# **Depression Among Elderly Patients / Mosul City**

Abdul-Rasoul Alyasiri\*, Ghada Khalid Adeeb\*\*, Najat Al-saffar \*\*\*

#### **ABSTRACT**

**Background**: Depression in elderly aged (60 year and above )is a widespread mental health problem. The current primary healthcare systeminadequately recognize and treat elderly patients with depression..

**Objectives:**To determine the prevalence of depression among elderly patientsin Mosul city, its correlation with some sociodemographic variables and to assess severity of depression in relation to past history of depression.

Type of the study: This is a cross-sectional study.

**Methods:** This study assess the prevalence of depression in a randomly selected sample 150 elderly patients aged 60 years and above (89 female & 61 male) who attended the geriatric clinic in Ibn Sina Teaching Hospital /Mosul City between the 1<sup>st</sup>/March /2014 to the 10<sup>th</sup>/ June 2014.A short form of Geriatric Depression Scale (GDS) the Arabic version was used to assess depressionand a semi-structured interview were applied after screening the patients for cognitive impairment using the Mini Mental State Examination (MMSE) to exclude those who scored less than 23 on this scale .

**Results:** The study showed that the Prevalence of depression was 65.3% , statistically significant difference was not found with any variable used. Strong

positive relation was found in severely depressed patients with the past history of depression, multiple physical complaint was found in the depressed sample. Conclousin:As the prevalence of depression among elderly patients was high, National programs should be

elderly patients was high, National programs should be developed in community & health services focusing on early detection and treatment of depression among the elderly population.

KeyWord: Depression, Elderly, Mosul

# Al-Kindy College Medical Journal 2017: Vol.13 No.2 Page: 34-39

\*F.R.C.Psych M.R.C.Psych, Chairman of the Scientific Council of Psychiatry Iraqi Board for medical Specialization Consultant Psychiatrist, Baghdad Teaching Hospital.

\*\*M. B. Ch. B FIBMS, Specialist Psychiatrist

\*\*\*M.R.C.Psych-Professor of Psychiatry /College of
Medicine /University of Mosul-Consultant Psychiatrist,
Ibn- Sina Teaching Hospital, Mosul

Received 1<sup>th</sup> Aug 2016, accepted in final 30<sup>th</sup> April 2017 Corresponding to : Abdul-Rasoul Alyasiri

ccording to the last Iraqi human development report the elderly age group (60 andabove)in 2011 was 3% of the population(1). Internationally the number of elder will be doubled from 11% to 22%(2). This might be attributed to control of infectious diseases,improvement in sanitation, living standards, nutrition and declining death rate (3). The definition of 'older person' by theWorld Health Organization is the chronological age of 60 or 65 years(4). Elderly suffering mental disorders are underrepresented in psychiatric clinics, this was reported by western and local studies (5,6,7,8). Although it is apathological processbut thehealth professionals and community accept lower functioning in elderly as a reaction to ageing (9). Depression is usually associated physical, psychosocial, and biological problems (10). Family history is less common in late-onset depression (11-12). Elderly people severely affected by depression butthey usually tend not to request help (13-14), most common symptoms is loss of interest, lack of enjoyment, apprehension, poor sleep, thoughts of death, chronic pain and impaired memorywhile atypical symptoms arechronic unexplained pain, physical symptoms

delusions regarding poverty (cotard's syndrome), behavioral changes or abusing alcohol,talking about death should alert the risk of suicide(15). Aims of the study:to determine the prevalence of depression among elderly patients in mosul city, its correlation with some sociodemographic variables and to assess severity of depression in relation to past history of depression.

**Methods:** A cross-sectional study was conducted at the Geriatric Out-Patient Department, (GOPD) of Ibn-Sina Teaching Hospital Mosul city/ Iraq. Sample collection started in the1stof march and stopped at the 10<sup>th</sup> of June / 2014.A total of 150 patients (61 men and 89 women) 60 years and older were recruited into the study by the systematic random sampling technique using a sampling ratio of 1:3, every 3<sup>RD</sup> elderly patient was involved in the study, until the required number was attained. The (GOPD) in IbnSinaTeaching Hospitalwas a newly established department in Mosul city receiving the patient 60year and above only ,providingphysical and mental health services.

#### Inclusion criteria:

- 1-Partcipants aged 60 & above who agree to participate.
- 2-Patients with Mini Mental State Examination (MMSE) score above 23.
- 3-The patient physical condition stable enough to participate.

