Original Research Article

A comparative study of psychiatric morbidity and quality of life among elderly people living in old age homes and in the community

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Abstract

Background: In the course of any living thing's existence, ageing is a normal and expected component of the process of development. There is very nothing that can be done to slow down the ageing process, as it is a natural part of life. It is not merely a biological phenomenon, but also has psychological and social ramifications for humans.

Methods: Between January 2019 and May 2019, researchers from the Institute of Mental Health in Hyderabad carried out a cross-sectional comparative study. This study's sample was drawn from residential care facilities and retirement communities in Hyderabad, India.

Results: The study was conducted at the Institute of Mental Health in Hyderabad on two groups: community-dwelling seniors and OAH residents (OAH). The community and OAH samples were taken in Hyderabad. Each group had 50 samples chosen. The study comprised older men and women who gave informed permission.

Conclusion: This study compared old age home and community elderly psychiatric morbidity, quality of life, stressful life events, and medical co-morbidities. Many research were done on seniors. Few research compare nursing homes and communities. Systematic investigations are needed as the number of retirement homes rises.

Keywords: Comparative study, mental health, psychiatric morbidity, quality of life, community

Introduction

The natural course of development for all living things includes an ageing process at some point throughout their lives ^[1]. The process of ageing is a biological fact that is, for the most part, independent of what individuals do. It is not merely a biological phenomenon for human beings; rather, it also has psychological and societal repercussions as a result of this phenomenon ^[2-5]. Ageing is an unavoidable growth process that is accompanied by a number of shifts in a person's physical, psychological, social, and hormonal situations. These shifts can occur at any point in one's life. When one hears the term "old age", the thought that first comes to mind is "the end of one's productive and fulfilling existence" ^[6-8].

The number of people who are able to live beyond the age of 60 is fast increasing as a result of improvements in economic conditions and health care facilities, as well as an increase in

the average life expectancy. India is the world's second most populous nation, with an estimated population of 1.21 billion as of 2011 [9-12]. China is the most populous nation on the planet. According to figures compiled by the United Nations in 2011, it included more than 17% of the total population of the planet. The demographic landscape of India is undergoing change at the moment. From a situation with a high mortality rate and a high fertility rate, we are moving toward one with a low mortality rate and a low fertility rate [13-16].

The percentage of the world's population that is 60 years old or older is anticipated to reach 22% by the year 2050, having climbed from 8% (or 200 million people) in 1950 to roughly 11% (or 760 million) in 2011 [17-20]. This increase is expected to continue. The population share of elderly people in India currently stands at 8%, which is nearly 104 million; 53 million females and 51 million males. This number is expected to increase to 10.1% by 2021 and 18.3% (300 million) by 2050. The census from 2011 revealed that the elderly population in India is nearly 104 million [21-24]. According to the demographic profile, India's overall population is expected to increase by 55% between the years 2000 and 2050, while the elderly population of 60 years of age and older is projected to increase by 326% and the elderly population of 80 years of age and older is projected to increase by 700% [25-29]. The purpose of this research was to investigate and compare the psychiatric morbidity, quality of life, and stressful life events of older persons who lived in both residential care facilities for the elderly and in the community as a whole [30-34]. The goals of the study were to investigate and analyse the socio-demographic factors of both study samples and to make comparisons between them [35-39]. To investigate and contrast. The prevalence of mental illness among older persons residing in nursing facilities and in the community as a whole [40]. To conduct research on and provide a comparison of the quality of life enjoyed by elderly persons who reside either in old age homes or in the general society. The purpose of this research is to investigate and analyse the stressful life events experienced by older individuals who live in both residential care facilities and the general population [41-45].

Methods

This is a cross sectional and comparative study conducted from institute of mental health, Hyderabad, between January 2019 to May 2019. The sample for the present study was collected from the old age homes and communities located in the city of Hyderabad. Permission was obtained from the concerned authorities of old age homes. Purposive sampling technique was used to select study subjects. Informed consent was obtained from all study subjects before carrying out study. Subjects were explained that participation in the study is voluntary, they can withdraw consent at any point of time. The purpose, aims and objectives were explained to patients in language they understood. Ethics committee approval was obtained from Osmania medical college ethics committee before carrying out the study.

Inclusion criteria

- Age > 60 yrs.
- Both genders.
- Persons who are co-operative and given consent.
- Persons having informant (for community sample).
- Who have been staying in old-age home for more than months.

Exclusion criteria

- Age <60 years.
- Persons who are not cooperative and do not give consent.

- Persons having severe visual, speech and hearing defects.
- Those who are having severe medical problems.
- Persons those who are not having family members (for community sample).
- Persons with past h/o psychiatric illness.

Sample size and duration of study

- 1) Purposive sampling technique was used to collect sample.
- 2) 50 subjects from old age home.
- 3) 50 subjects from community.

Source of data and place of study

The sample for the present study was collected from the old age homes and communities located in the city of Hyderabad. The study was done from January 2019 to May 2019.

Tools required

- 1) Intake proforma for socio demographic data.
- 2) Modified Kuppuswamy scale for assessment of socioeconomic status.
- 3) It consists of education, occupation and monthly family income of head of family.
- 4) BPRS to screen for psychopathology.

It was developed by JE Overall and DR Gorham (51) to measure the major psychotic and non-psychotic symptoms. It consists of 18 items, rated on a 7-point scale (0-7). The ratings are based on both the subjective and objective analysis of the symptoms.

MOCA to rule out cognitive impairment. It is widely used screening tool for detecting cognitive impairment, developed by Zaid Nasreddine in 1996, in Montreal, Quebec. It is a 30 point test, with scores range between 0-30, administered in Approx 10 min. Those with scores less than 26 are supposed to have mild cognitive decline and should be assessed further. Telugu version was used for illiterate people.

