Original Article

Depression among Elderly - An Unaddressed Emerging Burden. A Community Based Cross Sectional Study

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Abstract

Background: Growing old is an intrinsic phenomenon. Communicable diseases are under control and non-communicable diseases are increasing. Depression is a common mental health disorder in elderly. Depression can cause great suffering and impaired functioning in daily life.

Aim: study are to find the prevalence and factors influencing depression among rural elderly study participants.

Methods: It is a Community based, Cross sectional analytical study design carried out for a period of 6 months among elderly persons aged 60 years and above residing in the rural field practice area of SDUMC, Kolar. Bed ridden participants, those with mental health issues were excluded. Data collected using pretested semi-structured questionnaire and Depression assessed by GDS-15
Chi-square applied to test association with p value significance defined lesser than 0.05.

Results: Out of 286 study participants, 111(38.8 %) belonged to Keeloholali, 154(53.8%) were female participants, 118(41.3%) were unemployed, 244(85.3%) were illiterates, 7.3% had diabetes, 11.5% had visual impairment, 121(42.3%) belonged to nuclear family and 195(68.2%) were married. 228(79.7%) of study participants had one or other type of depression.

Conclusion: Depression among elderly is increasing and many times it is unaddressed. To better the quality of life and increase the life expectancy among elderly, early diagnosis of mental illness plays a crucial role.

Key-words: Depression, elderly, risk factors

Introduction

Aging or growing old is an intrinsic phenomenon related with physical, biological and psychological transformation. People over 60 years and above are thriving very swiftly than any other age group and estimated that this age group can grow to almost two billion by 2050.[1] Declining trends of fertility rates with further declining mortality rates, better health care services accompanied by better quality of life have influenced the life expectancy leading to demographic transition and aging of the population. Epidemiologic transition theory stresses the importance on how it diversifies causes of mortality, from infectious causes, parasitic to chronic and degenerative diseases where mortality reduces relatively with life expectation increases for populations. Global Burden of Disease (GBD) report suggests depression is the third pre eminent cause for total Disability Adjusted Life year's (DALY) lost.[2] Depression is an affective illness characterized by depressive in mood, cognition and behaviour.[3] Depression being a common mental health disorder symptomizes with sadness, loss of interest or pleasure in day to day activities, feelings of guilt with low self-worth, disrupted sleep or disturbed appetite, feelings of tiredness and poor concentration for

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at least two weeks.[4,5]The GBD 2000 estimates both men and women experience at least one depressive episode in a 12-month period more so in women. However prevalence figures differ across populations and may be higher in some populations.[6] Depression can cause great suffering and impaired functioning in daily life because of the silent nature of disease and especially in elderly as they do not present with classical clinical symptoms. Added burden of Depression in elderly is, most of the times symptoms are untreated as they coincide with other problems faced by elderly, impaired cognitive functions, the misconception and stigma surrounding mental illness making people more reluctant to seek health care from the health system. Screening of this problem is often neglected by the health care providers especially at rural areas. With this background, study was started with objectives to determine the prevalence of depression among elderly and to assess the factors influencing depression among rural elderly study participants.

Material and Methods

The present study was a Community based, Cross sectional analytical study design carried out for period of 6 months from April to September 2019 involving the elderly persons 60 years and above residing in the rural field practice area of SDUMC, Kolar. The rural field practice area, Devarayasamudra covers 20 villages with a total population of 9846 of which 1174 people are above 60 years. From 20 villages, three villages were selected by simple random sampling method. Eligibility screening was done by visiting house to house in the selected areas for line listing of elderly. Persons aged 60 years and above and those residing in rural field practice area for at least one year will be included and Bed ridden patients and those with already diagnosed mental health issues were excluded. Pretested semi-structured questionnaire was used to collect information on socio-demographic details such as age, gender, marital status, religion, education status, type of occupation, income and the type of family. The depression assessed by using the Short Geriatric Depression Scale is a fifteen -item shortened version of the GDS-30.It has good accuracy as a screening tool for major depression in this community-based sample of low-educated oldest-old individuals.[7] With a prevalence of Depression of 24.4 from previous study, keeping an absolute precision of 5% and 95% confidence interval, the minimum sample size calculated using n-Master software was 283.[8] Written informed consent was obtained from the participants prior to the study. Collected data was coded and entered in Epi Data and analyzed using IBM SPSS version 22. Data represented as frequencies, proportions and chi-square test of significance was applied to test association between various factors and depression. p value <0.05 was considered as statistically significant.

Table 1: Distribution of study participants according to Sociodemographic profile

Sl.NO	Variables		Frequency	Percent
1	Location	Keeloholali	111	38.8
		V Guttahali	103	30
		Kempapura	72	25.2
2	Gender	Male	132	46.2
		Female	154	53.8
3	Occupation	Unemployed	118	41.3
		Unskilled Worker	35	12.3
		Semiskilled	39	13.3
		Skilled	17	5.9
		Shop Owner, Farmers	70	24.5
		Professional	7	2.4