### Exclusion criteria:

- 1-Thosewho were unable to communicate in Arabic language.
- 2-Those who complain of physical illnesses which affect theirability
- of communication( eg. CVA ).
- 3- Those suffering from severe debilitating illnesses.

The patient consent to participate in this study was taken first,mini mental state of the patient were assessed then administration of a structured questionnaire for the demographical data, lastly the Geriatric Depression Scale the Arabic version of 15 questionswas done(16) ,lt is a self-rating scale, scores of 0-4 are considered normal, 5-8 indicates mild depression; 9-11 indicates moderate depression; and 12-15 indicates severe depression. Data analysis was done using SPSS (Statistical Packages for Social Sciencesversion), For the presence or absence of significance, p-value as < 0.05 was considered to be significant throughout the study analysis.

RESULTS: The socio-demographic characteristics of the study sample. Age distribution of the sample shows that the mean age was 67.5 years, with standard deviation of 6.6.Genderdistribution showsthatmale patients (40.7%) and female patients (59.3%) with F:M ratio (1.4-1), (61.3%) of the sample were married. The main source of income in the studied sample were the family (40.7%) , (71.3 %) of the sample belong to urban regions. And(88%) of the sample lives with their families Table(2)Show the distribution of the sample (depressed and non depressed) in relation to the socio-demographic characteristics. The study showed that 46% of the depressed patients were of the (60-69)year age group, but with insignificant difference. (57%) were females, (59%) of the sample were married, (42%) of the sample depends on their families in gaining money, (69%) belong to urban regions and(88%)lives with their families. All P- values were not significant.

DISCUSSION: It was observed through studies conducted in many countries that elderly (above 60 year of age )suffering from mental disorders underrepresented in attendees consulting psychiatric outpatient clinics , this was reported by some local studies (5,6,7) , adequate time & effort has to be offered to them. Special mental health services has to be planned for this important community sector .Elderly with psychiatric disorders needs specially designed centers

(Geriatric clinic in IbnSina Center was one of the targets of mental health policy in IRAQ to offer health services for elderly who suffer various types of mental disorder, chronic medical illnesses and physical

disabilities.) Depression is the commonest mental health problem among elderly and its extent varies considerably across studies .It was found that the prevalence rate of depression in old age in this study was65.3%. It is quite alarming indicator of the problem of depressive disorders in old people in Mosul City . When comparing the with different studies it was higher than that recorded in researches took place in Mosul city in 2009 it was 36.1% (17). In Baghdad city 2003 was AL-Dewanyia 38.9%(18), in Teaching hospital in 2013was 43.6% (19) ,Iran 23.5%(20) , Malaysia 13.9% (21) and in England & Wales 8.7%(22). This difference could be explainedsimply by the unstable politicalsituation, Deficiencies in all types of services which the people were suffering during last few months in Mosul city and in Iraq ingeneral In addition to the difference in the tools & populations.

## Socio-demographic correlations of depression:

Depression in the patient with (60-69) age group constitute the majority of the sample (46%)(Table 1), but with no significant value, the same as in Al-Diwaniya General Hospital(19) and previous study in Mosul City(17) This might be attributed to the fact that younger people are more able to visit the health centers seeking for treatment. Depressive symptoms in late life is usually more prevalent among women. In this study the depressed females consist(57%) of the patients (Table 2) similar to all compared studies except in Iran(20). This is mainly because women were more likely to detect and report depressive symptoms than men(3). The majority of the depressed sample were married 59% (Table 2), similar to studies in Mosul City 2010, in Al-Diwaniya Teaching Hospital (19), to the contrary of the study in Malaysia (21) . This is controversial, but loneliness is one of the depressive manifestations commonly seen in elderly people regardless of their marital status.

In this study those with stable source of income show low percentage of depressive symptom while those depend on unstable financial support from their families had ahigher riskof depression (42%) (Table 2),This was similar to results in Iran(20) Malaysia(21)& Mosul (17). It might be related to sense of autonomy and being more independent person in those have stable private income. In this study the highest level of depression was shown in the urban community 69% (Table 2), similar to that in Iran(20),daily life needs and difficulties may be the cause.

The higher percentage of the depressed sample found to be living with their families (88%) (Table 2),similar to that in Iran(21) to the contrary of that found in Malaysia(21). The elderly are looked after by family members, predominantly the sons .Taking care of the elderly has become a burden for poor families, who are generally of a low income and experiencing a lot of problems( like displacement, financial and medical) While the social welfare for the elderly in our country is still inadequate.

