Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20163499

A study on mental health status and its determinants in elderly people of Raipur city, Chhattisgarh, India

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Received: 20 September 2016 **Accepted:** 27 September 2016

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ABSTRACT

Background: Rapid increase in nuclear families and contemporary changes in psychosocial matrix makes vulnerable to older people to develop mental health Problems. In the above context study was done to assess mental health status and its determinants in elderly people of Raipur city, Chhattisgarh, India.

Methods: Community based cross sectional study was conducted in randomly selected 32 areas of Raipur city during July 2013 to June 2014. Multi stage simple random sampling was used. A total of 640 subjects were included in study. Sample size was calculated by using statistical formula, $n = Z21-\alpha/2$ P (1-P)/d.1 Predesigned and pretested proforma were used for data collection. Ethical consideration was obtained from institutional ethical Committee and Informed Consent from subject. All elderly of age 60 years and above who were residing in the study area for at least one year, and Willing to Participate in study without compulsion were included in study.

Results: Out of total study population 20.31% had excellent whereas 79.68% showed average mental health status. Study observed that out of total study population 52.03% had anxiety whereas 27.65% had depression and 20.31% were normal that have excellent mental health status. Male had better mental health than female. Those who were performing physical activity during leisure time and economically independent and belong to upper socioeconomic group and married had better mental health.

Conclusions: Females lives longer than male leads to feminization of ageing. It is important to improve the social capital and involve communities and families in supporting the older adults.

Keywords: Mental health, Elderly, Anxiety, Dukes criteria

INTRODUCTION

The ageing of the world's population is a global phenomenon with extensive economic and social consequences. A multitude of social, demographic, psychological, and biological factors contribute to a person's mental health status. Almost all these factors are particularly pertinent amongst older adults. Factors such as poverty, social isolation, loss of independence,

loneliness and losses of different kinds, can affect mental health. Although these disorders have a low prevalence, the impact they have on individuals, families and societies is huge.

There are older women worldwide than older men. This difference increases with advancing age and has been called "feminization of ageing". Rapid increase in nuclear families and contemporary changes in psychosocial

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matrix makes vulnerable to older people to develop mental health problems.

In the above context study was done in elderly population of Raipur City, Chhattisgarh India with the objective to know Prevalence of mental illness and their determining factors.²

METHODS

It was a community based cross sectional observational study was conducted in randomly selected 32 Areas of Raipur city including Urban and Slum during July 2013 to June 2014. Multi stage Simple random sampling method was used. A total of 640 subjects were included in study.

Sample size were calculated by using statistical formula, $n=Z^21-\alpha/2$ P(1-P)/d.¹ Predesigned proforma and duke health Profile was used as study tool. Duke health profile is based on self-rating scale. For mental health 100 indicates the best health status, and 0 indicates the worst health status. For anxiety, depression, anxiety-depression, pain, and disability, 100 indicate the worst health status and 0 indicates the best health status.

Ethical consideration was obtained from institutional ethical committee and informed consent from subject. All elderly persons in the age group of 60 years and above who were residing in the study area for at least one year, and Willing to participate in study without compulsion was included in study. Those who were not willing to participate were excluded. All the participants were categorized into three sub-groups—young Old: 60 to 74 years; old-old: 75 to 84 years; and oldest-old: ≥85 years.² and data analysis was done by employing percentages and test of significance using appropriate software.

RESULTS

Present study has predominant female (58.28%) and young old age group (81.71%). Most of the people belong to middle socioeconomic status (46.71%) followed by lower socioeconomic status (42.03%). Majority hale belongs from joint family (84.06%). A significant proportion were widowed (57.5%) followed by married (40.62%). About 85% were dependent. Most of the people (51.71%) use to do household activity in their leisure time (Table 1).

Out of total study population 20.31% had excellent whereas (79.68%) showed average mental health status, none had worst (Table 2). Study observed that out of total study population 52.03% had anxiety whereas 27.65% had depression and 20.31% were normal who have excellent mental health status (Table 3).

