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# **Research Article**

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# A Cross Sectional Study of Depression amongst Elderly in a Rural Area of Punjab

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**Abstract:** The world over, in most countries, proportion of people who are 60 years of age or more, is growing much faster than that in any other age group. Old age is not a disease in itself, but the elderly are vulnerable to long term diseases of insidious onset. Therefore, the support system available to them at this juncture in life is very essential. This analytical study evaluated the quality of psychosocial support systems available for the aged in rural Punjab, India. This study was conducted in a rural area of district Moga in the state of Punjab, India. The demographic data and profile of the village population was studied and out of the total population of 9,456, individuals who were 60 years or older of age who met the inclusion criteria were included in the study. Out of the total of 1870 elderly population stated that the primary health care services provided in the village were not adapted to the needs of people of their age. 86% agreed that the infrastructure was not comfortable for them. There is a need to review the quality as well as the distribution of services offered to the elderly in rural Punjab, India, including the content of the services, especially where their mental health is concerned.

Keywords: Aged, Depression, Elderly, Old, Rural.

## **INTRODUCTION**

In most countries of the world, proportion of people who are 60 years of age or more, is growing much faster than that in any other age group [1]. This is due to both longer life expectancy and the decline in fertility rates1. Ageing is a universal process. This ageing population can be viewed as a success story for the public health policies and also for socioeconomic development. But at the same time, it challenges the society to adapt, so as to maximize the health as well as functional capacity of older people [1, 2]. This also influences social participation and security [1]. Old age is not a disease in itself, but the elderly are vulnerable to long term diseases of insidious onset. The importance of this stage of a human life cycle can be gauged from the fact that the WHO declared the world health day for the year 2012 focusing on ageing [1, 3, 4]. The theme for that was, "Good health adds life to years". The population of the world is ageing rapidly. By 2050, the proportion of the world's population > 60 years is estimated to double from approximately 11% to 22% [4, 5]. The absolute number of all people aged  $\geq 60$ years is expected to increase to 2 billion by that time [6]. As per the WHO, most low- and middle-income countries will be experiencing the most rapid

demographic change [7]. In a study conducted in Punjab, India, most of the study subjects from the elderly age group were found to be depressed and also diagnosed to be having other psychiatric morbidities [8]. The world will have more people who live to see their 80s or 90s than ever before [9]. The number of people aged 80 years or older, for example, will have almost quadrupled to 395 million between 2000 and 2050. Globally, many older people are at risk of maltreatment. The need for long-term care is rising [9]. The number of older people who are no longer able to look after themselves in developing countries is forecast to quadruple by 2050. Many of the very old lose their ability to live independently because of limited mobility, frailty or other physical or mental health problems. Many require some form of long-term care. Worldwide, there will be a dramatic increase in the number of people with dementias such as Alzheimer's disease, as people live longer. In emergency situations, older people can be especially vulnerable [9, 10].

The WHO has coined the term "active ageing" [4-6]. Active ageing is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age. It applies to both individuals and population groups. Active ageing allows people to realize their potential for physical, social, and mental well-being throughout the life course and to participate in society, while providing them with adequate protection, security and care when they need. The word "active" refers to continuing participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labour force. Older people who retire from work, ill or live with disabilities can remain active contributors to their families, peers, communities and nations. Active ageing aims to extend healthy life expectancy and quality of life for all people as they age. "Health" refers to physical, mental and social well being as expressed in the WHO definition of health. Maintaining autonomy and independence for the older people is a key goal in the policy framework for active ageing. Ageing takes place within the context of friends, work associates, neighbours and family members. This is why interdependence as well as intergenerational solidarity are important tenets of active ageing.

#### MATERIALS AND METHODS

This was a cross sectional descriptive study conducted in a rural area of district Moga in the state of Punjab, India. The demographic data and profile of the village population was studied and obtained from the office of the Panchayat, after taking due permission from the authorities. The total population was 9,456, out of which, individuals who were 60 years or older of age were 1873. The inclusion criteria were all the individuals who were 60 years of age or older, were permanent residents of this village and were physically residing there during the period of the study. Ten of the 1873 were not in the village during the period of the study, while three were admitted in different hospitals for treatment of ailments and therefore excluded from the study. The remainder 1870 people were included in the study. Data was collected as per a pre-tested and validated questionnaire administered by the investigators, after completing a pilot study. The questionnaire consisted of the personal particulars of the individual, details of the family and the Geriatric Depression Scale (GDS). The GDS was the main tool which consisted of fifteen questions related to screening of depression in the individual at the community level. It was an investigator administered questionnaire. Informed consent of the participants was taken. The answers were recorded either in affirmative to the question or otherwise. A score of one point was given for each affirmative answer signalling depression that is given in bold in the questionnaire. Average time taken for the completion of one questionnaire was five minutes. The questionnaire was validated after translating it into Punjabi language, followed by back translation. Data thus collected, was analysed with an appropriate statistical software.

