Int J Med. Public Health. 2021; 11(1):28-32.
A Multifaceted Peer Reviewed Journal in the field of Medicine and Public Health
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Original Article

Comparative Study on Economical Status of the Elderly Residing in Urban and Rural Areas and its Impact on Morbidity in a District of Gujarat

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ABSTRACT

Introduction: During old age physical strength and mental stability decreases, money power becomes bleak coupled with negligence from younger generation. In our modern society, where money is the scale of everything, the old age people are measured as an economic liability and a social burden. **Aim and Objectives:** 1. To assess the economical status of elderly population. 2. To associate the findings with present and past morbidities among the study subjects. **Materials and Methods:** A cross sectional study was carried out in urban and rural area of Surendranagar district among 611 elderly, using a predesigned and pre tested questionnaire. The study was carried out by directly questioning the subjects with oral and written consent. For selection of the area, in both the urban and rural areas, the sampling units were enumerated and samples were collected by using simple random sampling. Data was entered and analysed using MS excel 2007. **Results:** Nearly 60 % of the subjects in both area were currently unemployed and their current income less than 5000. Most of the subjects in the rural area had no saving whereas their counterparts in the urban areas having the savings of meager amount up to Rs.1,000. For the financial dependency, majority in the urban and rural area were dependents on their family members. And also, financial Dependency had a statistically significant correlation with presence of Morbidity. **Conclusion:** The economical independence should be one of the top priorities of the health managers, decision makers and policy makers and it must be evaluated in both the urban and rural areas thoroughly. A special status should be granted to them and shall help in provision of basic services like bare minimum of grocery, healthcare and medicines. Healthy aging being a very important indicator of a country's health status should be of prime importance.
Key words: Socio-economic status, Elderly, Economical independence, Morbidity, Depression, Urban-rural.

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History
- Submission Date: 31-07-2020;
- Revised Date: 29-10-2020;
- Accepted Date: 14-12-2020;

DOI : 10.5530/ijmedph.2021.1.5

Article Available online
http://www.ijmedph.org/v11/i1

INTRODUCTION

Background

The world's population is aging: as we can say that every country from all over the world is experiencing growth in the number as well as the proportion of older persons in their population. Population aging is poised to become one of the most important social transformations of this century, with the involvement of nearly all sectors of society like labour and financial markets, the demand for goods and services, such as housing, transportation and social protection, as well as family structures and intergenerational ties.[1] Socio-economic status (SES) is surrounded not only by income but also educational attainment, financial security and subjective perceptions of social status and social class.[2] Age-related degenerative changes at social, physical and economic level have an important bearing on adjustment in old age.

During old age physical strength and mental stability decreases, money power becomes bleak coupled with negligence from younger generation. According to an estimate nearly 40% of senior citizens living with their families are reportedly facing abuse of one kind or another, but only 1 in 6 cases actually comes to light.[3] In modern society, where money is the scale of everything, the old age people are measured as an economic liability and a social burden.[4]

A high income increases the advantages of medical and service access, enabling individuals to cultivate a relatively healthy lifestyle.[5,6] The positive association between elderly health and socio-economic status (SES) has been widely documented in the literature as well.[7] As there is a directly linkage between the economical status and the health status and morbidities it was decided to study the relationship between the two variables. The state of economical dependency and lack of earnings, savings and resources among elderly can play a major role in the morbidities and health seeking behaviour among them. With this background, the present study was

Cite this article : Nagar NS, Shashwat NS, Hirenkumar PB. Comparative Study on Economical Status of the Elderly Residing in Urban and Rural Areas and its Impact on Morbidity in a District of Gujarat. Int J Med Public Health. 2021;11(1):28-32.

designed to explore the relationship between the variables and have a comparative outlook in both urban as well as rural areas.

Aims and Objective

1. To assess the economical status of elderly population.
2. To associate the findings with present and past morbidities among the study subjects

MATERIALS AND METHODS

A cross sectional house to house survey was carried out in both urban and rural areas and the data was collected using pre-structured, validated and pre-tested questionnaire by directly questioning the subjects after obtaining written consent from them.

For selection of the area, in both the urban and rural areas, the sampling units were first enumerated. After this for Rural data collection, out of all the 14 talukas in the district, one taluka was selected by using simple random sampling, which came out to be Sayla taluka. For selection of villages, the similar process was followed and Sayla village was selected. For urban data collection, 12 wards of the city were enumerated and by simple random technique, Ward No. 7 was selected for the study.

