

Prevalence of Depression And Its Associated Factor With Coping Strategies Among Medically Ill Elderly Patients In Eastern Rajasthan Jaipur

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Abstract:

Background: Depression is recognized as a serious public health concern in developing countries. It is the most common psychiatric disorder among the elderly person. There is a relationship between coping and depression. Individuals in poorer mental health and under greater stress tended to employ less adaptive coping strategies and that these coping efforts affected the level of mental health.

Objective: To find out the prevalence of depression with coping strategies among medically ill elderly patients.

Materials and Methods: A cross sectional study was conducted among elderly patients above 60 years of age. A total of 100 medically ill elderly patients attending the Psychiatric Outpatient department [OPD] were evaluated by Geriatric Depression Scale and Coping inventory for stressful situations

Results: The prevalence of depression was 74% among medically ill elderly patients. Out of that 70.27% patients had mild depression and 29.72% had severe depression. Depressed patients used more of emotion oriented coping and less of task oriented and avoidance based coping mechanisms as compared to non depressed patients who used more of task oriented and avoidance based coping than emotion oriented coping mechanisms. Severity of depression positively correlated with emotion oriented coping mechanisms and it was negatively correlated with task and avoidance oriented coping mechanisms.

Conclusion: Prevalence of depression was 74% among the medically ill elderly patients. Patients with depression more often used emotion based coping, less often used task and avoidance coping mechanisms

Keywords: Coping, Depression, Elder patient.

I. Introduction

Population ageing is a global phenomenon. The elderly population is now becoming of considerable concern around the world. Globally there are 901 million people aged 60 or over in 2015 which is projected to rise to 1.4 billion in 2030.¹ According to Population Census 2011 there are nearly 104 million elderly persons aged 60 years or above in India.² The population of people aged 60 years or above is likely to increase to 18.4% of the total population by the year 2025.³ Improved healthcare promises longevity but social and economic conditions such as poverty, break up of joint families and poor services for the elderly pose a psychiatric threat to them.⁴ It has been documented that elderly are more prone to psychological problems and depression is the most common geriatric psychiatric disorders.

Depression is recognized as a serious public health concern in developing countries. It is the most common psychiatric disorder among the elderly which can manifest as major depression or as minor depression characterized by a collection of mild depressive symptoms.⁵ Prevalence of depression in elderly in India varied from 6% to 50%.^{6,7} The depressive symptoms in the elderly are likely to be dismissed as normal by the older persons, their family members and even by health care providers.

The concept of coping was first developed by psychologists in the 1960s and 1970s and was applied to the struggle of overcoming and managing the stresses of living and adapting.⁸ There are two forms of coping that is "emotion- focused coping" and "problem focused coping." Emotion focused coping is employed when someone fails to see a solution to a stressful situation and works to regulate the emotions that are generated by that dilemma. An individual chooses problem-focused coping when the possibility of a solution to that problematic stressful situation is considered feasible.⁹

There is a relationship between coping and mental health. The individuals in poorer mental health and under greater stress tended to employ less adaptive coping strategies and that these coping efforts affected the level of mental health.¹⁰ Thus poorer coping with medical illness predisposes an elderly individual to develop depression. The presence of stress and the use and availability of effective coping strategies by an individual

have a significant impact on psychological functioning, and help in prevention of depression. Hence the study was conducted to assess prevalence of depression with coping strategies among elderly patients.

II. Material And Methods

A cross sectional study was conducted among elderly patients above 60 years from July 2015 to August 2016 in Department of Psychiatry, Mahatma Gandhi Medical College and Hospital, Jaipur. The study protocol was approved by the Ethics Committee of Mahatma Gandhi Hospital.

Study Population

A total of 100 medically ill elderly patients attending the Psychiatric Outpatient department [OPD] and geriatric OPD of a tertiary care hospital fulfilling the inclusion and exclusion criteria were selected for the study after taking written informed consent from them.

Procedure: Socio-demographic profile and semi structured questionnaire was obtained from the elderly patients. The following scales were administered to patients:

Geriatric Depression Scale (GDS): The geriatric depression scale developed by Yesavage et al ¹¹; is a brief, 30 item questionnaire in which participants are asked to respond by answering yes or no in reference to how they felt over the past week. One point is assigned to each answer and the cumulative score is rated on a scoring grid. The grid sets a range of 0-9 as “normal”, 10-19 as “mildly depressed” and 20-30 as “severely depressed”.

Coping inventory for stressful situations (CISS-21)

This is formed by Norman Endler & James D.A. Parker. The CISS-21 ¹² is assumed to assess coping by three basic coping strategies: emotion-oriented, task-oriented and avoidance coping. Each scale of the CISS-21 consists of 7 items. Respondents are asked to rate each item on a five point scale ranging from 1 “not at all” to 5 “very much”. It is used for determining the preferred coping style of an individual.