4	Education	Illiterates	244	85.3
		Primary	16	5.3
		Middle	11	3.8
		high	7	2.4
		PUC	3	1.4
		Graduates	5	1.8
5	Chronic diseases	Arthritis	27	9.4
		Asthma	7	2.4
		Chronic back pain	17	5.9
		Diabetes	21	7.3
		Hypertension	5	1.7
		Visual Impairment	33	11.5
		Hearing Problem	8	2.8
		No Disease	156	54.5
		Diabetes and Hypertension	2	.7
		Divyangjan	9	3.1
		Cardiac Problem	1	.3
6	Type of family	Nuclear	121	42.3
		Joint	81	28.3
		Three generation	84	29.4
7	Marital Status	Married	195	68.2
		Unmarried	1	.4
		Divorced	34	11.9
		Widow	56	19.6
8	Age in years	60-65	195	68.2
		66-70	39	13.6
		71-75	27	9.4
		76-80	17	5.9
		More than 80	8	2.8
9	Family Members	Less than 5	127	44.5
		More than 5	159	55.5
10	Modified BG Prasad Classification 2019	I	40	14.0
		II	80	28.
		III	93	32.5
		IV	45	15.7
		V	28	9.8

Out of 286 study participants, 111(38.8 %) belonged to Keeloholali, 154(53.8%) were female participants, 118(41.3%) were unemployed, 244(85.3%) were illiterates, 7.3% had diabetes, 11.5% had visual impairment, 121(42.3%) belonged to nuclear family and 195 (68.2%) were married. Modified BG Prasad classification was used for stratifying elderly participants and it was noted 32.5% belonged to Class III and 15.7% belonged to Class IV

Table 2: Prevalence of depression among study participants

Scale	Categories	Frequency	Percent
GDS	Normal	58	20.3
	Mild Depression	199	69.6
	Moderate Depression	27	9.4
	Severe Depression	2	0.7

Out of 286 study participants, 199 (69.6%) had mild depression, 27(9.4%) had moderate depression and 2 (0.7%) had severe depression. 228(79.7%) of study participants had one or other type of depression.

Table 3: Association between various factors with Depression among elderly participants

		DEPRESSION			p value
		No	Yes	Total	
Locality	Keeloholali	101(91.0%)	10(9.0%)	111	0.68
	V Guttahali	90(87.4%)	13(12.6%)	103	
	Kempapura	63(87.5%)	9(12.5%)	72	
Gender	Male	121(91.7%)	11(8.3%)	132	0.15
	Female	133(86.4%)	21(13.6%)	154	
Occupation	Unemployed	101(85.6%)	17(14.4%)	118	0.68
	Unskilled Worker	33(94.3%)	2(5.7%)	35	
	Semiskilled	34(87.2%)	5(12.8%)	39	
	Skilled	16(94.1%)	1(5.9%)	17	
	Shop Owner, Farmers	63(90.0%)	710.0%	70	
	Professional	7(100.0%)	0(0.0%)	4	
Education	Illiterates	220(90.2%)	24(9.8%0	244	0.04
	Primary	14(87.5%)	2(12.5%)	16	
	Middle	8(72.7%)	3(27.3%)	11	
	High	4(57.1%)	3(42.9%)	7	
	Pre university	3(100.0%)	0	3	
	Graduates	5(100.0%)	0	5	
Type Of Family	Nuclear	104(86.0%)	17(14.0%)	121	0.336
	Joint	75(92.6%)	6(7.4%)	81	
	Three Generation	75(89.3%)	9(10.7%)	84	
Chronic Diseases	Normal	139(89.1%)	17(10.9%)	156	0.86
	Some Chronic Diseases	115(88.5%)	15(11.5%)	130	
Marital Status	Married	172(88.2%)	23(11.8%)	195	0.68
	Others	82(90.1%)	9(9.9%)	91	
Age In Years	60-65	177(90.8%)	18(9.2%)	195	0.39
	66-70	32(82.1%)	7(17.9%)	39	
	71-75	24(88.9%)	3(11.1%)	27	
	76-80	15(88.2%)	2(11.8%)	17	
	more than 80 years	6(75.0%)	2(25.0%)	8	
Family Members	Less than 5	108(85.0%)	19(15.0%)	127	0.07
	More than 5	146(91.8%)	13(8.2%)	159	
Modified BG Prasad Classification 2019	I	36(90.0%)	4(10.0%)	40	0.07
	II	69(86.3%)	11(13.8%)	80	
	III	83(89.2%)	10(10.8%)	93	
	IV	42(93.3%)	3(6.7%)	45	
	V	24(85.7%)	4(14.3%)	28	

Discussion

The present study was a cross sectional study carried for a period of 6 months on elderly participants aged 60 years and above using Geriatric Depression Scale - 15 in rural health training centre field practice area. Majority were female participants and illiterates. Out of 286, 118(41.3%) were unemployed, 42.3% belonged to nuclear family and 68.2% were married. 156 (54.5%) had no illness and rest of participants had one or other illness with 7.3% having diabetes, 11.5% having visual impairment.

Out of 286 study participants, 228 (79.7%) of study participants had one or other type of depression. The present study showed 79.7% of prevalence of depression among elderly study participants. The prevalence of geriatric depression ranges from 6% to 53% worldwide.[9-15] In a systematic community based studies for mental health surveys on geriatric depressive disorders in those aged 60 years and above in Indian population, pooled prevalence of depression among elderly was found to vary between 8.9 to 62.16 percent.[16] Various possible factors were assessed in the present study like age, gender, marital status, total family members, socioeconomic status, education and occupation however no association was found to be significant . Various risk factors have been found, which makes one likely to get depression when compared to others, they are female gender, economic disadvantages, social disadvantages such as education, exposure to violence, being separated, divorced or widowed, and chronic illnesses.[17,18]

Conclusion

Depression among elderly is increasing and many times it is unaddressed. To better the quality of life and increase the life expectancy among elderly, early diagnosis of mental illness plays a crucial role. Available of health care services must be sensitized with screening for depression. Financial dependency being an important predictor for quality of life and depression in elderly, social security system plays a necessary step to reduce the burden in the community.

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