For estimation of sample size, the estimated geriatric population as per Census 2001 was sought.[5] As per the estimates of Census 2001, 7% of the population of Surendranagar was that of the elderly in the district. This amounted to 12,220 (7% of geriatric population as per Census 2001). Out of this 5 % was selected as sample for the current study. This came out to be 611 elderly subjects which were selected equally from both urban and rural areas. Study was conducted for a period of 6 months after seeking clearance from the Institutional ethics committee, CU Shah Medical College, Surendranagar. Data was entered and analysed using MS excel 2007. For descriptive statistics, simple proportions were calculated and to establish associations, chi squared test was used to associate variables at 5% level of significance.

RESULTS

Table 1 shows the Socio-demographic profile of study subjects. Majority of the subjects in the urban area were in the age group of up to 75 years, where as in the rural areas subjects were equally divided across all age groups. In both urban and rural area, majority of subject were females.

Nearly 60% of the subjects in both urban and rural area were currently unemployed. Majority of the subject in urban area were professional or semiprofessional where those in rural area were skilled or unskilled workers.

With respect to education, 28% in urban and 58% rural were illiterate. Majority of the literate in both the areas were educated up to primary. About 14 % in urban, 4% in rural were graduates. Most of the subjects were married with about 30% in both areas, who were widow/widower.

As most of the subjects were unemployed, about 70% in urban and 90 % rural, as their current income less than 5000. About 17% in urban and nearly 8% in rural had income between 5000 to 10,000. Those having their income more than 10,000 were about 15% in the urban area and less than 5% in rural area.

Table 2 showed that as most of the subjects were unemployed, about 70% in urban and 90 % rural, as their current income less than 5000. About 17% in urban and nearly 8% in rural had income between 5000 to 10,000. Those having their income more than 10,000 were about 15% in the urban area and less than 5% in rural area.

About half of the subjects, in both the settings had their expenditure up to Rs. 2000, whereas the expenditure level above Rs. 3000 was found among very few. Most the expenditures were pertaining to medical expenditures, drugs and self-care.

Table 1: Socio–demographic profile of study subjects.

Age group	Urban (N=305)		Rural (N=306)	
	No.	↓%	No.	↓%
60-65	119	39	84	27.45
66-75	136	44.5	136	39.2
76-100	50	16.5	102	33.32
Sex				
Males	123	40.3	144	47.1
Females	182	59.7	162	52.9
Occupation				
Professional	33	10.81	13	4.24
Semi Professional	18	5.9	3	0.98
Clerical/Shop/Farm	25	8.19	28	9.15
Skilled Worker	21	6.88	38	12.41
Unskilled worker	23	7.54	44	14.37
Unemployed	175	57.37	180	58.82
Education				
Graduate	42	13.77	13	4.24
Intermediate diploma	18	5.9	3	0.98
High school	24	7.86	18	5.88
Middle school	39	12.78	31	10.13
Primary school	98	32.13	65	21.24
Illiterate	84	27.54	176	57.51
Marital Status				
Married	200	65.57	206	67.32
Single	6	1.96	2	0.65
Divorcee	0	0	3	0.98
Widow/Widower	99	32.45	90	29.47
Separated	0	0	5	1.63
Total	**305**	**100**	**306**	**100**

Majority of the subjects in the rural area had no saving whereas their counterparts in the urban areas having the savings of meager amount up to Rs.1,000. This shows the overall picture that saving was minimal and expenditure was quite high in both urban and rural areas.

Table 3 explain that when the details about financial dependency were asked to the study subjects, majority in the urban area were dependent on their spouse (52%) followed by son (43%) and daughter (5%). In the rural areas a vast majority were dependent on their son (74%) followed by spouse (20%) and their grand children (3%).

Table 4 showed that financial Dependency had a statistically significant correlation with presence of Morbidity (X2= 14.72, DF= 2, $P<0.01$) and Depression (X2 = 26.81, DF= 2, $P<0.01$) in elder people of urban area.

Table 5 also showed that in rural area, financial Dependency had a statistically significant correlation with presence of Morbidity (X2=32.94, DF= 2, $P<0.01$) and Depression (X2 = 8.56, DF= 2, $P<0.05$) in elder people.

Table 2: Present Income of the study subjects.