Study reveals 66.87% of total population had average mental health status whereas only 14.84% shows excellent mental health status and belong to young old

age group. Male (36.70% excellent) had better mental health than female (8.57% excellent). About 45.83% of independent people shows excellent mental health whereas only 15.80% of dependent showed excellency. Those who were performing household activity had better mental health (22.35% had excellent) than those who were doing nothing (4.37% excellent) in their leisure time activity. Inverse relation was observed with family status, those who were living in nuclear family (26.47%) shows excellent whereas (19.14%) in joint family shows excellent status.

Table 1: Background characteristic of study population.

Background	Total number	Percentage		
characteristic	(n=640)	(%)		
Age group				
Young old	523	81.71		
old	114	17.81		
V. old	3	0.46		
Sex				
Male	267	41.71		
Female	373	58.28		
Socio-economic status (SES)				
Upper	72	11.25		
Middle	299	46.71		
Lower	269	42.03		
Type of family				
Nuclear	102	15.93		
Joint	538	84.06		
Marital status				
Married	260	40.62		
Widowed	368	57.5		
Separated	12	1.87		
Financial status				
Dependent	544	85		
Independent	96	15		
Leisure time activity				
Nothing	160	25		
House hold activity	331	51.71		
Others	149	23.28		

Table 2: Prevalence of mental health status.

Mental health status Excellent	Number 130	Percentage (%)
Average	510	79.68
Worst	0	0

Table 3: Distribution of mental health disorder.

Mental health	Number	Percentage (%)
Anxiety	333	52.03
Depression	177	27.65
Normal	130	20.31
Total	640	100

In respect to socio-economic status people belong to Upper class (34.31%) shows excellency and only (1.58%) lower class had excellent status. Married person had

better mental status than widowed and separated (28.07%), (14.94%) and (16.66%) respectively had excellent mental health (Table 4).

Table 4: Distribution of mental health status with its background characteristics.

Background characteristic	Excellent	Average	Chi-square, df, P. Value
Age group			
Young old	95 (14.84)	428 (66.87)	Chi-square =0.317, df=2, P<0.01 [Significant]
Old	35 (5.46)	79 (12.34)	
V. old	0	3 (0.46))	
Sex			
Male	98 (36.70)	169 (63.29)	Chi-square=74.31, df=1,P<0.001
Female	32 (8.57)	341 (91.42)	[Highly significant]
Financial status			
Dependent	86 (15.80)	458 (84.19)	Chi-square=45.44, df=1,P<0.001
Independent	44 (45.83)	52 (54.16)	[Highly significant]
Leisure time activity			
Nothing	7 (4.37)	153 (95.62)	Chi-square=40.51, df=2,P<0.001 [Highly significant]
House hold activity	74 (22.35)	257 (77.64)	
Others	49 (32.88)	100 (67.11)	
Type of family			
Nuclear	27 (26.47)	75 (73.52)	Chi-square=2.84, df=1,P>0.05
Joint	103 (19.14)	435 (80.85)	
Socio-economic status (SES)			
Upper	35 (34.31)	37 (36.27)	Chi-square=109.91, df=2,P<0.001 [Highly significant]
Middle	90 (30.10)	209 (69.89)	
Lower	5 (1.85)	264 (98.14)	
Marital status			
Married	73 (28.07)	187 (71.92)	Chi-square=16.33, df=2,P<0.01 [Significant]
Widowed	55 (14.94)	313 (85.05)	
Separated	2 (16.66)	10 (83.33)	

DISCUSSION

Present study has predominant female (58.28%) and young old age group (81.71%). A significant proportion were widowed (57.5%) followed by married (40.62%). In another study similar trend was observed 79% were female and 21 were male. It shows the fact that female have relatively high life expectancy than male contrary to present study Higher numbers of residents (47%) were in range of 80-90 years.