### **RESULTS AND DISCUSSION**

Out of the total of 1870 elderly population who met the inclusion criteria, 980 were females while the remainder 890 were men. Further distribution as per the age groups is as given in table-1. The figures in parenthesis correspond to the respective percentages.

rubier i Distribution of the Study population as per their age							
Age group	Male (%)	Female (%)	Total (%)				
≥60 to <70	553 (52.72)	496 (47.28)	1049 (100)				
$\geq 70$ to $\leq 80$	386 (50.46)	379 (49.54)	765 (100)				
≥80 to <90	17 (36.17)	30 (63.83)	47 (100)				
≥90 to <100	03 (37.50)	05 (62.50)	08 (100)				
≥100	0	01 (100)	01 (100)				
Total	890 (47.59)	980 (52.41)	1870 (100)				

 Table: 1 Distribution of the study population as per their age

The results were recorded for the specified age groups since it was observed in the pilot study that there were no significant differences in the responses of the male and female study subjects. Table 2 shows the response of the study subjects in answer to the question as to whether they were basically satisfied with their lives.

Age group	Yes	Yes (%)	No	No (%)	Total	Total (%)
$\geq 60$ to $< 70$	843	80.36	206	19.64	1049	100
$\geq$ 70 to <80	323	42.22	442	57.78	765	100
≥80 to <90	45	95.74	2	4.26	47	100
$\geq 90$ to <100	8	100.00	0	0.00	8	100
≥100	1	100.00	0	0.00	1	100
Total	1220	65.24	650	34.76	1870	100

It was observed that the level of satisfaction was increasing with the increase in age, except for the people aged between seventy to eighty years. This was more due to the less demanding nature of the people as their age increased.

The distribution of the study subjects with response to the question as to whether they had dropped many of their activities and interests is as shown in table 3.

Table: 3 Distribution of the study subjects in response to the question,	"Have you dropped many of your activities
and interests?"	

and interests:								
Age group	Yes	Yes (%)	No	No (%)	Total	Total (%)		
$\geq 60$ to $< 70$	223	21.26	826	78.74	1049	100		
$\geq$ 70 to <80	731	95.56	34	4.44	765	100		
≥80 to <90	23	48.94	24	51.06	47	100		
≥90 to <100	6	75.00	2	25.00	8	100		
≥100	1	100.00	0	0.00	1	100		
Total	984	52.62	886	47.38	1870	100		

It was observed that this drop was maximum in the age group of seventy to eighty years while the older the people, the more they claimed to be pursuing their interests. The distribution of the study subjects based on the feeling of emptiness in their lives is as shown in the table 4.

Table 4: Distribution of the study subjects in response to the question	n, "Do you feel that your life is empty?"
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Age group	Yes	Yes (%)	No	No (%)	Total	Total (%)
$\geq 60$ to $< 70$	332	31.65	717	68.35	1049	100
≥70 to <80	113	14.77	652	85.23	765	100
≥80 to <90	13	27.66	34	72.34	47	100
$\geq 90$ to <100	2	25.00	6	75.00	8	100
≥100	0	0.00	1	100.00	1	100
Total	460	24.60	1410	75.40	1870	100

It was observed that this feeling of emptiness was present more amongst those who were of a younger age in the study population. This was more so due to lack of satisfaction and aspirations in life. On the contrary, as the age increased, they started feeling better since they were looked after in a better way by their children, grandchildren and relatives.

The responses of the study population to the question about feeling bored in life are as tabulated in table 5.

Table 5: Distribution of the stud	v subiects in	response to the o	uestion. "Do	vou often get bored?"
	j subjects m	response to the	1	, ou oncen gee sor eur

Age group	Yes	Yes (%)	No	No (%)	Total	Total (%)
$\geq 60$ to <70	679	64.73	370	35.27	1049	100
$\geq$ 70 to <80	142	18.56	623	81.44	765	100
≥80 to <90	12	25.53	35	74.47	47	100
$\geq 90$ to <100	2	25.00	6	75.00	8	100
≥100	0	0.00	1	100.00	1	100
Total	835	44.65	1035	55.35	1870	100

It was observed that boredom decreased as age advanced. It was seen that this was due to the fact that those who were elder in age, had a tendency to keep themselves occupied by spending time with their friends, relatives and grandchildren. The responses of the study subjects to the question pertaining as to whether they were in good spirits or not, are as shown in table 6.

Table 6. Distribution	of the study subjects in res	snonse to the question " $\Delta r$	e vou in good sni	irits most of the time?"
Table 0. Distribution	of the study subjects in res	pointe to the question, 211	c you in good spi	mus most or the time.

