Prevalence of Depressive Symptoms among Elderly People residing in Nursing Homes of Baghdad City/ Iraq

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Abstract: *Aging is a series of processes that begin with life and continue throughout the life cycle. As persons grow older, they are encountered various physical, psychological and social role changes that challenge their sense of self and ability to live happily. Depression is considered to be the main difficulty leading to emotional imbalance and impaired quality of life among elderly individuals. The study aims to find out the prevalence of levels of depressive symptoms among elderly in nursing homes of Baghdad city; and to explore any relationship between levels of depressive symptoms and some socio-demographic characteristics of elderly. A descriptive study was conducted from May 9th, 2016 to the August 8th, 2016 upon a non-probability sample of 52 elderly who live currently in two nursing homes of Baghdad city; 32 elderly individuals were recruited from Al-Rashad nursing home and other 20 from Al-Salakh nursing home. To meet the aims of the present study a questionnaire was constructed. The questionnaire consisted of two parts: firstly, five socio-demographic characteristics of elderly: gender, age, level of education, occupation and marital status; and second part is fifteen items which are supposed to assess levels of depressive symptoms and represent Geriatric Depression Scale (GDS-15) for Almeida (1999)[1] which is to define the levels of depressive symptoms among those elderly. Data were analysed by method of: a descriptive statistical analysis: frequencies and percentages and tables of distribution; and inferential analysis which was Chi^2. The present study indicates that 75.0% of elderly participated are male; about half of them are married; about 70.0% are 60 years old and more; 63.1% of them have secondary school and more level of education; about half of participants are retired. The results also reveals too that 76.9% of elderly have moderate level of depressive symptoms and 19.2% of those elderly has more severe symptoms and only 3.8% are within normal level of depressive symptoms. The study finds a significant relationship between level of depressive symptoms and gender and level of education. The present study recommends for more provision of mental health services for elderly in nursing homes. Increasing in the extent psychosocial support services for elderly is necessary; and referral and follow-up for those who have severe levels of depressive symptoms to specialized hospitals. Further researches upon larger samples and within different governorates of the country are to be done.*

Keyword: *prevalence, levels, depressive, symptoms, elderly, nursing, homes, Baghdad.*

I. Introduction

Depressive symptoms are common problems among older adults[2].Various studies have indicated that around 15% of those over age 65 experience symptoms of depression that cause them distress and make it hard for them to function[3]. In late life, depression affects mainly the elderly with different physical illnesses. In addition, depression not only makes a person feel physically ill, but actually makes physical health worse and increases mortality[4]. Depressive symptoms in late-life cause pain and grief not just for those who are depressed, but also for those who care about them and severe depressive symptoms can cause excessive disturbance and misery for the family as well as for the individual who is depressed[5]. Depressive symptoms reflect a variety of physical and social factors and it may be challenging to identify in elderly people as its manifestations could vary from that of younger ages[6]. The common depressive symptoms, which are not contributed to old age, are a loss of interest in life, lack of enjoyment in normal activities, apprehension, poor sleep, and persistent thoughts of death, chronic unexplained pain, poor concentration or impaired memory[3,7]. In conclusion, low socio-economic rank, low educational level and being widowed are socio-demographic causes related to depressive symptoms in the elderly[8,9]. It is significant to notice that keeping fit has been associated to the improvement of depressive symptoms and generally health consequences in elderly clients with depressive symptoms[10,11]. Depressive symptoms among elderly may be complicated by co-morbid overall medical diseases which regularly outbreak them and they present with a display of physical symptoms that may be as a resulting to the concomitant conditions separately or jointly[12,13].

II. Objective of the Study

The present study aims to find out the prevalence of levels of depressive symptoms among elderly people residing in nursing homes of Baghdad city; and furthermore to explore any relationship between these levels of depressive symptoms and some socio-demographic characteristics of elderly people.

III. Methodology

A descriptive study was conducted from May 9th, 2016 to the August 8th, 2016 upon a non-probability sample of 52 elderly who live currently in two nursing homes of Baghdad city; 32 elderly individuals were recruited from Al-Rashad nursing home and other 20 from Al-Salakh nursing home. To meet the aims of the present study a questionnaire was constructed. The questionnaire consisted of two parts: firstly, five socio-demographic characteristics of elderly: gender, age, level of education, occupation and marital status; and second part is fifteen items which are supposed to assess levels of depressive symptoms and represent Geriatric Depression Scale (GDS-15) for Almeida (1999)[1] which is to define the levels of depressive symptoms among those elderly. The 15-item GDS (GDS-15) is a short version of the original Geriatric Depression Scale (GDS), developed by Sheikh & Yesavage (1986)[15] from items more strongly linked to the recognition of depressive symptoms. Overall, GDS items have revealed good diagnostic accurateness in addition to acceptable understanding, precise and reliability. The GDS short version is fairly an attractive tool for screening depressive symptoms in outpatients in general in addition to other non-specific situations since its application is shorter. 15 to 20 minutes the time needed for each questionnaire to be completed. The researcher completed filling all the questionnaires during interviewing the elderly. Data were analysed by method of: a descriptive statistical analysis: frequencies and percentages and tables of distribution; and inferential analysis which was Chi2.

