity, Psychological

Introduction :

The world's population is ageing. The proportion of the world's population aged 60 years or over increased from 8 per cent in 1950 to 12 per cent in 2013. It will increase more rapidly in the next four decades to reach 21 per cent in 2050. In the least developed countries, the proportion of older persons has remained fairly stable at about 5 per cent for many decades, but this proportion is expected to double by 2050. [1]

With the decline in fertility and mortality rates accompanied by an improvement in child survival and increased life expectancy, there is progressive increase in the number of elderly persons found. Increasing life span and poor health care add to the degree of disability among the elderly and compound the problems of care giving. [2]

Public interest in aging has increased not only because all of us can expect to live to a ripe old age but also because we wish to avoid those age-related changes that lead to physical invalidity or other diseases and may ultimately cause social isolation. [3]

With a comparatively young population, India is still poised to become home to the second largest number of older persons in the world. Projection studies indicate that the number of 60+ in India will increase to 100 million in 2013 and to 198 million in 2030. Majority of them are in the rural areas, thus making service delivery a challenge. Feminization of the elderly population, increase in the number of the older-old (persons above 80 years) and percentage of the elderly below poverty line are also serious issues. [4]

The old age dependency ratio (12%) is also showing an upward trend in India. The sex ratio for elders continues to rise to become as high as 136 women per 100 men by 2026. This trend poses more specific challenges relating to very old-widowed women. High levels of illiteracy, particularly among older women in rural areas, are yet another aspect of vulnerability for senior citizens in India. [5]

In India, major illnesses of elderly include communicable as well as non-communicable diseases; hearing, visual impairment and loco-motor disabilities also contribute a major chunk. The prevalence of heart diseases was found to be more among elderly people living in urban areas, they are also more prone to mental morbidities due to breakdown of social and family structures and changes associated with rapid urbanization. [6]

As populations grow older, it is more important than ever that Governments design innovative policies and public services specifically targeted to older persons. [7] So, there is a great need of country-specific studies of health and social problems in the elderly to design such policies.

Looking at current scenario, our study will highlight level of problems of elderly and thus will help to the health planner and policy makers to channelize resources to address these problems at community level. This study will also provide evidence about psychosocial status, morbidity pattern and economic dependence of elderly which will help to set up a framework for further researches into health care of elderly. The data of this study will help to obtain baseline measures for assessment of future studies.

Objectives:

• To determine economic dependence of elderly

• To study psychosocial status of elderly

• To find out the morbidity pattern in elderly

Method:

With prior permission from Ethical committee, a cross-sectional, descriptive study was conducted at the field practice area of rural health training center (RHTC) situated at Chhota-guda, Udaipur, Rajasthan from September to November 2018. The RHTC is managed by Community Medicine department, American International Institute of Medical Sciences, Udaipur. The study center with approximate population of eight thousand three hundred, is located 10 km from the college. As of 52% prevalence rate(p) taken from previous study,[12] a sample size of 369 was reached by using an appropriate statistical formula n= 4pq/d2 (n=sample size, q=100-p=48 and

d=allowable error, which is taken 10% of p). To overcome non response rate, recall bias and sampling error, current study has taken final sample size of 400. Elderly persons aged 60 years and above who were permanent residents of the area and gave informed consent to be part of our study were eligible to participate in our study. Those geriatric people who were not permanent residents of the area, who did not give consent to participate, and those critically ill elderly who were unable to respond to interview schedule were excluded from the study. Systematic random sampling technique was followed to choose a sample by taking every 20th house (As the approx. population of study area was 8300 and calculated sample size was 400). Modified Prasad Socio-economic Categorization Status Scale was used to categorize the socio-economic status of the family (AICPI-307, January 2019: Base year 2001=100).A pretested semi-structured proforma was used to collect data by a trained health professional after obtaining informed consent. Geriatric Depression Scale 15 (GDS 15) was used to measure depression level in elderly.[13]A Short Form GDS is a 15 item questionnaire in which participants are asked to respond by answering yes or no in reference to how they felt over the past week. Scores of 0-4 are considered normal, 5-8 indicate mild depression; 9-11 indicate moderate depression; and 12-15 indicate severe depression.

Data entry and analysis were done using software Epi info 7. Chi-square statistical tests were used to find out association.

Results:

Table-I, Shows analyzed the socio-demographic profile of the respondents. Out of the 400 elderly interviewed, 168 (42%) were male while 232 (58%) were female. Most of them (36%) were in the age group of 65–69 years. Most of the respondents were educated up to primary school only while 30.75% were illiterate. Out of 400 elderly, 228 (57%) were married and 4 (1%) were unmarried. We found that 31.25% of elderly were staying alone, 49.75% were in joint families, and the rest 19% were in nuclear families. In our study, most elderly (58.50%) belonged to middle socioeconomic status. We observed that 76.75% elderly were unemployed.