- 5) ICD-10 criteria to study the psychiatric morbidity.
- 6) WHO-QOL BREF to assess quality of life is a self-rated scale

Tool used to assess QOL of elderly people was World Health Organization QOL (WHO QOL BREF) questionnaire. This questionnaire contained 26 questions and is divided into four domains: physical, psychological, social, and environmental. The scale of values for each domain can vary from 0 to 100 point indicating that higher the score better the quality of life in that domain. For the illiterates the questionnaire was explained and responses were filled by the investigator.

7) Presumptive Stressful Life Event Scale.

This was devised by Gurmeet Singh *et al.*^[54] to suit Indian population along the lines of Holmes and Rahes social readjustment rating schedule. It was constructed and standardized for two time spaces i.e. last one year and life time. It has 51 life events including both desirable and undesirable and ambiguous events. Each life event weigh score of 20 to 95. It was observed that an average Indian individual experiences an average of 10 common stressful life units in a life time or 2 stressful life units in one year, without suffering obvious adverse physical or psychological disturbance.

The qualitative analyses of the socio demographic variables were analyzed using percentages and frequencies. Quantitative analyzed was done by calculating mean, standard deviation of the variables and later chi square test was used to know the association between categorical variables and student T test was used to find the association between two independent variables and one continuous variable. The correlations between the variables were analyzed using Pearson correlation test. Data analyzed SPSS Version 22 Software and later all the test results were tabulated. p value less than 0.05 was considered significant.

Results

Age Group Total Mean Age SD Tvalue/Pvalue Group 60-69 70-79 > 80 13 20 17 50 74.3 OldAge Home 7.7226% 40% 100% 34% 3.48 Sample 34 11 5 50 0.0007 7.5 69 Community 68% 22% 10% 100% 47 31 22 100 Total 47% 31% 22% 100%

Table 1:Age distribution among both groups

The table shows the frequency distribution of age in two groups. The total sample consisted of 47% (n= 47) of individuals between 60 to 69 years, 31% (n=31) between 70 to 79 years, and 22% (n=22) above 80 years. In the Old age home group, 26% (n=13) fell in the age group between 60 to 69 years, where as in community group 68% (n=34) fell in this category. The 70 to 79 years group comprised of Old age home group 40% (n=20) and community group 22% (n=11). In the Old age home group, 34% (n=17) fell in the age group above 80 years, where as in community group only 10% (n=5) fell in this category. Mean age of elderly people staying in OAH was 74.3 years, where as in community it was 69 years. The difference between the values in both groups is statistically significant.

Table 2:Gender distribution

	Cwarm	G	Gender		
	Group	Male	Female	Total	
	Old Aga Homa	22	28	50	
Sample	Old Age Home	44%	56%	100%	
	Community	22	28	50	
		44%	56%	100%	
Total		44	56	100	
Total		44%	56%	100%	
Chi square	e: 0				
P value: 1					

The table shows the frequency distribution of sex in both groups. The sample consisted of 44% (n=44) males and 56% (n=56) females. The community group comprised of 44% (n=22) males and 56% (n=28) females. The old age home group comprised of 44% (n=22) males and 56% (n=28) females. The difference between the values in both groups, is not statistically significant.

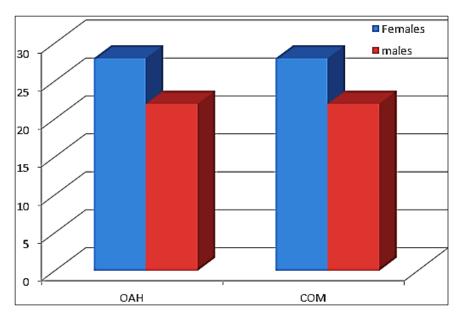


Fig1:Bar diagram showing the gender distribution among the both groups

	Crosser	Rel	Religion		
	Group	Hindu	Muslim	Total	
	Old Aga Homa	50	0	50	
C1 -	Old Age Home	100%	0%	100%	
Sample	Community	46	4	50	
		92%	8%	100%	
Total		96	4	100	
1 Otal		96%	4%	100%	
	Chi square: 4.16'	7 P value	: 0.04	•	

Table 2:Religion among the both groups

This table shows the frequency distribution of different religions in both groups. In the old age home group, 100% (n=50) were Hindus and there were no Muslims. In the community group, 92% (n=46) were Hindus and 8% (n=4) were Muslims. The difference between the values in both groups, is statistically significant.

Table 3:Education across both the groups

	Group	Education					Total	
	Group	Illiterate	School	Intermediate	Degree	P.G	1 Otai	
	Oldogo homo	14	23	2	9	2	50	
Commlo	Oldage home	28%	46%	4%	18%	4%	100%	
Sample	Community	8	12	11	8	11	50	
		16%	24%	22%	16%	22%	100%	
Total	T 1		35	13	17	13	100	
Total		22%	35%	13%	17%	13%	100%	
Chi square: 17.6								
Pvalue:	0.001							

In the sample, 22% (n=22) were illiterates, 35% (n=35) were educated school, 13% (n=13) till intermediate, 17% (n=17) were graduates and 13% (n=13) were post graduates. The highest number of illiterates were found in the old age home group (28%, n=14). The highest number of post graduates were found in community group (22%, n=11). In the old age home groups, 28% (n=14) were illiterates, 46% (n=23) had school education, 4% (n=2) till

intermediate, 18% (n=9) were graduates and 4% (n=2) were post graduates. In the community group, 16% (n=8) were illiterates, 24% (n=12) had school education, 22% (n=11) were till intermediate, 16% (n=8) graduates and 22 % (n=11) were post graduates. The difference between the values in both groups, is statistically Significant.