IV. Results

Table 1: Distribution of the total sample according to the Demographic Characteristics of the Elderly People participated in the study

Gender			Occupation		
Gender	**f**	**%**		**f**	**%**
Male	39	75.0%	Free work	15	28.8%
Female	13	25.0%	Retired	27	51.9%
Total	**52**	**100.0%**	House Keeper	10	19.2%
			Total	**52**	**100.0%**
Age			**Level of Education**		
year	**f**	**%**	**Level**	**f**	**%**
40-49	2	3.8%	Illiterate	6	11.5%
50-59	14	26.9%	Read and write & Primary	13	25.0%
60-69	17	32.7%	Secondary	21	40.0%
≥70	19	36.5%	Institute, college & more	12	23.1%
Total	**52**	**100.0%**	**Total**	**52**	**100.0%**
Marital Status					
				f	**%**
Single				4	7.7%
Married				44	84.6%
Divorced				1	1.9%
Widowed				3	5.8%
Total				**52**	**100.0%**

The results of table (1) indicates that 75.0% of elderly participated are male; about half of them are married; about 70.0% are 60 years old and more; 63.1% of them have secondary school and more level of education; about half of participants are retired.

Table 2: Distribution of the sample according to the severity of Depressive symptoms

	Cut-off Points	Levels of Depressive Symptoms	f	%
	0-4	Normal Symptoms	2	3.8%
	5-9	Mild Depressive Symptoms	40	76.9%
	10-15	More Severe Depressive Symptoms	10	19.2%
		Total	**52**	**100.0**

Table (2) shows that 76.9% of elderly have moderate level of depressive symptoms and 19.2% of those elderly has more severe symptoms and only 3.8% are within normal level of depressive symptoms.

Table 3: Distribution in levels of depressive symptoms according to the Gender of elderly people

			Levels of Depressive Symptoms			Total
			Normal	**Moderate**	**Severe**	
Gender	**Male**	f	1	31	7	**39**
		%	1.9%	59.6%	13.5%	**75.0%**
	Female	f	1	9	3	**13**
		%	1.9%	17.3%	5.8%	**25.0%**
Total		**f**	**2**	**40**	**10**	**52**
		%	**3.8%**	**76.9%**	**19.2%**	**100.0%**

Table (3) shows that 59.6% of the male elderly and 17.3% of female have moderate level; and 13.5% of male and 5.8% of female have severe level.

Table 4: Distribution in levels of depressive symptoms according to the Age of elderly people

			Levels of Depressive Symptoms			Total
			Normal	Moderate	Severe	
Age	40-49	f	0	2	0	**2**
		%	0.0%	3.8%	0.0%	**3.8%**
	50-59	f	0	10	4	**14**
		%	0.0%	19.2%	7.7%	**26.9%**
	60-69	f	0	15	2	**17**
		%	0.0%	28.8%	3.8%	**32.7%**
	≥70	f	2	13	4	**19**
		%	3.8%	25.0%	7.7%	**36.5%**
Total		**f**	**2**	**40**	**10**	**52**
		%	**3.8%**	**76.9%**	**19.2%**	**100.0%**

Table (4) indicates that 53.8% of elderly who are 60 years old and more have moderate levels of depressive symptoms; and only 7.7% of fifties and seventies have severe level.

Table 5: Distribution in levels of depressive symptoms according to the Levels of Education of elderly people

			Levels of Depressive Symptoms			Total
			Normal	Moderate	Severe	
Level of Education	Illiterate	F	0	2	4	**6**
		%	0.0%	3.8%	7.7%	**11.5%**
	Primary	F	0	11	2	**13**
		%	0.0%	21.2%	3.8%	**25.0%**
	Secondary	F	1	17	3	**21**
		%	1.9%	32.7%	5.8%	**40.4%**
	Institute & College	F	1	10	1	**12**
		%	1.9%	19.2%	1.9%	**23.1%**
Total		**F**	**2**	**40**	**10**	**52**
		%	**3.8%**	**76.9%**	**19.2%**	**100.0%**

Results of table (5) reveal that 21.2% of primary school, 32.7% of secondary school and 19.2% of institute and college levels of education have moderate level of depressive symptoms; and only 7.7% of illiterate and 3.8% of primary have severe level of depressive symptoms.