III. Statistical Analysis

Statistical analysis was performed with the SPSS, Trial version 23 for Windows statistical software package (SPSS inc., Chicago, il, USA) and Primer. The Categorical data were presented as numbers (percent) and were compared among groups using Chi square test. Groups were compared for quantitative data were presented as mean and standard deviation and were compared using by students t-test Relationships between variables in the patient group was assessed by using Pearson’s correlation coefficient.

IV. Results

The demographic details of the sample studied are shown in Table 1

There were 100 medically ill elderly patients, out of which 74 were depressed i.e 74% were found to be depressed as against 26% patients being non-depressed. So overall there was a high prevalence of depression (74%) in the medically ill elderly patients. Of the 74 depressed patients, 52 i.e 70.27% patients had mild depression and 22 patients i.e 29.72% had severe depression.

Socio-demographic Details	Non Depressed N =26	Depressed N =74
Age Group		
60-65 years	19 (32.20%)	40 (67.80%)
66-70 years	04 (11.54%)	22 (84.62%)
71-75 years	01 (20.00%)	09 (90.00%)
> 75 years	02 (40.00%)	03 (60.00%)
Gender		
Male	12 (46.15%)	31 (41.89%)
Female	14 (53.85%)	43 (58.11%)
Marital Status		
Married	20 (32.26%)	42 (67.74%)
Widowed	06 (15.79%)	32 (84.21%)
Occupation		
Unemployed	22 (84.62%)	59 (79.73%)
Working	04 (15.38%)	15 (20.27%)

Table 1 Socio-demographic profile of depressed and non depressed patients

Table 2 Coping strategies of depressed and non depressed patients

		N= 100	Mean Rank	Sum of Ranks
CISS total score	Non depressed	26	86.02	2236.50
	Depressed	74	38.02	2813.50
	Total	100		
CISS task score	Non depressed	26	87.50	2275.00
	Depressed	74	37.50	2775.00
	Total	100		
CISS emotion score	Non depressed	26	13.50	351.00
	Depressed	74	63.50	4699.00
	Total	100		
CISS avoidance score	Non depressed	26	87.46	2274.00
	Depressed	74	37.51	2776.00
	Total	100		

The CISS assesses coping by three basic coping strategies: Task-oriented, emotion-oriented and avoidance coping. The mean scores on the various subscales and the total score of CISS are shown in Table 2. In CISS total score, depressed patients had lesser mean rank (38.02) as compared to non depressed patients (86.02) So depressed patients had poor coping towards stressful situations as compared to non depressed patients and this difference was statistically significant with $p < 0.05$ Also in CISS task score, depressed patients had lesser mean rank (37.50) as compared to non depressed patients (87.50) So depressed patients had less of task oriented coping towards stressful situations as compared to non depressed patients and this difference was statistically significant with $p < 0.05$ In CISS emotion score depressed patients had higher mean rank (63.50) as compared to non depressed patients (13.50) So depressed patients had more of emotion based coping towards stressful situations as compared to non depressed patients and this difference was statistically significant with $p < 0.05$ Also in CISS Avoidance score, depressed patients had lesser mean rank (37.51) as compared to non depressed patients (87.46) So depressed patients had less of avoidance based coping towards stressful situations as compared to non depressed patients and this difference was statistically significant with $p < 0.05$. Thus depressed patients had poor coping towards stressful situations as compared to non depressed patients. Depressed patients used more of emotion oriented coping and less of task oriented and avoidance based coping mechanisms as compared to non depressed patients who used more of task oriented and avoidance based coping than emotion oriented coping mechanisms.

Table 3 Correlation of Geriatric Depression with Coping Strategies

Geriatric Depression Score		CISS Task	CISS Emotion	CISS Avoidance
	Correlation Coefficient	- 0.854	0.875	-0.763
	Sig. (2-tailed)	.000	.000	.000
	N	100	100	100

V. Discussion

Elderly people face a lot of stress. Majority of elderly people suffer from one or more medical illness. Medical illness results in functional disability in these people. They also cause an additional economic burden on an elderly individual. The disability and the financial burden may make a person feel to be more dependent on others. This may lead to depression in elderly individual's life.

Every individual tries to cope with stressful situations in life. Those having healthy coping remain healthy, but those having faulty coping tend to develop psychiatric complications, depression being one of them.