Table4:Socio economic status

			Socioeconomic Status				
	Group	Lower	Lower Middle	Upper Lower	Upper Middle	Upper	Total
	Oldogo homo	4	20	10	16	0	50
G 1	Oldage home	8%	40%	20%	32%	U	100%
Sample	C :	2	12	12	21	3	50
	Community	4%	24%	24%	42%	6%	100%
T-4-1		6	32	22	37	3	100
Total		6%	32%	22%	37%	3%	100%
Chi cana	ro: 6.52						

Chi square: 6.52. P value: 0.16.

The table shows the frequency distribution of different socio-economic classes in both groups. In the sample, 6% (n=6) belonged to lower SES, 32% (n=32) belonged to Lower middle SES, 22% (n=22) belonged to Upper lowerSES, 37%(n=37) belonged to Upper middle SES and 3% (n=3) belonged to Upper SES. In the old age home group, 8% (n=4) belonged to lower SES.40% (n=20) belonged to Lower middle SES, 20% (n=10) belonged to Upper lower SES, 32%(n=16) belonged to Upper middle SES and 0% (n=0) belonged to Upper SES. In the community group, 4% (n=2) belonged to lower SES, 24% (n=12) belonged to Lower middle SES, 24% (n=12) belonged to Upper lower SES, 42% (n=21) belonged to Upper middle SES and 6% (n=3) belonged to Upper SES. The difference between the values in both groups, is statistically Not significant.

Table 5: Marital status

	Cwarm	Marital Status					
	Group	Married	Separated	Divorced	Widow	Widower	Total
	Old agehome	19	4	3	15	9	50
		38%	8%	6%	30%	18%	100%
Sample		33	2	1	10	4	50
	Community	66%	4%	2%	20%	8%	100%
Total		52	6	4	25	13	100
Total		52%	6%	4%	25%	13%	100%

Chi square: 8.35 P value: 0.079

The table shows the frequency distribution of marital status in both groups. In the old age home group, 38% (n=19) were married, 8% (n=4) were separated, 6% (n=3) were divorced and 48% (n=24) were widowed. In the community group, 66% (n=33) were married, 4% (n=2) were separated, 2% (n=1) were divorced and 28% (n=14) were widowed. Highest no. of widowhood 48% (n=24) was found in old age home group and highest no. of married individuals 66% (n=33) were found in community group. The difference between the values in both groups is statistically not significant.

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Table 6: Family type

	Cwarm		Total		
	Group	Nuclear	Joint	ExtendedNuclear	1 otai
	Old aga hama	31	9	10	50
	Old age home	62%	18%	20%	100%
Sample	Community	38	11	1	50
		76%	22%	2%	100%
Total		69	20	11	100
Total		69%	20%	11%	100%
Chi can	oro: 9 27				

Chi square: 8.27 P value: 0.01

This table shows the frequency distribution of type of family in both groups.

In the sample, 69% (n=69) were from nuclear family,20% (n=20) were from joint family and 11%(n=11) were from extended nuclear family. In the old age home group, 62% (n=1) were from nuclear family, 18% (n=9) were from joint family and 20% (n=10) were from extended nuclear family. In the community, 76% (n=38) were from nuclear family, 22% (n=11) were from joint family and 2% (n=1) were from extended nuclear family. The difference between the values in both groups is statistically significant.

Duration of stay in OAH

Among the old age home sample, 14% (n=7) were staying in OAH since 1 yrear, 22% (n=11) since 2 years, 24% (n=12) since 3 years, 18% (n=9) since 4 years, 14% (n=7) since, 4% (n=2) since 6 years, 4 % (n=2) living since 7 years. Mean duration of stay in OAH was 3.24 years.

Table 7:History of physical illnesses

Illness		OAH N (%)	Community n (%)	Chi-square/Pvalue
Uzmartancian	Present	18 (36%)	14 (28%)	0,73
Hypertension	absent	32 (64%)	36 (72%)	0.39
	Present		10 (20%)	0.271
Diabetes	Absent	42 (84%)	40 (80%)	0.602

In the sample, 32% (n=32) had history of hypertension. In the old age home group 36% (n=18) & in community group, 28% (n=14) had history of hypertension, which is statistically not significant. In the sample, 18% (n=18) had history of diabetes. In the old age home group 16% (n=8) & in community group, 20% (n=10) had history of diabetes, which is statistically not significant.

 Table 8:Other medical illness

Illnes	S	Old Age HomeN (%)	CommunityN (%)	Chi square/P value
Arthritis	Present	10 (20%)	6 (12%)	1.19
Artifitis	Absent	40 (80%)	44 (88%)	0.27
CAD	Present	2 (4%)	4 (8%)	0.7
CAD	Absent	48 (96%)	46 (92%)	0.39
CVA	Present	3 (6%)	1 (2%)	1.04
CVA	Absent	47 (94%)	49 (98%)	0.3
Hearing imp		3 (6%)	0 (0%)	
Visual imp		2 (4%)	()	
BPH		1 (2%)	()	

In the sample, 32% (n=32) had history of arthritis. In the old age home group 20% (n=10) & in community group, 12% (n=6) had history of arthritis. The difference between the groups was statistically not significant. In the sample, 6% (n=6) had history of CAD. In the old age

home group 4% (n=2) & in community group, 8% (n=4) had history of CAD. The difference

between the groups was not statistically significant.

