



OPTIMISM AND SOCIAL DYNAMISM: A TOOL TO CURB GERIATRIC DEPRESSION

Community Medicine

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ABSTRACT

Depression at any age needs attention. Geriatric population being most susceptible, are more prone to many morbidities, physically and mentally. Geriatric depression is one such morbidity which needs prompt attention. However, many factors like optimism and social dynamism can curb depression. **Aims:** To study the prevalence of geriatric depression and to assess the effect of various factors on geriatric depression. **METHODOLOGY:** A community based cross-sectional study conducted at UHTC, Suraj Kund, Meerut, from June 2019 to September 2020. A total of 220 elderly aged 60 years and above were included and selected by Simple Random Sampling technique, by taking prevalence of morbidity as 87.6%. Elderly were interviewed using predesigned and pretested questionnaire. Data was collected, compiled and tabulated using Epi Info software, version 7.2.3.1. **RESULTS:** GDS-15 score, assessed for depression showed that 46.36% of the elderly was indicative of depression ($GDS \geq 10$). Out of 79 elderly who were happy, maximum had no depression (53.16%), whereas 74.23% of the sad elderly were found to be depressed with a GDS of more than 10. 38.16% of the elderly who had others company all the time had no depression ($GDS=0-5$), while 67.65% of the elderly who don't have others' company were severely depressed ($GDS \geq 10$). Almost half of the elderly (51.16%) of those who do not attend any social gatherings were indicative of depression ($GDS \geq 10$). 60% of the study participants who does not do any work in their leisure time (or lie idle) and who had low standard of living were most depressed (60%). **CONCLUSION:** The present study showed that geriatric depression was found to be least in those who were socially active, or had happy attitude towards life, or had company at home, or were busy in doing some work in their leisure time and not lying idle, and these associations were found to be statistically significant ($p\text{-value} < 0.05$).

KEYWORDS

Depression, Geriatric, Optimism, Social Dynamism, Simple Random Sampling.

INTRODUCTION

The ageing population is more susceptible to number of medical, psychological and sociological problem. With emerging changes in our social and cultural values, the aged who are economically unproductive are thus neglected. (1) They are superficially respected, cared for and heard. Due to this, the elderly experience loneliness and this has detrimental influence on their mental health. (2) Due to the loss of earning power and social recognition, they may feel worthless, which is harmful. (3) Age-associated neurobiological changes and stressful events lead to late life depression which is an important public health problem and the commonest neuropsychiatric disorder, associated with increased risk of morbidity, suicide, reduced physical, cognitive and social functioning, and greater self-neglect, all of which are in turn associated with elevated mortality. (4) Depression in older adults differ in both subtle and obvious ways from depression in the younger people in terms of presentation, etiology, risk and protective factors and potential outcomes.

So, this study was done with the objectives to study the prevalence of Geriatric depression, to assess the effect of Optimism and Social Dynamics of the elderly on Geriatric Depression and to study the association of Standard of Living Index with the Geriatric depression.

MATERIAL AND METHODS

This is a Community based Cross-Sectional study conducted at Urban Health and training Centre, Suraj Kund, Meerut, which is the Urban practice area of Department of Community Medicine, L.L.R.M. Medical College, Meerut. The study was conducted in 10 localities of Suraj Kund area, which are registered at the urban health and training centre from June 2019 to September 2020. Elderly aged 60 years and above residing in the study area were included as study population.

Sample size was calculated taking the prevalence of morbidity in elderly population as 87.6% (5) with 5% relative precision at 95% confidence interval, to be 220 by using the formula: $n = (1.96)^2 p/q/d^2$

METHODOLOGY FOR DATA COLLECTION:

This area comprised of population of approximately 11,101 inhabiting in 1962 families registered in Urban Health Training Centre, Suraj Kund. The number of persons 60 and above are about 1142 (10.28% of the population) as per UHTC record, residing in the 10 localities. For the purpose of studying the sample of 220, from each locality, 22 registered elderly were selected by Simple Random Sampling technique using Random number tables. If that elderly according to the random number table was not present, or did not give verbal consent or sick, then elderly who was next in the random selection was taken till the entire sample size was covered. A detailed information about the prevalence of depression and other associated factors, of geriatric population was collected with the help of predesigned and pretested oral questionnaire.

Inclusion and Exclusion criteria: Elderly aged 60 years and above and all those who gave verbal consent were included and all those who were seriously ill or was not able to follow the commands/ interview on their own were excluded from the study.

Statistical analysis: Data was analysed using Epi Info software, version 7.2.3.1. Pearson's Chi Square test was applied to find out significant association between the two characteristics which are in the form of frequency. $P < 0.05$ was considered statistically significant, whereas $p < 0.01$ was considered highly significant.

Ethical clearance: The study was ethically approved by the ethical committee of the institute. The protocol and importance of the study was explained to the participants before recruitment into the study, followed by their informed verbal consent.