In this study 74 patients among 100 medically ill elderly patients were depressed. This is a very high prevalence. It may be due to this study was conducted in a tertiary care hospital and the study population was selected from psychiatry and geriatric OPD of the hospital wherein chances of patient being depressed was high as compared to community sample and secondly depression was assessed with the help of Geriatric depression scale (GDS), in which mild depressive symptoms are also identified. Thus, it may have included patients having even mild depression. Our results are consistent with study conducted by Deepika Singh et al¹³ who reported 72% of depression among the medically ill elderly patients. Study conducted by Sharad V Dighe et al¹⁴ also reported 62% of depression in medically ill elderly patients. Some other studies have revealed that the

prevalence rates for depression in community samples of elderly in India vary from 6% to 50%.^{6, 7} The prevalence of depression in Caucasian elderly populations in the West vary from 1% to 42%. In present study 70.27% of patients had mild depression and 29.72% patients had severe depression. Mild depression was more prevalent than severe depression. Our finding is consistent with the findings of most other studies.^{16, 17} In present study 95 patients were in the age group of 60-75 years and 05 patients who were more than 75 years. Similarly Barua A et al¹⁸ found 52.6% of patients belonged to age group of 60-69 years. However various authors^{19, 20, 21} reported a high prevalence of depression among the individual aged above 74 years.

In this study females outnumbered male. As per table 5, 43 i.e (58.11) % were females as compared to male 31 i.e (41.89%) of depressed patients. It reveals that females are more vulnerable to depression. It may be due to additional work and home responsibilities, caring for grandchildren, change in social roles, abuse, poverty may trigger a depressive episode. Our results are in accordance with Barua A et al¹⁸ and Jain R K et al²² also reported 64% and 45.9% were depressed females respectively. However Gurvinder Pal Singh et al²³ reported male (55.25%) outnumbered a female patient (44.75%) that is contrary to our studies.

Out of total 100 patients 38 were widowed and 62 were married in our study. Among that widowed patients, 32 (84.21%) were depressed while out of total 62 married patients 42 (67.74%) were depressed which is statistically significant. (Table 7) Similar finding was seen in a study done by Deepika Singh et al¹³ wherein 55.6% were married and 44.4% were widowed. However widowed patients are expected to be more vulnerable for depression. Loneliness, poor social support and financial dependence all act as risk factors for depression. We also found that out of 74 depressed patients, 59 (79.73%) were unemployed and only 15(20.27%) were working and depressed. (Table 9) A similar study was done by various authors^{24, 25, 26} who also reported that a high prevalence of depression among the unemployed individuals. Elderly dependent on children, pension, charity or other family members for financial support were at higher risk for depression than those who were self dependent. Lower income and financial dependency on others for fulfillment of daily needs as well as health care expenses of a person in late life produces depressive symptoms.

Coping Strategies and Depression in Elderly

Coping or attempting to restore order into one's life is a psychological process evoked by stress in dealing with the changes in the environment. It serves as an internal source of emotional strength and mediates an individual's reaction to perceived stress; internal or external. Task oriented coping involves addressing the problem causing distress. Examples are making a plan of action or concentrating on the next step and attempts to alter the situation. Emotion oriented coping has negative emotions towards self because of which the person cannot cope up with situation effectively. This form of coping includes emotional responses, self preoccupation, fantasizing, self blame and a feeling of guilt. Avoidance coping refers to the avoidance of stress by distracting oneself with a substitute task or by seeking social diversion, such as being in the company of other people. This prevents a direct encounter with the problem at hand and the emotional upheaval secondary to the problem. We looked for coping mechanisms used by medically ill elderly patients who were depressed. As seen in table 2, coping mechanism used by depressed individuals were different than non depressed individuals. Depressed individuals used more of emotion oriented coping and non depressed patients used task oriented and avoidance coping mechanisms. On administration of Mann Whitney test the difference between depressed and non depressed patients was statistically significant. Emotion oriented coping used by depressed patients has made them more vulnerable to develop depression. Elderly patients suffering from medical illness do not seem to cope up with them and to other stressful life events leading to depression.

Severity of symptoms of depression was also associated with the kind of coping used. More the emotion oriented coping used, more was the severity of depression. More of task oriented coping and avoidance coping led to less severe depression. A similar study were done by C.S. Hurt²⁷ and Lorna Myers²⁸ who also reported emotion-focused coping is associated with greater depression and anxiety while task oriented coping is associated with better psychological well-being.

In this study we also observed that as the level of depression increased the task and avoidance coping decreased, while emotion based coping increased. So severity of depression was negatively correlated with task and avoidance coping mechanisms and positively correlated with emotion based coping.

Conclusion: Prevalence of depression was 74% among the medically ill elderly patients wherein 70.21% patients were mildly depressed and 29.79% patients were severely depressed. Non depressed patients used more of task oriented and avoidance based coping than emotion oriented coping, while depressed patients used more of emotion oriented coping and less of task and avoidance coping mechanisms.

References

- [1]. United Nations Department of International Economic and Social Affairs, Population Division (2016) World Population Ageing 2016, United Nations NY 2016.
- [2]. Ministry of Statistics and Programme Implementation. Elderly in India 2016 Government of India, New Delhi.
- [3]. Sharma S. Ageing: An Indian experience. Souvenir of ANCIPS 94. Madras: 1994. Pp. 101-5.