Income in Rs.	Urban (N=305)		Rural (N=306)	
	No.	↓%	No.	↓%
0-5000	204	66.88	275	89.86
5000-10000	50	16.39	23	7.51
10000-15000	14	4.59	3	0.98
15000-20000	18	5.9	3	0.98
>20,000	19	6.22	6	1.96
Expenditure				
0-1000	48	15.73	42	13.7
1000-2000	170	55.73	153	50
2000-3000	45	14.75	70	22.8
3000-4000	0	0	25	8.16
>5000	39	12.78	10	3.26
Savings				
0-500	75	24.59	236	77.12
500-1000	140	45.9	36	11.76
1000-1500	60	19.67	28	9.15
1500-2000	12	3.93	3	0.98
>2000	18	5.9	3	0.98
Total	**305**	**100**	**306**	**100**

Table 3: Table regarding economic dependency of the study subjects.

Dependent on	Urban (N=217)		Rural (N=226)	
	No.	↓%	No.	↓%
Spouse	113	52.07	45	19.91
Son	92	42.39	166	73.45
Daughter	12	5.52	3	1.32
Grandson/ Granddaughter	0	0	6	2.65
NGO	0	0	3	1.32
Son-in-law/Daughter-in-law	0	0	3	1.32
Total	**217**	**100**	**226**	**100**

Figure 1 shows, that 29% in urban and 26% in rural were financial independent. About 16% in both urban, rural were partly dependent for their finances on their spouse or children; whereas more than half i.e. 55% in urban and 58% in rural were financially totally dependent on others.

When the details about financial dependency were asked to the study subjects, majority in the urban area were dependent on their spouse (52%) followed by son (43%) and daughter (5%). In the rural areas a vast majority were dependent on their son (74%) followed by spouse (20%) and their grandchildren (3%).

It can be said from the above table that, financial Dependency had a statistically significant correlation with presence of Morbidity (X2= 14.72, DF= 2, $P<0.01$) and Depression (X2 = 26.81, DF= 2, $P<0.01$) in elder people of urban area.

Here also in rural area, financial Dependency had a statistically significant correlation with presence of Morbidity ($X^2=32.94$, DF= 2, $P<0.01$) and Depression ($X^2= 8.56$, DF= 2, $P<0.05$) in elder people.

DISCUSSION

The present study was conducted to study the economic status of the elderly and to study its association with the presence of morbidity among them. Majority of the subjects in urban and rural area were financially dependent and their savings were not enough to meet their day to day, particularly the medical expenses. It was noteworthy that less than one third were financially independent and most of the subjects who were dependent were dependent on their family members. Most of the expenditure was on essentials like medical care, drugs and self-care for which the subjects had to depend on their family members. This shows

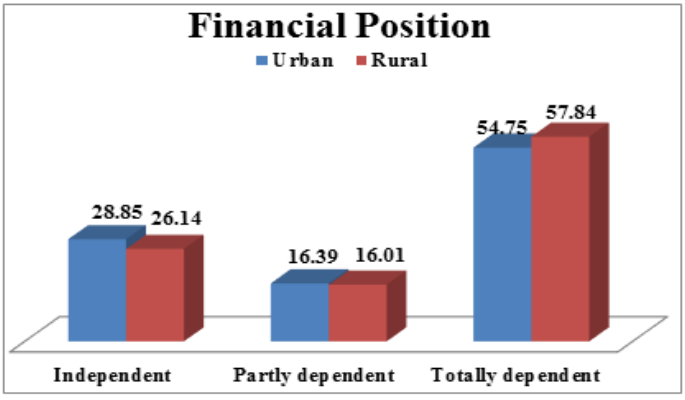

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Table 4: Association of economic dependency on physical and mental health [Urban (*N*=305)].

Financial dependency	Physical health			Mental health		
	Morbidity	No morbidity	Chi square	Depression present	Depression absent	Chi square
Independent	12	76		0	85	
Partially dependent	21	29	$P<0.01$	12	38	$P<0.01$
Fully dependent	52	115		22	145	
Total	85	220		34		

Table 5: Association of economic dependency on physical and mental health [Rural (*N*=306)].

Financial dependency	Physical health			Mental health		
	Morbidity	No morbidity	Chi square	Depression present	Depression absent	Chi square
Independent	25	55		12	68	
Partially dependent	37	12	*P*<0.01	0	49	*P*<0.05
Fully dependent	57	120		15	162	
	119	187		27	279	

that family plays a major role in the overall health of the elderly not only as emotional support but also as a financial support.