Age group	Yes	Yes (%)	No	No (%)	Total	Total (%)
$\geq 60$ to $< 70$	990	94.38	59	5.62	1049	100
$\geq$ 70 to <80	489	63.92	276	36.08	765	100
$\geq 80$ to $\leq 90$	31	65.96	16	34.04	47	100
$\geq 90$ to $< 100$	6	75.00	2	25.00	8	100
≥100	1	100.00	0	0.00	1	100
Total	1517	81.12	353	18.88	1870	100

While the individuals in the extremes of ages in the study groups said that they were in high spirits most of the time, those in between confessed that it was not so always or most of the time in their case. As shown in table 7, majority of the older and oldest subjects stated that they were not afraid that something bad would happen to them. The responses of the others were mixed.

 Table 7: Distribution of the study subjects in response to the question, "Are you afraid that something bad is going to happen to you?"

going to nappen to you.							
Age group	Yes	Yes (%)	No	No (%)	Total	Total (%)	
$\geq 60$ to $< 70$	59	5.62	990	94.38	1049	100	
$\geq$ 70 to <80	276	36.08	489	63.92	765	100	
$\geq$ 80 to <90	16	34.04	31	65.96	47	100	
$\geq 90$ to <100	2	25.00	6	75.00	8	100	
≥100	0	0.00	1	100.00	1	100	
Total	353	18.88	1517	81.12	1870	100	

Distribution of the study subjects regarding the feeling of happiness is as shown in fig. 1.



Fig. 1: Distribution of the study subjects in response to the question, "Do you feel happy most of the time?"

While most of the eldest people in the age groups claimed that they were happy, some individuals in the younger age groups confessed that it was contrary in their case. The main reasons found for the unhappiness in case of the latter were unemployment of children and grandchildren, addictions and substance abuse in the family, and ill health of the family members.

The distribution of the study subjects in response to the question if they felt they had more problems with memory loss than most other people of their age around, is as shown in the fig. 2.





It was observed that the problem was more prominent amongst those in the higher age groups, except for the lone individual who was over a hundred years old. The distribution of the study subjects in response to the question as to whether they felt it was wonderful to be alive, is as shown in fig. 3.



Fig. 3: Distribution of the study subjects in response to the question, "Do you feel that it is wonderful to be alive now?"

Interestingly, the subjects who were in the middle age groups felt less wonderful compared to those in the extreme ones. The response of the study subjects to the question as to whether they felt full of energy, is as shown in fig. 4.



Fig. 4: Distribution of the study subjects in response to the question, "Do you feel full of energy?"

An almost steady increase in the feeling of fullness of energy was observed from eighty years onwards. This was more likely due to the fact that most of these study subjects had their children and grandchildren earning a good livelihood and being well settled. The distribution of the study subjects in response to certain other miscellaneous questions, for example, "Do you often feel helpless?", "Do you prefer to stay home rather than going out, most of the times?", "Do you feel worthless the way you are?", "Do you feel that your situation is hopeless?", "Do you think that most people are better off than you are?", is a shown in fig. 5.



Fig. 5: Distribution of the study subjects in response to miscellaneous questions

A score of one point was given for each affirmative answer signalling depression that is given in bold in the questionnaire. Based on this scoring, a score of five or more suggested depression. As shown in the table 8, the distribution of the study subjects having depression, based on the age groups suggested that those who were of lesser age were more likely to be depressed compared to those who were much older.

Table 8: Distribution of depression in the study subjects based on age group

Age group	Depressed	Depressed	Not	Not depressed	Total	Total (%)
		(%)	depressed	(%)		
$\geq 60$ to $< 70$	587	55.96	462	44.04	1049	100
$\geq$ 70 to <80	323	42.22	442	57.78	765	100
≥80 to <90	13	27.66	34	72.34	47	100
$\geq 90$ to <100	2	25.00	6	75.00	8	100
≥100	0	0.00	1	100.00	1	100
Total	925	49.47	945	50.53	1870	100

This was found to be due to the fact that with age, the individuals were found to become more stable and adapted to the realities of life. On the other hand, those who were younger amongst the study subjects, still had a lot of unresolved issues, especially related to the next generation.

## CONCLUSION

Depression has been observed to be an important problem of the elderly. There is a need to review the quality as well as the distribution of services offered to the elderly in rural Punjab, India, including the content of the services, especially where their mental health is structured Behaviour concerned. Α Change Communication program is recommended for developing improved services for the elderly so that both the family members and the health care providers align with the needs and requirements of the elderly. The concept of Age-friendly Primary Health Care (PHC) Centres recommended by the WHO, needs to be brought closer home and implemented for the benefit of this vulnerable population [11]. There is a toolkit developed that assists the health care workers in making themselves well versed in the diagnosis as well as management of chronic diseases and the so-called four giants of geriatrics (memory loss, urinary incontinence,

depression and falls/immobility) that often impact people as they age. It is, therefore, imperative to communicate with the elderly for an effective agefriendly health promotion.

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