Table 6. Distribution in the levels of depressive symptoms according to the Marital Status of elderly people

			Levels of Depressive Symptoms			Total
			Normal	Moderate	Severe	
Level of Education	Single	f	0	1	3	**4**
		%	0.0%	1.9%	5.8%	**7.7%**
	Married	f	2	35	7	**44**
		%	3.8%	67.3%	13.5%	**84.6%**
	Divorced	f	0	1	0	**1**
		%	0.0%	1.9%	0.0%	**1.9%**
	Widowed	f	0	3	0	**3**
		%	0.0%	5.8%	0.0%	**5.8%**
Total		**f**	**2**	**40**	**10**	**52**
		%	**3.8%**	**76.9%**	**19.2%**	**100.0%**

Table (6) indicates that 67.3% and 13.5% of married elderly have moderate and severe levels of depressive symptoms respectively; and only 5.8% of the singles have severe levels of depressive symptoms.

Table 7: Distribution in levels of depressive symptoms according to the Occupation of elderly people

			Levels of Depressive Symptoms			Total
			Normal	Moderate	Severe	
Occupation	Free work	f	0	11	4	**15**
		%	0.0%	21.2%	7.7%	**28.8%**
	Retired	f	1	22	4	**27**
		%	1.9%	42.3%	7.7%	**51.9%**
	House keeper	f	1	7	2	**10**
		%	1.9%	13.5%	3.8%	**19.2%**
Total		**f**	**2**	**40**	**10**	**52**
		%	**3.8%**	**76.9%**	**19.2%**	**100.0%**

Results of table (7) indicate that the moderate levels are distributed among the occupations of elderly 21.2%, 42.3% and 13.5% as free work, retired and house keeper respectively.

Table 8: Association between Demographic characteristics of the elderly people and Depressive symptoms

Demographic Characteristics	X^2	df	Sig.	No.
Gender	16.53	1	0.03	
Age	5.67	3	0.46	
Marital status	9.57	3	0.15	**52**
Level of Education	18.57	3	0.02	
Occupation	2.43	2	0.66	

Table (8) reveals that the study finds a significant association between levels of depressive symptoms and gender (X^2= 16.53, p= 0.03) and level of education (X^2= 18.57, p= 0.02).

V. Discussion

The main aims of present study are to define the various levels of depressive symptoms and find out association between these levels and some socio-demographic characteristics of elderly residing of the nursing homes of Baghdad, Iraq. Socio-demographic information show that out of 52 elderly people in present study, 39 (75.0%) are male and 13 (25.0%) are female; 17 (32.7%) are aged between 60 and 69, 19 (36.5%) are 70 and more;   13 (25.0%) are read and write, 21 (40.0%) have secondary school, 12 (23.1%) are with college level of education; 44 (84.6%) are married and only 4 (7.7%) are unmarried (Table 1). Results of the present study reveal that only 3.8% of the elderly are within normal depressive symptoms, 76.9% of them are with mild level of depressive symptoms and 19.2% are with more severe depressive symptoms (Table 2). Distribution of the sample according to the socio-demographic characteristics of the elderly indicates that 73.1% of male have moderate and more severe levels of depressive symptoms than female have; 60 years old and more, 53.9% of primary and secondary levels of school, 67.3% of married, and 42.3% of retired are likely to have moderate level (Tables 3,4,5,6, & 7). Data analysis shows that female have more severe level of depressive symptoms than male have (X^2= 16.35, p= 0.03), the higher level of education the elderly have the severer level of depressive symptoms have those elderly (X^2= 18.57, p= 0.02) (Table 8).

Many previous studies revealed high prevalence of depressive symptoms in elderly living in nursing homes; more than three to four times greater than the non-nursing-homes elderly[15-22]. By applying the short form of Geriatric Depression Scale (GDS-15)[1], an additional comprehensive and valuable scoring scheme in rating depressive symptoms, the present study categorized the status of depressive symptoms among elderly sample into three levels: normal, moderate, more severe depressive symptoms according to a 3-cut-off points. In regard to psychiatric epidemiology, the higher prevalence of depressive symptoms in females has been widely documented and has been stated in many studies using various diagnostic instruments or/ and interview approaches[23,24], however, the present results do not agree with the other study, this might be the number of males are more than the number of females. Many earlier studies indicated that depressive symptoms are more common in later life[25,26,27] which agree with the results of present study.

VI. Conclusions and Recommendations

The present study indicates that the majority of elderly participated are male; about half of them are married; about most of them are 60 years old and more half of them have secondary school and more level of education; about half of participants are retired. Three quarters of elderly have moderate level of depressive symptoms. The study finds a significant relationship between level of depressive symptoms and gender and level of education. The present study recommends for more provision of mental health services for elderly in nursing homes. Increasing in the extent psychosocial support services for elderly is necessary; and referral and follow-up for those who have severe levels of depressive symptoms to specialized hospitals. Further researches upon larger samples and within different governorates of the country are to be done.

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