Table 9: Psychiatry morbidity among both the groups

		OAH	Community
		N (%)	N (%)
Psychiatric Morbidity	Present	24 (48%)	14 (28%)
Psychiatric Morbidity	Absent	26 (52%)	36 (72%)
Chi square: 4.24			
P value: 0.039			

This table shows the frequency distribution of psychiatric morbidity in both groups. In the OAH sample, 48% (n=24) have psychiatric morbidity. In the community sample, 28% (n=14) have psychiatric morbidity. The difference between the values in both groups, is statistically significant.

Table 10: Different psychiatric illnesses

	Depression	Anxiety	Hypomania	Psychosis	ADS	Total			
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)			
OAH	19 (38%)	3 (6%)	1 (2%)	1 (2%)	0	24(48%)			
Community	9 (18%)	4 (8%)	0	0	1(2%)	14(28%)			
Chi-square:	Chi-square: 4.3								

P-value: 0.35

This table shows the frequency distribution of psychiatric morbidity in both groups. In the sample, 38% (n=38) has psychiatric morbidity, 48%(n=24) in old age home group and 28% (n=14) in the community group. In the old age home group, 48% (n=24) have psychiatric morbidity, among the 24 people 38% (n=19) are having depression, 6% (n=3) are having anxiety, 2% (n=1) having hypomania, and 2% (n=1) have psychosis.

Table 11: Cognitive impairment

		OAHN (%)	Community N (%)				
Cognitive	Present	20 (40%)	16 (32%)				
impairment	Absent	30 (60%)	34 (68%)				
Chi square: 0.694							
P value: 0.40							

This table shows the frequency distribution of cognitive impairment in both groups. In the old age home group, 40% (n=20) have cognitive impairment. In the community, 32% (n=16) have cognitive impairment. The difference between the values in both groups is statistically not significant.

Table 12: Table depicting mean age of cognitive impairment

, , ,	Ag	e
Cognitive impairment	Mean	S.D.
Present	77.2	8
Absent	72.3	6.96
P value: 0.01		

T value: 2.29

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Mean age of having cognitive impairment is 77.2 and Mean age of not having cognitive impairment is 72.3, which is statistically significant.

Table 13: Depicting correlation between psychiatric morbidity and cognitive impairment

	MOCA Sore
Psychiatric Morbidity	R value: -0.318 P value:
	0.001

The above table shows negative correlation between the psychiatric morbidity an MOCA score with Pearson correlation r = -0.18, which is statistically significant.

Table 14: Table depicting mean score of quality of life in both the groups

	QOL	QOL Score		
	Mean	S.D		
OAH	56.9	5.67		
Community	59.28	4.8		
P value: 0.01				
T value: 2.21				

Mean score of QOL score in old age home group is 56.9 and in the community group is 59.28. The difference between two groups is statistically significant with p value of 0.01.

Table 15:Table depicting mean scores of physical domain quality of life in both the groups

	QOL Physical Domain Score					
	Mean S.D.					
OAH	58.7	10.4				
Community	53.88	7.75				
P value: 0.005						
T value: 2.62						

Mean score of QOL Physical domain score in old age home group is 58.7and in the community group is 53.88. The difference between two groups is statistically significant with p value of 0.005.

Table 16:Table depicting mean scores of psychological domain quality of life in both the groups

	QOL Psychological Domain Score					
	Mean S.D.					
OAH	60.5	9.8				
Community	68.5	7.57				
P value: 0.0001						
T value: 4.56						

Mean score of QOL Psychological domain score in old age home group is 60.5 and in the community group is 68.5. The difference between two groups is statistically significant with p value of 0.0001.

Table 17: Table depicting mean scores of social domain quality of life in both the groups

	QOL Social Domain Score			
	Mean S.D.			
OAH	52	7.52		
Community	60	8.45		
P value: 0.0001				
T value: 5.02				

Mean score of QOL Psychological domain score in old age home group is 52 and in the community group is 60. The difference between two groups is statistically significant with p value of 0.0001.

Table 18: Table depicting mean scores of environmental domain quality of life in both the groups

	QOL Social Domain Score					
	Mean S.D.					
OAH	57.2	6.98				
Community	53.7	8.26				
P value: 0.01						
T value: 2.27						

Mean score of QOL Environmental domain score in old age home group is 57.2 and in the community group is 53.7. The difference between two groups is statistically significant with p value of 0.01.

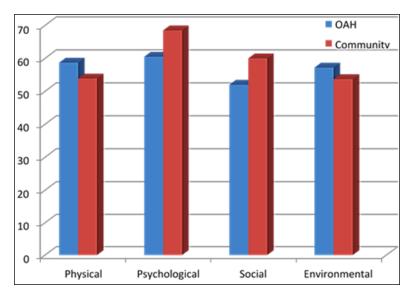


Fig 2: Comparison of domains of qol by their place of living

Table 19: Table depicting correlation between psychiatric morbidity and gol score

	QOL
Psychiatric Morbidity	R value: -0.67
	P value: <0.0001

The above table shows negative correlation between the psychiatric morbidity and QOL with Pearson correlation r = -0.67, which is statistically significant.

Table 20: Table depicting mean scores of presumptive stressful life events in both the groups

	PSLES	PSLESscore		
	Mean	S.D		
OAH	623.73	212.2		
Community	519.16	171.2		
P value: 0.0039				
T value: 2.71				

Mean score of PSLES score in old age home group is 623.73 and in the community group is 519.16. The difference between two groups is statistically significant with p value of 0.0039.