Regarding marital status of residents, 54% were widow, only 9% were unmarried.³ Out of total study population 20.31% had excellent whereas 79.68% showed average mental health status, none had worst (Table 2). In another study 20.0% and 13% of adults aged 55 and over suffer from a mental Disorder.^{4,5} Study observed that out of total study population 52.03% had anxiety whereas 27.65% had depression and 20.31% were normal who have excellent mental health status (Table 3). In another study, it is estimated that 20% of people age 55 years or older

experience some type of mental health concern. The most common conditions include anxiety, severe cognitive impairment, and mood disorders (such as depression or bipolar disorder).⁶ In another study Schizophrenia has an estimated point prevalence of 0.4% and a lifetime risk of 1% i.e. one in a hundred people will suffer from schizophrenia during their lifetime.⁷ depression accounts for most of the variance (36.7%).⁸

Studies of depression in nursing homes (National Institutes of Health, 1991; Par melee, Katz, & Lawton, 1992) have found rates of m ajar depression as high as 25%, and 20% for minor depression. While the prevalence of mental health problems such as depression and cognitive impairment were 7.6% and 22.4%, respectively. 10

In another study mental disorders made by Geriatric Mental State (GMS) instrument included dementia (56.2%), depression (34.3%), mania (4.8%), anxiety (1.9%), and schizophrenia (2.8%). Present Study reveals

66.87% of total population had average mental health status whereas only 14.84% shows excellent mental health status and belong to young old age group. Simillar situation was observed in another study where prevalence of depression is expected to double within the older adult population as Baby Boomers age, making it meaningful to study. 11

Unlike present study another author have shown, for both sexes there was a reduction in the prevalence of high and very high psychological distress for people aged over 55 (30% and 18% of females and males respectively) (ABS 2013). Male (36.70% excellent) had better mental health than female(8.57% excellent). Similar trend was observed in another study where, women reported higher prevalence of mental health issues such as anxiety (p 0.02) and insomnia (p 0.02) compared with men. 13

About 45.83% of independent people show excellent mental health whereas only 15.80% of dependent showed Excellency. Simillar study was done by another author suggested that Among the health problems studied, depression was found to be significantly associated with unemployment (p<0.05). Working beyond traditional retirement ages may be beneficial for mental health in some populations. Those who were performing household activity had better mental health (22.35% had excellent) than those who were doing nothing (4.37% excellent) in their leisure time activity.

Similar finding was observed by another author shows Statistically signify cant inverse associations were found for total physical activity and leisure physical activity versus dementia and depression (p<0.001). ¹⁵

Inverse relation was observed with family status, those who were living in nuclear family (26.47%) shows excellent whereas (19.14%) in joint family shows excellent status. In respect to socio-economic status people belong to Upper class (34.31%) shows Excellency and only (1.58%) lower class had excellent status. Married person had better mental status than widowed and separated (28.07%), (14.94%) and (16.66%) respectively had excellent mental health (Table 4).

Although socioeconomic measures of disadvantage such as unemployment, being unmarried, low income and low education have been shown in many studies to be positively related to the prevalence of psychiatric disorders.⁵

CONCLUSION

Females lives longer than male leads to feminization of ageing. It is important to improve the social capital and involve communities and families in supporting the older adults.

ACKNOWLEDGEMENTS

Authors don't have words to express his feelings and thanks to all Mitanin, Anganwadi worker and interns who helped me to carry out data collection in study area very smoothly and all staff and coauthors who helped to complete the study. Authors would also like to sincerely thanks to pillar of study the all elderly person and their relatives who co-operate me very well during data collection.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

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Cite this article as: Alam MN, Singh SP, Gupta VS, Bhawnani D, Soni GP. A study on mental health status and its determinants in elderly people of Raipur city, Chhattisgarh, India. Int J Community Med Public Health 2016;3:2982-6.