Table 1: Socio-demographic characteristics of elderly

Characteristics	Frequency	Percentage
Gender		
Male	168	42.00
Female	232	58.00
Age (Years)		
60-64	108	27.00
65-69	144	36.00
70-74	89	22.25
75 or more	59	14.75
Education		
Illiterate	123	30.75
Primary school	135	33.75
Middle school	86	21.50
High school	41	10.25
Graduate and above	15	03.75
Marital status		
Married	228	57.00
Unmarried	04	01.00
Widow/Widower	165	41.25
Divorced/ Separated	03	0.75
Type of family		
Nuclear	76	19.00
Joint	199	49.75
Staying alone	125	31.25
Socio-economical class		
Class-1	15	03.75
Class-2	32	08.00
Class-3	234	58.50
Class-4	76	19.00
Class-5	43	10.75
Employment		
Paid work	67	16.75
Unemployed	307	76.75
Pensioner	26	06.50

In current study, it was observed that out of total unemployed elderly, 80.78% were financially dependent. (Figure-1)

**Figure 1: Economical dependence of unemployed elderly persons**
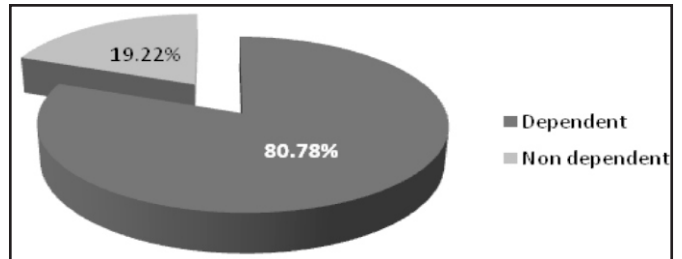
Out of 400 elderly, 6 had no family members. In current study 46.44% of elderly had felt 'neglected by family members'. Whereas, 55.33% of the subjects had felt 'burden to the family'. Loneliness was felt by 31.25% of elderly. As per Geriatric Depression Scale 15 (GDS 15), 19.75% elderly were having 'depression'. (Table-2)

Table 2: Psychological status of elderly

| Variables	Frequency (%)
Feeling neglected by family members (n=394)	
Always	57(14.47)
Sometimes	126(31.97)
Never	211(53.56)
Feeling burden to the Family(n=394)	
Always	26(06.60)
Sometimes	192(48.73)
Never	176(44.67)
Feeling loneliness(n=400)	
Yes	125(31.25)
No	275(68.75)
Depression level (GDS 15 score)(n=400)	
No (0 – 4)	321(80.25)
Mild (5 – 8)	44(11.00)
Moderate (9 – 11)	27(06.75)
Severe (12 – 15)	08(02.00)

In current study the morbidity profile of elderly people was evaluated based on their history, clinical diagnosis, laboratory test reports, and doctor's prescriptions. It was found that out of 400 elderly people, 296 (74%) had chronic morbidities during the study period. Many elderly were suffering from multiple morbidities at the same time. Joint pain (56.25%) was found to be the most common morbidity followed by visual impairment (30.5%) and hypertension (26%). More women (56.44%) were suffering from arthritis than men. We did not consider any acute disease in our study. (Figure-2)

Figure 2: Distribution of elderly population according to Morbidity pattern
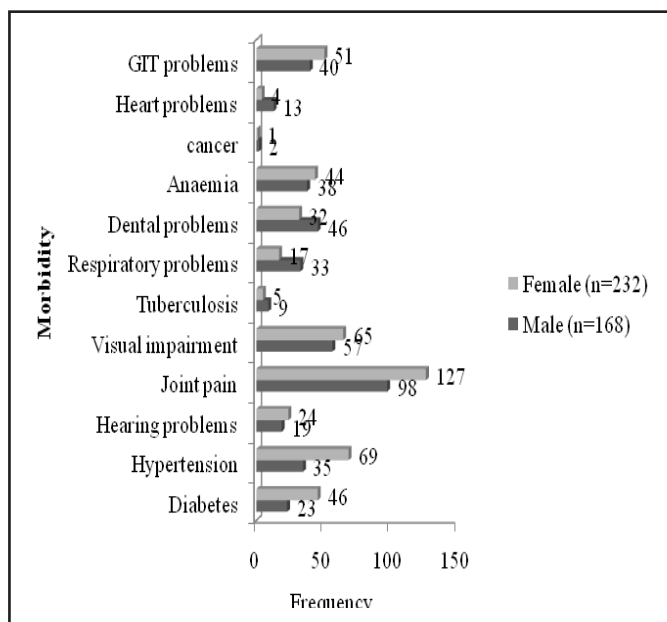
In figure-3 we analyzed the health-seeking behavior of all those elderly who reported having some morbidity or those diagnosed as having morbidity by the investigators. Among 296 elderly having some chronic morbidity, 156 (52.70%) sought health advice and treatment.