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 Table 21:Table depicting correlation between psychiatric morbidity and PSLES score:

	PSLES
Psychiatric Morbidity	R value: +0.55
	P value: <0.0001

The above table shows positive correlation between the psychiatric morbidity and stressful life events with Pearson correlation r = +0.55, which is statistically significant.

Table 22: Frequency distribution of depression among various sociodemographic variables

			Depression		Chi-square	Significance	
			Present(n)	Absent(n)	Pvalue	Significance	
	OAH	60-69	2	11	11.02		
	OAH	70-79	5	15	11.92	Significant	
	(n=50)	=>80	12	5	0.002		
Age	C	60-69	1	33	16.81		
	Community	70-79	5	6	0.000	Significant	
	(n=50)	=>80	3	2	2		
	OAH	Female	12	16	0.63	Not	
Gender	(n=50)	male	7	15	0.42	significant	
Gender	Community	Female male	6	22	0.50	Not	
	(n=50)	remaie maie	3	19	0.47	significant	
		Illiterate School	9	5			
	OAH	Inter	7	16	7.67	Not	
	(n=50)		1	1	0.104		
	(11–30)	Degree P.G	1	8	0.104	Significant	
Education		1.0	1	1			
Education		Illiterate School	5	3			
	Community (n=50)		4	8	19.23	Significant	
			0	11	0.007		
		P.G	0	8	0.007		
		r.u	0	11			
	OAH	L LM UL	4	0	9.09	Significant	
	(n=50)		8	12	0.028		
	(11–30)	LIVI OL	4	6	0.028		
Socioeconomic status		UM	3	13			
			1	1			
	Community		3	9	3.22	Not	
	(n=50)	LLM UL UMU	1	11	0.52	Significant	
	(11=30)		4	17	0.32	Significant	
			0	3			
		Divorced	2 5	1			
	OAH	Married	5	14	2.57	Not	
Marital status	(n=50)	Separated	2	2	0.63	Significant	
	(11–30)	Widow Widower	6	9	0.03	Significant	
		widow widower	4	5			
		Divorced	0	1			
	Community		2	31	15.9	Significant	
	(n=50)	Married	0	2	0.003		
	(11–30)	Separated Widow Widower	6	4	0.003		
		WIGOW WIGOWEI	1	3			

The above table shows prevalence of depression among the various socio demographic variables.

Age: In both the groups, prevalence of depression is significantly high in 70-79 and above 80 years age group.

Gender: In both the groups, prevalence of depression is high among the females but statistically not significant.

Education: In both the groups, prevalence of depression is high in elderly with illiterates and school level education. In the community group it is statistically significant, whereas statistically not significant in OAH.

Socioeconomic status:In OAH group, prevalence of depression is significantly (p=0.002) high in lower. Lower middle and upper lower socioeconomic status people, whereas such significance is not found among community group.

Marital status: In both the groups, prevalence of depression was high among the divorced, separated, widow and widowers. This finding as statistically significant in community group (p=0.003), whereas it is not significant in OAH group.

	•		7 1 1			0 0 1	
Illnegg	GROID		Depression		Chi square	Cianificance	
Illness	group		Present(n)	Absent(n)	P value	Significance	
	OAH	Present	11	7	6.37	Significant	
HTN	(n=50)	Absent	8	24	0.01	Significant	
пін	Community	Present	6	8	8.14	Cionificant	
	(n=50)	Absent	3	33	0.004	Significant	
	OAH	Present	5	3	2.42	Not Cionificant	
DM	(n=50)	Absent	14	28	0.11	Not Significant	
DM	Community	Present	5	5	8.67	Significant	
	(n=50)	Absent	4	36	0.003	Significant	

Table 23: Depression in study population with HTN and dm among both groups

The above table shows the prevalence of depression among the study population with Hypertension and Diabetes mellitus.

HTN: In both the groups, prevalence of depression is significantly high in elderly with HTN. **DM:** In the community group, prevalence of depression is significantly high in elderly with DM, whereas such significance is found in the OAH group.

Table 24: Depression in the study population with other medical illnesses among both groups

Illness	Group		Depre	ession	Chi square	Significance
Inness	Group		Presentn	Absentn	Pvalue	Significance
	OAH	Present	4	6	0.02	Not
Arthritis	(n=50)	Absent	15	25	0.88	Significant
Aiuiius	Community	Present	3	3	4.73	Significant
	(n=50)	Absent	6	38	0.029	Significant
	OAH	Present	1	1	0.12	Not
CAD	(n=50)	Absent	18	30	0.72	Significant
CAD	Community	Present	3	1	2.52	Not
	(n=50)	Absent	16	30	0.11	Significant
	OAH	BPH	0	1		
	(n=50)	Hearing	3	0		
Presence		Impairment				
of other Medical Illnesses		Visual impairment	2	0		
of other Medical Illiesses		CVA	2	1		

Community		0	1	
(n=50)	CVA			

The above table shows the prevalence of depression in study population with other medical illnesses among both groups. Among the all other medical illnesses apart from HTN and DM; elderly people with arthritis were more in both in OAH (20%) and in the community (12%). In the community group, prevalence of depression was significantly high (p=.002) in elderly with arthritis, whereas such a significance not found in OAH group.