RESULTS:

Table: 1 Prevalence of Geriatric Depression

GDS-15 Score	Total	
	No.	%

No depression (0-5)	64	29.09
Suggestive (6-9)	54	24.55
Indicative (10-15)	102	46.36
TOTAL	220	100

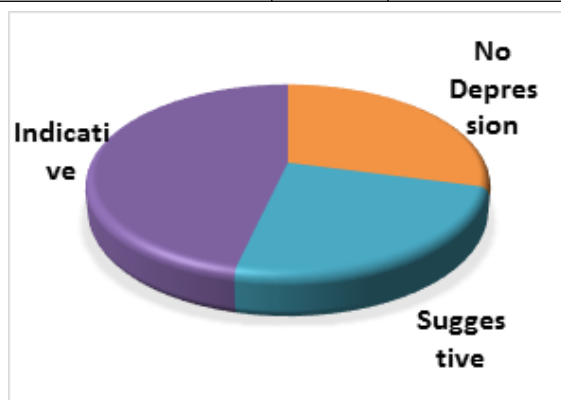


Figure-1-Prevalence of Geriatric Depression

GDS-15 score was assessed for depression in the study participants which showed that 46.36% of the elderly was indicative of depression ($GDS \geq 10$), followed by 24.55% elderly who were suggestive of depression ($GDS=6-9$). 29.09% of the elderly had no depression (GDS of 0-5) as shown in table-1.

Out of those elderly who were happy (79), maximum had no depression (53.16%), whereas 74.23% of the sad elderly were found to be depressed with a GDS of more than 10, followed by those whose attitude was indifferent towards life (38.64%), as shown in table-2 and this association was found to be highly significant with a p-value of <0.001 .

Table-2 also shows that 38.16% of the elderly who had others company all the time had no depression ($GDS=0-5$), whereas 67.65% of the elderly who don't have others' company (or lonely) were severely depressed ($GDS \geq 10$). The availability of others company at home is significantly associated with depression (p -value <0.001).

As shown in Table-2, almost half of the elderly (51.16%) of those who do not attend any social gatherings were indicative of depression ($GDS \geq 10$) whereas only 43.28% of those who attend such gatherings were found to be depressed ($GDS \geq 10$), and this association was statistically significant with a p-value of <0.05 .

60% of the study participants who does not do any work in their leisure time (or lie idle) were indicative of depression ($GDS \geq 10$), whereas 40.48% of the elderly who were engaged in religious activities were free from depression ($GDS=0-5$) and this association was found to be statistically significant (p -value <0.05).

As shown in table-3, those elderly who had low standard of living were most depressed (60%), followed by those who had medium standard (54%), and least depressed (42.58%) were those who belongs to high status. However, this association was found to be insignificant (p -value >0.05).

DISCUSSION:

As we know, depression is the commonest neuropsychiatric disorder and poses a substantial public health problem contributing significantly to the global burden of the disease. Its incidence and prevalence are apparently more among the elderly.

In the present study, out of 220 elderly, 46.36% were indicative of depression ($GDS \geq 10$), followed by 24.55% elderly who were suggestive of depression ($GDS=6-9$) while 29.09% of the elderly had no depression (GDS of 0-5), which is higher than a study done in an urban area of Karnataka (6) where depression (score >5) was found in only 11.2% of the elderly by use of GDS-15 scale, 29.6% of the elderly were depressed in the Urban Field Practice Area of Community Medicine Department, RIMS, Imphal (7).

In the present study, when elderly was asked about their attitude towards life, most of the elderly (50.45%) were sad followed by

35.91% elderly who were happy in comparison to a study in urban slums of Davangere City, Karnataka (8) in which 43% had an unfavourable attitude while 57% had a favourable attitude (8), 48.33% felt unhappy in life in an urban slum of Udaipur, Rajasthan (9). The prevalence of depression ($GDS \geq 10$) was significantly higher (74.23%) in those who had a sad attitude towards life which reveals a strong association of being happy or indifferent to the life have a positive impact on prevention of depression and various diseases.

In this study, about 70% elderly mostly have someone from the family to accompany them at home while 30% were lonely most of the time, in comparison to a study done in urban slums of Davangere City, Karnataka (8), 61% elderly always had availability of company at home (64% females and 52% males), compared to 18% elderly who felt lonely at home (29% males and 14% females) (8).

In this study, more than half of the elderly (60.91%) attend social functions while 39.09% do not attend, in comparison to, 60% of the elderly who were active outside home and 40% were not, in urban slums of Davangere City, Karnataka (8), 97.5% does not attend social gatherings while only 2.5% of the population were busy in social activities like charitable work, religious activities, etc in an urban area of Kottayam district (10). The people who are not outgoing or social are more prone to the depression probably because "Lack of Sharing is lack of Caring".