More than half of the depressed group found to be of mild degree of depression (Fig 1) similar to studies in Mosul(17), in Al-Diwaniya General Hospital(19). The past psychiatric history obviously founded in those complaining of severe depression (83.3%) (Table3).

Hypertension ,Diabetes , joint problems and corneal opacity was the main physical complaints (Fig 2)(Illnesses that limits their activity and mobility) taking in consideration the side effects of poly pharmacy. This

study shows us thatmultiple physical complaints was a shared presenting feature of depression in elderly people similar to that in Malaysia (21)and in England and Wales(22)

Conclusion: This study showthat the prevalence ofdepression was 65.3% much higher than what have been documented by all the compared studies. The study shows that56% of the depressed elderly population has mild depression. Among all variables used no significant differences was found. A positive relationship between the severity of the depression & the past psychiatric history of depression was noticed. Co morbidity of the physical complaints was significant.

## Recommendations:

- Further studies are needed to be conducted in different settings like the community or nursing homes.
- The medical staff in the Out Patients Clinics should be informed ,well trained to discover & treat the depression in old age.
- Encouragement of the integration of mental health services for elderly in primary health care system with the outpatient.
- Governmental abilities must be forwarded towards the improvement of socioeconomic status of this age group of the Iraqi people specially in time of crises.

## Table(1)showing the demographic characteristic of the studied population

Age Gender	Level 60 -69 70-79 >80	NO. 72 56	% 48%
	70-79		
		56	
Gender	>80		37.3%
Gender		22	14.7%
0.0.1.00.	Male	61	40.7%
	female	89	59.3%
Marital status	single	4	2.7%
	widow	49	32.7%
	married	92	61.3%
	divorced	5	3.3%
Source of income	retirement	37	24.7%
Source of income	family support	61	40.7%
	private work	25	16.6%
	Social assistance	27	18%
Residency	rural	43	28.7%
Residency	urban	107	71.3%
	family	132	88%
Type of living	alone	14	9.3%
	Nursing care	4	2.7%

Table (2) Demographical characteristics in depressed &non depressed sample.

Characteristic	Levels	not depressed		depressed		p_
		No.	%	No.	%	value
Age( years)	60_69	27	52%	45	46%	0.000
	70 _ 79	17	33%	39	40%	
	> 80	8	15%	14	14%	0.690
Gender	Male	19	37%	42	43%	
	Female	33	63%	56	57%	0.453
	Single	2	4%	2	2%	
	Widow	15	29%	34	35%	
Marital status	Married	34	65%	58	59%	0.692
	Divorced	1	2%	4	4%	
	Retirement	15	29%	22	22%	
Source of income	Family support	20	38%	41	42%	
	Private work	11	21%	14	14%	
	Social assistance	6	12%	21	21%	0.325
	Rural	13	25%	30	31%	
Residency		39				
	Urban		75%	68	69%	0.469
Type of living	Family	46	88%	86	88%	
71 3	Alone	5	10%	9	9%	
	Nursing	1	2%	3	3%	0.917

Using Pearson Chi-square test at 0.05 level . All p  $\_$  values were not  $\,$  significant .

Table(3)The severity of depression in relation to past history of depression:

	Depressed patients	With past history	
Severity of depression	No.	No.	%
mild	55	4	7.3%
moderate	31	6	19.3%
severe	12	10	83.3%

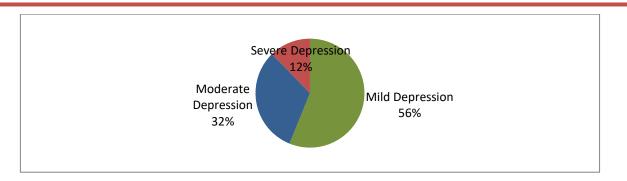


Figure (1) Distribution of the Depressed sample according to the severity of depression.