Discussion

The study was conducted at the Institute of Mental Health in Hyderabad on two groups: community-dwelling seniors and OAH residents (OAH). The community and OAH samples were taken in Hyderabad. Each group had 50 samples chosen. The study comprised older men and women who gave informed permission. Intake proforma collects sociodemographic sample data. After collecting sociodemographic information, each subject was given four scales: Brief Psychiatric Rating Scale, Montreal Cognitive Assessment Scale, WHO Quality of Life BREF Scale, and Presumptive Stressful Lie Event Scale. BPRS measured psychotic and nonpsychotic symptoms [46-49]. It has 18 7-point items (0-7). Subjective and objective symptom evaluations are used. Those who scored at least 3 on each item were examined for psychiatric illnesses using ICD 10. Cognitive impairment was measured by MOCA, quality of life by WHO-QOL BREF, and stressful events by PSLES. The data was recorded into a data sheet and examined using statistical methods. Previous section tabulates outcomes [50-54]. In the present study, the bulk of OAH group seniors were 70-79 (40%) and 80+ (34%). The majority of the community was 60-69 (68%) and 70-79 (22%). OAH residents were older than those in the community (69 years) (p= 0.0007).

In the current study, all 50 (100%) OAH sample members were Hindus, while 46 (92%) communitymembers were Hindus and 4 (8%) were Muslims. OAH had no Muslims. The P value across groups is 0.04. This is because Muslims live in joint households and have stronger family relationships. Most of the sample was collected from OAHs run by Hindu organisations, where Hindus were overrepresented [55-58]. In this study, 28% of OAH group members are illiterate, 46% have schooling, 4% have intermediate, 18% have graduated, and 4% have postgraduate degrees. 16% of the community group is illiterate, 22% have elementary school, 22% have intermediate, 16% have high school, and 22% have college.

40% of OAH are from lower middle class, 32% are from higher middle class, 20% are from upper lower class, and 8% are from lower class. 42% of community group members are from upper middle class, 24% from upper lower class, 6% from higher, and 4% from lower class. P=0.16 shows no statistically significant difference between groups [59, 60]. Socioeconomic status matches both categories. In this survey, most upper- and lower-middle-class seniors are in both groups.

38% of OAHs are married, 30% are widowed, 18% are widowers, 8% are separated, and 6% are divorced. Individuals are 66% married, 20% widows, 8% widowers, 4% separated, and 2% divorced. P=0.079 indicates that both groups were matched for marital status. Even though the difference between the groups is not statistically significant, the greater number of married persons and fewer widows/widowers in the community group indicates that remaining married is a strong predictor against residential care. 62% of the OAH group were from nuclear families, 18% from joint families, and 20% from extended nuclear families.

Rameshwar *et al.* showed that 60.5% of patients live in nuclear families and just 39.5% in joint families. Rao SS found no statistically significant difference in family structure between OAH and community senior groups (p=0.07) $^{[61-64]}$. Unlike the current study. Psychiatric disease is more common in OAH (24%) than the community (14%; p=0.35).

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This finding agrees with Rao SS (42), Nagaraj AKMand Djernes JK research. This contradicts a research by Shailala B (40), which found that persons in old age homes are psychologically better and psychiatric morbidity was lower than in the community., seventh and eighth decades of life. SS Rao's work supports this. OAH residents faced more stressful occurrences than the community in the research. PSLES score was higher in OAH than community (t=2.71; p=0.0039). According to Rao SS's analysis [65-68]. This study found a statistically significant positive connection between psychiatric illness and stressful life experiences (r=+0.55).

Conclusions

This study compared old age home and community elderly psychiatric morbidity, quality of life, stressful life events, and medical co-morbidities. Many research were done on seniors. Few research compare nursing homes and communities. Systematic investigations are needed as the number ofretirement homes rises. This is a cross-sectional, case-control study on seniors in Hyderabad, Telangana. Each group sampled 50. OAH research respondents averaged 74.3 years compared to 69 in the community. Most OAH and community subjects are urban. Most OAH subjects were illiterate and school-educated. Most of the sample was educated through high school and college, showing low literacy rates. Old age homes had more widows/widowers (48%) and separated/divorced (14%), while the community had more married (66%). Since Hindu organizations ran OAH, all study subjects were Hindus. 92% Hindus, 8% Muslims.

References

- 1. Elango S. A study of health and health related social problems in the geriatric population in a rural area of Tamil Nadu. Indian journal of public health. 1998;42(1):7-8.
- 2. WHO Expert Committee on Health of the Elderly. Health of the elderly: report of a WHO Expert Committee. World Health Organization, 1989.
- 3. Chandramouli C. Census of India-A story of Innovations. Press Information Bureau, Government of India, 2011.
- 4. DESA U.World urbanization prospects: The revision, highlights. United Nations, Department of Economic and Social Affairs (UN/DESA), Population Division. United Nations publication, 2014.
- 5. Ahmed A, Chaudhry AG, Farooq H. Older Persons and Ageing Phenomena: Exploratory Study Based on Perceptions of Elders about Old Age. American Research Thoughts. 2014 Dec;1(2):1029-35.
- 6. General R. Census Commissioner, Ministry of Home Affairs, Government of India. SRS Report, 2012.
- 7. Raju SS. Ageing in India in the 21st Century: A Research Agenda. Mumbai: The Harmony Initiative, 2006 Feb.
- 8. United Nations. Dept. of Economic and Social Affairs. Population Division. World Population Ageing, 1950-2050. New York: United Nations, 2002.
- 9. Statistics E. Central Statistical Office. National Statistical Organization, Ministry of Statistics and Programme Implementation (www.mospi.gov.in), 2013.
- 10. Singh J. Comparative study of quality of life in aged persons. Indian Journal of Applied Research. 2014;4:1-3.
- 11. Pereira YD, Estibeiro A, Dhume R, Fernandes J. Geriatric patients attending tertiary care psychiatric hospital. Indian journal of psychiatry. 2002 Oct;44(4):326.
- 12. Ramachandran V, Sarada M, Ramamurthy B. Psychiatric disorders in subjects aged over fifty. Indian Journal of Psychiatry. 1979 Jul;21(3):193.