- [4]. Venkobaroo A. Geropsychiatry in Indian culture. *Can J Psychiatry*. 1979; 25:431-6.
- [5]. Satcher DS. Executive summary: A report of the surgeon general on mental health. *Public Health Rep* 2000;115:89-101.
- [6]. Venkoba Rao A. Psychiatry of old age in India. *Int Rev Psychiatry*1993;5:165-70.
- [7]. Nandi PS, Banerjee G, Mukherjee SP, Nandi S, Nandi DN. A study of psychiatric morbidity of the elderly population in a rural community in West Bengal. *Indian J Psychiatry* 1997;39:122-129.
- [8]. Lazarus RS, Lazarus BN: Coping with Aging. New York, Oxford University Press, 2006, pp 53–79.
- [9]. Lazarus RS, Folkman S. Stress, Appraisal, and Coping. New York: Springer; 1984.
- [10]. Aldwin CM, Revenson TA. Does coping help? A re-examination of the relation between coping and mental health. *J Pers Soc Psychol* 1984;53:337-48.
- [11]. Yesavage JA, Brink TL, Rose TL et al. Development and validation of a geriatric depression screening scale: a preliminary report. *J psychiatric Res*. 1982-83;17(1):37-49
- [12]. Endler NS, Parker JDA. Coping inventory for stressful situations (CISS): Manual. Second Ed., Toronto: Multi Health Systems, 1999.
- [13]. Singh D, Kedare j. A study of depression in medically ill elderly patients with respect to coping strategies and spirituality as a way of coping. *J Geriatr Ment Health* 2014;1:83-9.
- [14]. Dighe SV, Eknath M Gawade. Depression among rural elderly population. *Singhad e Journal of Nursing* 2012;2(2):18-22.
- [15]. Djerns JK. Prevalence and predictors of depression in population of elderly: A review. *Acta Psychiatr Scand*;113:372-87.
- [16]. Papadopoulos FC, Petridou E, Argyropoulou S et al. Prevalence and correlates of depression in late life: A population based study from a rural Greek town. *Int J Geriatr Psychiatry* 2005;20(4):3350-57.
- [17]. Chen CS, Chong MY, Tsang HY. Clinically significant non-major depression in a community-dwelling elderly population: Epidemiological findings. *Int J Geriatr Psychiatry* 2007;22(6):557-562.
- [18]. Barua A, Kar N. Screening for depression in elderly Indian population. *Indian J Psychiatry* 2010;52:150-3.
- [19]. Liu CY, Wang SJ, Teng EL, Fuh JL, Lin CC, Lin KN et al. Depressive disorders among older residents in a Chinese rural community. *Psychol Med*.1997;27:943-9.
- [20]. Chong MY, Tsang HY, Chen CS, Tang TC, Chen CC, Yeh TL et al. Community study of depression in old age in Taiwan. *Br J Psychiatry* 2001;178:29-35.
- [21]. Kay DW, Henderson AS, Scott R, Wilson J, Rickwood D, Grayson DA. Dementia and depression among the elderly living in the Hobart Community: The effect of the diagnostic criteria on the prevalence rates. *Psychol Med*.1985;15:771-88
- [22]. Jain RK, Aras RY. Depression in geriatric population in urban slums of Mumbai. *Indian J Public Health* 2007;51(2):112-3.
- [23]. Singh GP, Chavan BS, Arun P, Lobraj, Sidana A. Geriatric outpatients with psychiatric illnesses in a teaching hospital setting: A retrospective study. *Indian J Psychiatry* 2004;46:140-143.
- [24]. Ramachandran V, Menon Sarada M, Arunagiri S. Socio-cultural factors in late onset depression. *Indian J Psychiatry* 1982;24: 268-73.
- [25]. Broadhead W E, Blazer Dan G, George Linda K, Tse CT. Depression, disability days and days lost from work in a prospective epidemiologic survey. *J am med assoc* 1990;264:2524-8.
- [26]. Kenedy GJ, Kelman HR, Thomas C, Wisniewski W, Metz H, Bijur PE. Hierarchy of characteristics associated with depressive symptoms in an urban elderly sample. *Am J Psychiatry* 1989;146:220-5.
- [27]. Hurt.C.S, Thomas. B.A, Burn,.D.J, Hindle . J.V, Landau.S, Samuel M et al. coping in Parkinson's disease: an examination of the coping inventory for stressful situations. *Int j. geriatr. Psychiatry* 2011;26:1030-1037.
- [28]. Meyers L, Fleming M, Lancman M, Perine K. Stress coping strategies in patients with pycogenic non-epileptic seizures and how they relate to trauma symptoms, alexithymia, anger and mood. *Seizure* 2013;22:634-9