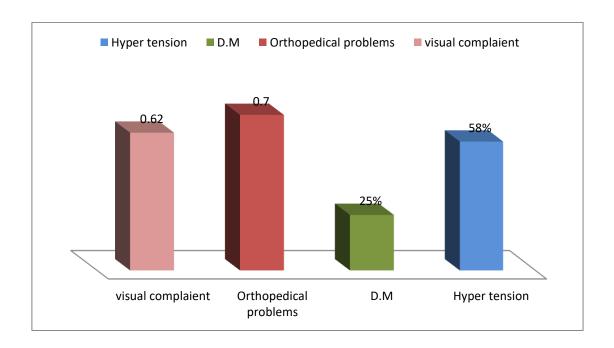


Figure (2) The main physical problems of the depressed patients were (Orthopedical, Visual complaints, Hypertension, Diabetes)

## References:

- Iraq human development report ,Ministry of planning 2014
- WHO-Mental health and older adultsFact sheet N°381 ,September 2013 .
- David S., Roger S., old age psychiatry, Oxford Handbook of Psychiatry, 14, 511.3<sup>rd</sup> Edition Copyright2013.
- WHO (World Health Organization) Definition of an Older or Elderly Person. Available at: www.who.int/healthinfo/survey/ageingdefnolder/en/ index.html, (accessed 7 Nov. 2007).
- NumanS.Ali, Amir A. Hussein, Depression In Elderly Patients Attending Primary Health Care Clinics In Baghdad City, The Arabjournal of psychiatry November (2005), Vol.16, No.2.
- Younis, M.S. and Al-Nuiaimi, A.S., "Cross sectional study of the psychiatric outpatient clinic atBaghdad university hospital in the year 2003", The Journal of Arab Board for Medical Specializations, 2006, Vol. 8No. 1, pp. 22-25.
- psychiatric clinic at ageneral hospital in a post conflict area: a model from Iraq. Journal of publicmental health.2014; 13: 51-58.
- Younisetal.Clinical and Demographic Profile of Attendees at Baghdad's Walk-in PsychiatricClinic.Oman Medical Journal (2013) Vol. 28, No. 5.
- Alexopoulos, Geriatric depression reaches maturity. International Journal of Geriatric Psychiatry, 7, 305-306.(1992).
- Princewill S. Onya, Risk Factors for Depressive Illness among Elderly Gopd Attendees at Upth, IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)Volume 5, Issue 2, PP 77-86(Mar.- Apr. 2013),
- 11. Baron M, Mendlewicz J, Klotz J. Age-of-onset and genetic transmissionin affective disorders. ActaPsychiatrScand 1981;64:373-80
- 12. Brodaty H, Luscombe G, Parker G et al. Early and late onset depressionin old age: different etiologies, same phenomenology. JAffect Disord 2001;66:225-36.
- Fremont P. Clinical aspects of the depression in the elderly. Psychol Neuropsychiatric Vieil; 2 (Suppl 1): S19-S27.2004.

- Gallese A, Ciani S. Depression and environmental, cultural and psychosocialvariables in aging: the delusions and sweet sadness of the elderly. MinervaPsichiatr 1990; 31(4): 213-8. Italian.
- Vinkers DJ, Stek ML, GusseklooJ,van der Mast RC, Westendorp RG. Doesdepression in old age increase only cardiovascular mortality?. The Leiden85-plus Study.Int J Geriar Psychiatry (2004): 19: 852-857.
- Wrobel, N.H. &Farrag , M.F. Identification of dementia and mental health symptoms in an elderly Arab American sample: Final report. Wayne County Senior Citizens Services, Detroit. (2004).
- Abdul-Rahman. S , Abdulateef J. Suha , Prevalence of Geriatric Depression in Mosul City-North of Iraq, JBMS Journal of Bahrain Medical Societies. Journal of the Bahrain medical society vol.22 . No; 2 April-June 2010.
- Numan S.Ali, Amir A. Hussein, Depression In Elderly Patients Attending Primary Health Care Clinics In Baghdad City The Arabjournal of psychiatryVol.16, No.2, November (2005).
- Al-Bermany S. student of the Iraqi Board Council / A thesis submitted to the Iraqi Board Council Prevalence of depression in elderly inpatient in Al-Dewaniya Teaching Hospital 2013, Unpublished theses.
- Mohamad R. M,MajidG.M., Maliheh S., Ms Mohamad T., Naghmeh M., Prevalence of Depression in an Elderly Population: A Population-Based Study in Iran Nov. 2010
- ImranA., AzidahA K, AsreneeA R, RosedianiM, Prevalence of Depression and its Associated Factors AmongElderly Patients in Outpatient Clinic of University SainsMalaysia HospitalKerian, 16150 Kelantan, Malaysia.Med J Malaysia.64(2):134-9.2009
- McDougall FA, Kvaal K, Matthews FE, Paykel E, Jones PD, Dewey ME, Brayane C; Medical Research Council Cognitive Function and Ageing StudyPrevalence of depression in older people in England and Wales: the MRC CFA Study .Psychol Med. 2007 Dec;37(12):1787-95. E pub 2007 Apr.