- 13. Premarajan KC, Danabalan M, Chandrasekar R, Srinivasa DK. Prevalence of psychiatry morbidity in an urban community of Pondicherry. Indian Journal of Psychiatry. 1993Apr;35(2):99.
- 14. Ghosh AB. Psychiatry in India: Need to focus on geriatric psychiatry. Indian Journal of psychiatry. 2006 Jan;48(1):4.
- 15. Rao AV. Geropsychiatry in Indian culture. The Canadian Journal of Psychiatry. 1979 Aug;24(5):431-6.
- 16. Hemang M Shah, Chintan K Solanki, Prakash I Mehta. Study of depression in the geriatric patients attending psychiatry OPD in a tertiary care hospital. Telangana Journal of Psychiatry. 2019Jan-June;5(1):43-47.
- 17. Khandelwal SK. Mental health of older people. Ageing in India. Situational analysis and planning for the future, 2003.
- 18. Blazer DG. Depression in late life: review and commentary. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences. 2003 Mar;58(3):M249-65.
- 19. Sood A, Singh P, Gargi PD. Psychiatric morbidity in non-psychiatric geriatric inpatients. Indian journal of psychiatry. 2006 Jan;48(1):56.
- 20. Lebowitz BD, Pearson JL, Schneider LS, Reynolds CF, Alexopoulos GS, Bruce ML, *et al.* Diagnosis and treatment of depression in late life: consensus statement update. Jama. 1997;278(14):1186-90.
- 21. Druss BG, Bradford WD, Rosenheck RA, Radford MJ, Krumholz HM. Quality of medical care and excess mortality in older patients with mental disorders. Archives of general psychiatry. 2001 Jun;58(6):565-72.
- 22. Kumar G, Majumdar A. Quality of life (QOL) and its associated factors using WHOQOL-BREF among elderly in urban Puducherry, India. Journal of clinical and diagnostic research: JCDR. 2014 Jan;8(1):54.
- 23. Oort FJ. Using structural equation modeling to detect response shifts and true change. Quality of Life Research. 2005 Apr;14(3):587-98.
- 24. Oort FJ, Visser MR, Sprangers MA. An application of structural equation modeling to detect response shifts and true change in quality of life data from cancer patients undergoing invasive surgery. Quality of Life Research. 2005 Apr;14(3):599-609.
- 25. Ferrell BR. The impact of pain on quality of life. A decade of research. The Nursing Clinics of North America. 1995 Dec;30(4):609-24.
- 26. Singh GP, Chavan BS, Arun P. Geriatric out-patients with psychiatric illnesses in a teaching hospital setting-A retrospective study. Indian journal of psychiatry. 2004 Apr;46(2):140.
- 27. Doty PJ. The oldest old and the use of institutional long-term care from an international perspective. The Oldest Old. Oxford University Press, New York, 1992, 251-67.
- 28. Menezes S, Thomas TM. Status of the Elderly and Emergence of Old Age Homes in India. International Journal of Social Sciences and Management. 2018 Jan;5(1):1-4.
- 29. Tiwari SC. Geriatric psychiatric morbidity in rural northen India: implications for the future. International Psychogeriatrics. 2000 Mar;12(1):35-48.
- 30. World Health Organization. Mental health and older adults, 2017 Dec. Retrieved from.
- 31. Murthy RS. National mental health survey of India 2015–2016. Indian journal of psychiatry. 2017 Jan;59(1):21.
- 32. Regier DA, Boyd JH, Burke JD, Rae DS, Myers JK, Kramer M, et al. One-month prevalence of mental disorders in the United States: Based on five epidemiologic catchment area sites. Archives of General Psychiatry. 1988 Nov;45(11):977-86.
- 33. Djernes JK. Prevalence and predictors of depression in populations of elderly: a review. Acta Psychiatrica Scandinavica. 2006 May;113(5):372-87.
- 34. Thapa P, Chakraborty PK, Khattri JB, Ramesh K, Sharma B. Psychiatric morbidity in elderly patients attending OPD of tertiary care centre in western region of Nepal.