Study population was assessed for their leisure time activities, and it was found that nearly 30% of the elderly used to lie idle at home, 19.09% were engaged in religious activities, 15.91% used to watch television, only 8.64% read books in their leisure time, whereas 14.09% used to roam outside home, in comparison to 75% elderly who watch tv and listen to music in their leisure time, 62.5% sleep, 47.5% elderly read in their leisure time, 5.8% chat with their friends, 5.0% play with their grandchildren, and 0.8% involved in kitchen gardening and tuition each in an urban area of Kottayam district (10).

In this study, maximum elderly (70.45%) had high standard of living, followed by medium (22.73%) and low standard of living in 6.82% elderly, which is more than that reported in a medical college in Bangalore (11) having 50% to high Standard of living index, 43% to medium and least (7%) to low Standard of living index, and less than that reported in Bengaluru city (12) with 83% elderly who belong to high standard and 17% to medium SLI.

CONCLUSIONS AND RECOMMENDATIONS:

The present study shows high prevalence of psychological depression with a GDS of ≥ 10 (46.36%) among geriatric age group of study population. Depression is more common among those who were sad or lonely at home, who used to avoid social functions or just lie idly at home. However, it is not significantly associated with the standard of living index of the elderly. Depression has to be managed and treated as early as possible as it co-exist with other serious medical problems.

Geriatric population being the most vulnerable one should be screened for other psychiatric disorders. It strongly recommends that every individual should be catered with psychological counselling and spiritual approach towards their life. Recreational homes can be developed and promoted for the elderly where they can involve in some recreational activities, like, satsang, old age yoga group, early morning walks, exercise classes, cooking and baking classes, gardening clubs, kitty parties, books club, outdoor and indoor games etc. in the daytime. Treatment modalities should include talk therapy, cognitive behavioral therapy and medications helping in treating depression. This study suggest that adequate measures should be taken to detect this psychiatric disorder in elderly patients by specialized geropsychiatric services. Already existing mental health programmes should be strengthened and should emphasize more on depressive disorders in aged. Health problems of the elderly should be tackled with psychosocial intervention as depression frequently manifests with somatic symptoms. At last depression in elderly must be alleviated because "To care for those who once cared for us is one of the highest honors".

Table: 2: Distribution and Association of Optimism and Social Dynamics of the elderly with Geriatric Depression

Factors	Depression			Total		p-value χ^2 , df
	No depression (0-5) No. (%)	Suggestive (6-9) No. (%)	Indicative (10-15) No. (%)	No.	%	

Attitude towards life						
Happy	42(53.16)	24(30.38)	13(16.46)	79	35.91	$X^2 = 75.28$ $df = 4$ $p < 0.001$
Indifferent	19(43.18)	8(18.18)	17(38.64)	44	20.00	
Sad	3(3.09)	22(22.68)	72(74.23)	97	44.09	
Total	64(29.09)	54(24.55)	102(46.36)	220	100	
Company at Home						
Available	58(38.16)	38(25.00)	56(36.84)	152	69.09	$X^2 = 25.50$ $df = 4$ $p < 0.001$
Not Available	6(8.82)	16(23.53)	46(67.65)	68	30.91	
Total	64(29.09)	54(24.55)	102(46.36)	220	100	
Attending Social Gatherings						
Attend social functions	47(35.07)	29(21.64)	58(43.28)	134	60.91	$X^2 = 6.09$ $df = 2$ $p < 0.05$
Do not attend	17(19.77)	25(29.07)	44(51.16)	86	39.09	
Total	64(29.09)	54(24.55)	102(46.36)	220	100	
Leisure Time activities						
1. Outside home	10(32.26)	8(25.80)	13(41.94)	31	14.09	$X^2 = 20.14$ $df = 10$ $p < 0.05$
2.At home						
Watch television	9(25.71)	13(37.14)	13(37.14)	35	15.91	
Read books	4(21.05)	6(39.58)	9(47.37)	19	8.64	
Engaged in religious activities	17(40.48)	4(9.52)	21(50.00)	42	19.09	
Lying idle	13(20.00)	13(20.00)	39(60.00)	65	29.55	
Others	11(39.29)	10(35.71)	7(25.00)	28	12.73	
Total	64(29.09)	54(24.55)	102(46.36)	220	100	

Table:3 Distribution and Association of Standard of Living Index of Elderly with Geriatric Depression

Standard of Living Index	Depression			Total		p-value χ^2 , df
	No depression (0-5) No. (%)	Suggestive (6-9) No. (%)	Indicative (10-15) No. (%)	No.	%	
Low SLI (0-14)	4(26.67)	2(13.33)	9 (60.00)	15	6.82	$X^2 = 3.58$ $df = 4$ $p > 0.05$
Medium SLI (15-24)	13(26.00)	10(20.00)	27 (54.00)	50	22.73	
High SLI (25-67)	47(30.32)	42(27.10)	66 (42.58)	155	70.45	
Total	64(29.09)	54(24.55)	102 (46.36)	220	100	

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