Figure 3: Health seeking behavior of elderly
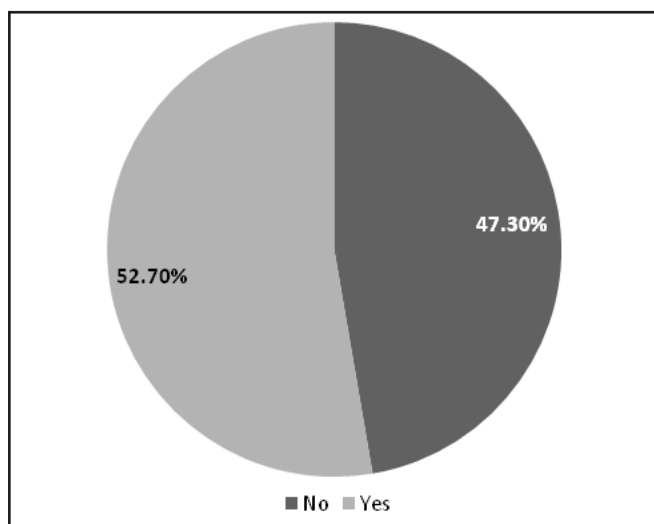
In our study, we analyzed different factors influencing health-seeking behavior of the elderly. Here, we found that health-seeking behavior was shown more by elderly males (62.61%) than females (47.08%). It was found to be statistically significant.

Those elderly educated up to middle schools, demonstrated highest (63.79%) seeking towards healthcare but was not statistically significant. On analysis of employment status of elderly and health-seeking behavior, we did not found significant association. (Table-3)

Discussion:

Advancing age is susceptible to numerous diseases especially the degenerative disorders. Females are the large disadvantaged group, who are one of the fastest growing segments and which will increase to become four times the current figure, by 2025. The challenge in the 21st century is to delay the onset of disability and ensure optimal quality of life for older people.[8, 9]

Out of total study subjects in current study, around one third was living alone which could be the reason for poor health seeking behaviour and psychosocial problems in elderly. According to a report in 2016 by Government of India, more than half number of elderly were living with their spouse, one third with their children and around 5% were living alone.[10] In our study we observed, out of total unemployed elderly, more than 80% were financially dependent on their respective families which could be the provoking factor for feeling of burden on family. This result was inconsistent with the findings of studies by Dahiya et al. [11] and Goel et al. [12] Whereas, it was found compatible with an observation of study by Barua K et al.[14]

Elders are in great need of care and support of family. Nearly one third of elderly were feeling loneliness in our study. This finding was almost similar to study by Prakash R et al.[15] It was found that around half of the subjects felt neglected by family members in our study. This finding was conflicting with result of study by Prakash R et al.[15] and it was found nearer to finding of study by Ribot V et al.[16] Studies from France[17] and Northern India[18] reported lower prevalence of depression as compare to our study, while it was noted higher in studies carried out in Western India.[19,20]

Joint pain (56.25%) was found to be the most common morbidity followed by visual impairment (30.5%) and hypertension (26%) in present study.

Table 3: Association of health seeking behavior of elderly with different variables

Variables	Elderly seeking healthcare (%)	Elderly having morbidity	Chi- square	P value
Gender				
Male	67 (62.61)	107	6.6077	p=0.010
Female	89 (47.08)	189		
Education				
Illiterate	43 (44.32)	97	6.0575	p=0.1948
Primary school	49 (55.05)	89		
Middle school	37 (63.79)	58		
High school	20 (50.00)	40		
Graduate and above	07 (58.33)	12		
Employment				
Paid work	18 (41.86)	43	2.5141	p=0.2844
Unemployed	130 (54.85)	237		
Pensioner	08 (50.00)	16		

(p<0.05 statistically significant)

Rent PD et al. in their study observed that problem of hypertension was seen in more than one third patients followed by diabetes (18.57%) and joint problems (14.42%).[21] George L et al. reported cataract and orthopedic problems in half of their study population. Whereas respiratory illnesses was the third most common chronic condition affecting almost one third subjects.[22] In a study from Northern India, anemia was found in almost two third elders followed by dental problems (63.0%), hyper-tension (49.0%) and chronic obstructive airway disease (42.0%).[23]

In our study, persons with education up to middle school were more conscious about their health comparatively. Significant association was found between gender and health seeking behaviour. Employment has also some impact on it in current study. Dey et al. in their article on health status of elderly in India observed that barriers, such as gender, religion, caste, socioeconomic status, social stigma, and economic dependence, hamper the access of elderly population to health-care services.[24] In present study health seeking behaviour was found in almost half of patients. Sharma D et al. in their study of morbidity pattern and health-seeking behavior of aged population residing in Shimla hills observed that nearly two third were seeking treatment for their health problems.[25]

Conclusion:

Joint pain was found to be the most common morbidity. Health-seeking behaviour was shown more by elderly males with statistical significance. Elderly educated up to middle schools demonstrated highest seeking towards healthcare but was not statistically significant. Employment status of elderly was not found to be associated significantly with their health-seeking behaviour.

Recommendations:

There should be provision of appropriate employment for the elderly to make them economically stable. Improvement in health seeking behaviour of elderly, especially females, is needed. Spreading of awareness regarding various government programmes and schemes for elderly person can also be fruitful.

Declaration:

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Conflict of Interest: Nil

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