- Industrial psychiatry journal. 2014 Jul;23(2):101.
- 35. Manhas RS, Manhas GS, Manhas A, Thappa JR, Akhter R, Sharma R. Psychiatric Morbidity among Geriatric Patients Attending Psychiatric OPD of Tertiary Care Hospital.
- 36. Dr Avik Chakraborty, Dr Ujjwal Bandyopadhyay, Burden of Psychiatric morbidity (proportion of different mental disorder) in geriatric age group patients attending Psychiatry OPD of a Tertiary Care facility of Employees State Insurance Corporation(ESIC) Hospital., International Journal of Scientific Research, March2018, 7(3).
- 37. Mullick TH, Samanta S, Maji B, Sarangi L. Pattern of morbidity and depression among the urban geriatric population: A community-based survey in Bhubaneswar, Orissa, India. International Journal of Health & Allied Sciences. 2018 Oct;7(4):233.
- 38. Akbar S, Tiwari SC, Tripathi RK, Pandey NM, Kumar A. Prevalence of psychiatric illness among residents of old age homes in Northern India. Journal of neurosciences in rural practice. 2018 Apr;9(2):193.
- 39. Kumar R, Satapathy S, Adhish VS, Nripsuta S. Study of psychiatric morbidity among residents of government old age homes in Delhi. Journal of Geriatric Mental Health. 2017 Jan;4(1):36.
- 40. Bandla S, Gopalan S, Nappinai N, Mathumathi S, Sivachidambaram B. A study of psychiatric morbidity in geriatric population living in old age home and community. Archives of Mental Health. 2016 Jan;17(1):90.
- 41. Singh AP, Kumar KL, Reddy CP. Psychiatric morbidity in geriatric population in old age homes and community: a comparative study. Indian journal of psychological medicine. 2012 Jan;34(1):39.
- 42. Rao SS, Chennamsetty SK, Rao SK. A Comparative Study of Psychiatric Morbidity, Quality of Life (QOL), Coping Skills among Elderly People Living in Old Age Homes (OAH) and in the Community. Int J Health Sci Res. 2014;4(8):212-25.
- 43. Nagaraj AK, Mathew J, Nanjegowda RB, Majgi SM, Purushothama SM. Psychiatric morbidity among elderly people living in old age homes and in the community: A comparative study. Online Journal of health and allied sciences, 2012 Jan, 10(4(5)).
- 44. Rayirala A, Nallapaneni N, Mandadi G, Bhogaraju A. A cross sectional comparative study assessing the psychiatric morbidity in elderly living in old age homes and community. Archives of Mental Health. 2014 Jan;15(1):86.
- 45. Ananthakrishnan VS, Gopalan SG, Sultana ZS, Shailaja B, Prasad M. A Retrospective study of sociodemographic profile and psychiatric morbidity in geriatric patients attending psy. dept. in a tertiary care hospital in a sub urban population. Indian journal of psychiatry.b-9, Kanara business centre, off link RD, ghaktopar-e, Mumbai, 400075, India: MedKnow publications & media Pvt Ltd.2018 Feb;60(5):66-67.
- 46. Chandrika S, Radhakumari P, DeviMadhavi B. Quality of Life of Elderly Residing in Old Age Homes and Community in Visakhapatnam City. Hindu.2015;42(84):50.
- 47. Amonkar P, Mankar MJ, Thatkar P, Sawardekar P, Goel R, Anjenaya S. A comparative study of health status and quality of life of elderly people living in old age homes and within family setup in Raigad District, Maharashtra. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2018 Jan;43(1):10.
- 48. Lakshmi Devi S, Roopa KS. Quality of life of elderly men and women in institutional and noninstitutional settings in urban Bangalore district. Res J Family Community ConsumSci. 2013;1:7-13.
- 49. Panday R, Kiran M, Srivastava P, Kumar S. A study on quality of life between elderly people living in old age home and within family setup. Open Journal of Psychiatry & Allied Sciences. 2015;6(2):127-31.
- 50. Agarwal P,Jhingan.Life events and depression in elderly.Indian J Psychiatry.2002;44:34-40.
- 51. Overall JE, Gorham DR. The brief psychiatric rating scale. Psychological reports.

- 1962Jun;10(3):799-812.
- 52. Nasreddine ZS, Phillips NA, Bédirian V, Charbonneau S, Whitehead V, Collin I, et al. The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. Journal of the American Geriatrics Society. 2005 Apr;53(4):695-9.
- 53. World Health Organization. The world health organization quality of life (WHOQOL)-BREF. World Health Organization, 2004.
- 54. Singh G, Kaur D, Kaur H. Presumptive stressful life events scale (PSLES)-a new stressful life events scale for use in India. Indian Journal of Psychiatry. 1984 Apr;26(2):107.
- 55. Holmes TH, Rahe RH. The social readjustment rating scale. Journal of psychosomatic research, 1967.
- 56. Sharma I, Ram D. Life events in anxiety neurosis. Indian journal of psychiatry. 1988Jan; 30(1):61.
- 57. Venkoba Rao A. Geropsychiatry in India-an overview. InProceedings of the First National Seminar on Geriatric Psychiatry, Kottayam, 1989 Sep.
- 58. ICMR-Mental health & ageing. ICMR bulletin. 1991May;21(5):49-54.
- 59. www.censusindia.gov.in>census 2001. searched from 2001 census data-census of India website; office of Registrar general and census commissioner.
- 60. Gupta S. Mental illness in the elderly: results from a psycho-geriatric unit of a general hospital. Indian JPrev. Soc. Med. 2006;37:89-93.
- 61. Copeland JR, Beekman AT, Dewey ME, Hooijer C, Jordan A, Lawlor BA, *et al.* Depression in Europe: geographical distribution among older people. The British Journal of Psychiatry. 1999 Apr;174(4):312-21.
- 62. Koenig HG, Goli V, Shelp F, Kudler HS, Cohen HJ, Blazer DG. Major depression in hospitalized medically ill older men: documentation, managementand outcome. International Journal of Geriatric Psychiatry. 1992 Jan; 7(1):25-34.
- 63. Saibal Guha, Valdiya. Psychiatric morbidity amongst inmates of oldagehome. Presidential address. Abstract from ANCIPS, 2010.
- 64. Ramachandran V, Sarada M, Ramamurthy B. Psychiatric disorders in subjects aged over fifty. Indian Journal of Psychiatry. 1979 Jul;21(3):193.
- 65. Joshi K, Kumar R, Avasthi A. Morbidity profile and its relationship with disability and psychological distress among elderly people in Northern India. International Journal of Epidemiology. 2003 Dec;32(6):978-87.
- 66. Bell RA, Smith SL, Arcury TA, Snively BM, Stafford JM, Quandt SA. Prevalence and correlates of depressive symptoms among rural older African Americans, Native Americans, and whites with diabetes. Diabetes care. 2005 Apr;28(4):823-9.
- 67. Simonsick EM, Wallace RB, Blazer DG, Berkman LF. Depressive symptomatology and hypertension-associated morbidity and mortality in older adults. Psychosomatic.