As economic status is largely related to occupation, gender wise disparity can be seen among the subjects. Also, it was seen that nearly 60 % of the subjects in both urban and rural area were currently unemployed. A study by Vijayanchali S. S *et al.* also showed that of the total 21% of elder people were unemployed.[4] Also a study by Gaurav RB *et al.* explained that 38.6% were retired or unemployed and currently not involved in an active profession.[9] The difference was large due to involvement in Agriculture sector in both urban and rural areas of the elderly. Not being involved in any form of professional activities calls for a major need for economical dependency among the elderly for their basic day to day and even medical needs. This is largely reflected from the study.

In our study, with respect to education, 28% in urban and 58% rural areas were illiterate. Majority of the literates in both the areas were educated up to primary, about 14 % in urban, 4 % in rural were graduates. A study by Vijayanchali S. S *et al.* also explained that 30% were graduated, 20 % educated up to primary and 4% up to secondary.[4] This difference may be due to differences in the study setting and selection of areas. Educated elderly are less dependent on the next generation for livelihood. A large proportion of the illiterate involved in labour work or unemployed thus had poor economic status. It was also observed that, 55% in urban and 58% in rural elder people were financially totally dependent on their family members. Similar result also reported by in another study that about 65% of the elder people were depending on others for their day to day activity.[8] It was also observed that, urban area showed that about 52% of the subjects were dependent on spouse and 42% dependent on son, whereas rural area showed 20% dependent on spouse and nearly 73% dependent on son. Current study showed that the financial dependency was more among females as compared to males. Even though the picture changed a bit with some urban-rural difference, by and large it remained the same in both the areas. Less than one third males were fully dependant whereas 80% females were fully dependant on other members of family for their financial status. Another study showed females mostly dependant on their Spouse (13.15%) and Son (15.3%).[7] Gupta I *et al.* also showed high levels of economic dependence among elderly especially females.[9]

In the present study, majority of the subjects (47% males and 72% females) showed income less than Rs. 5000, which is similar to another study[10] which reported males (44.5%) and females (51.3%) having income less than Rs. 2000. It was seen that in our study, older people having their income more than 10,000 were about 15% in the urban area and less than 5% in rural area. Another study which observed that about 34.6% of elder people earned fairly good monthly income age (more than Rs. 10,000 per month) during elder age.[10] These are similar findings seen in both study settings and show that income among elder is quite meager to take care of their daily expenses and expenses related to healthcare and medicines.

Financial Dependency had a statistically significant association with presence of both physical and mental morbidity in urban and rural areas. The impact of economic dependency is profound on health seeking behaviour which eventually impacts the physical and mental health. Due to lack of job or retirement and predominant illiteracy, many elders are not able to earn a basic living in old age. Hence it is imperative that they solicit support of other members of the family and their near and dear ones. As the elderly population is on a rise and shall only increase further in future, the economical independence during old age must not be avoided and should be one of the top priorities of the health managers, decision makers and policy makers to provide peaceful and healthy old age to the elderly of our country. Similar findings were reported by Kim CB *et al.* which reported elder people using different types of health insurance scheme and medical aid programme were in Good health.[10] It can thus be established that there is a significant association and deep impact of the economic status on physical and mental health and morbidity of the elderly.

CONCLUSION AND RECOMMENDATIONS

It can be concluded from the study that economical dependency is clearly evident in playing a significant role in the physical and mental health of the elderly population. It is therefore recommended from the study that the economical dependency of the elderly must be evaluated in both the urban and rural areas thoroughly. A special status similar to BPL card be granted to them which should be universal and shall help in provision of basic services like bare minimum of grocery, healthcare and medicines. Similar support can also be landed upon by Insurance agencies at a minimal cost borne by the beneficiaries. Special status of the elderly at hospital and other health centres should be an integral part of the upcoming health policy. Healthy aging being a very important indicator of a country's health status and health priorities should be of prime importance.

ACKNOWLEDGEMENT

We sincerely thank the ethical committee and PSM Department of C.U. Shah Medical College, Surendranagar.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ABBREVIATIONS

SES: Socio-economical status; **DF:** Degree of Freedom.

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Cite this article : Nagar NS, Shashwat NS, Hirenkumar PB. Comparative Study on Economical Status of the Elderly Residing in Urban and Rural Areas and its Impact on Morbidity in a District of Gujarat. Int J Med Public Health. 2021;11(1):28-32.