

Psychosocial Factors Predicting Of Depression among Old Age in Assiut Governorate

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Abstract: The elderly population is considered vulnerable to stress. One common stereotype of growing older is that there is a high chance of becoming depressed. This study aimed to assess and identify the psychosocial factors affecting depression among old age and to investigate prevalence associated with geriatric depression in Assiut – Egypt, during 6 months from October 2014 to March 2015. The study was carried out in the two villages affiliated to Assiut governorate and health insurance hospital. The study sample comprised 200 cases (100 cases in the two villages and 100 cases inside the hospital). Five tools were used for data collection, namely: demographic Data Structured Interview schedules, socioeconomic scale, Self-Esteem scale, Social Support scale and Geriatric depression scale. The main results yielded by the study proved that, (65.0%) were in the age group 59 to 81years old, the highest percentages were who have basic education (54.0%). 60.0 % of the studied sample was married, and the majority of them were employees (25.5%). A highest percentage were had low level of self – esteem (58.5%). A higher percentage were who have very low socioeconomic class (39.5%), the majority of sample had moderate social support level and the majority of geriatric had normal level of depression.. the study recommended to help families of geriatric should be involved in the care of them and the caregivers should be trained to provide empathy, sensitivity and understanding to old aged.

Key words: Psychosocial factors, depression, old ag

Introduction

Aging is a phenomenon that every one has to go through in life. The elderly population is considered vulnerable to stress of different kinds; one common stereotype of growing older is that there is a high chance of becoming depressed (Meyers and young 2000).

Depression in elderly is an important but often unrecognized public health problem. numerous studies have examined depression in the general community , several psychological factors have been proposed as causes of depressive symptoms and disorders in late life including personality attributes , neuroticism , cognitive distortions and emotional control , these factors however are not specific to the origins of depression in older adults (Dang, et al.,2005) .

Depression is the most common mood disorders in the later life. It may be associated with serious consequences, including disability, functional decline, diminished quality of life, increasing mortality and increased service utilization. Moreover it is undiagnosed in about 50% of cases (Charney, et al., 2003).

World health organization considered that the age of 65 is the beginning of aging but in Egypt, the age of 60 is still considered the beginning of aging according to the retirement age for most of people (Sheriff, 2000).

World health organization is predicting that by the 2020, that depression will become the second leading cause of disability, so it is considered as a major public health problem (Finley et al., 2002 and Ustun, et al., 2004). The risk of depression in the elderly increases and when ability to function becomes limited. Estimates of major depression in older people living in the community range from less than one percent to about five percent but rises to 13.5 percent in those who require home health care and to 11.5 percent in elderly hospital patients (Hybels and Blazer 2003).

A number of social stressors have also been proposed as contributing to late- life depressive symptoms and disorders including stressful life events , bereavement , chronic stress or strain, socioeconomic status and impaired social support (Dang, et al.,2005).

Social support is a multifactorial construct including perception, structure of the social network and tangible help and assistance (Turner and Turner 1999). Insufficient social network predicted the incidence of major depression in a sample of 875 of non depressed elderly people followed for 3 years (Forsell and Winblad 1999). Support can mediate between risk factors and the onset of depression. In a recent analysis using growth – curve modeling, perceived social support was shown to mediate the relationship between disability and depressive symptoms over time (Taylor and Lynch, 2008).

Hypotheses:

There is a significant relationship between age, sex, educational attainment, marital status, self-esteem, social support and level of depression among elderly.

Aim of the study:

The study aimed to assess and identify the psychosocial factors affecting depression among old age and to investigate prevalence associated with geriatric depression in Assiut – Egypt.

Subjects and Methods

Subjects

Research design:

The design followed for this study is a cross-sectional study design will be used.

Setting:

The study was conducted in the two villages affiliated to Assiut governorate and health insurance hospital.

Subjects:

Subjects of the study comprised available old persons living in there village and all geriatric persons attending in the health insurance hospital and who are agree to participate in the study within a period of 6 months from October 2014 to March 2015. The study subjects mounted about 200 cases (100 cases in the two villages and 100 cases inside the hospital).

Criteria of selection:

- 1- The elderly aged 60 years old and more.
- 2- The elderly who were able to communicate.

Tools of the study:

Five tools were used for data collection:

Tool (1): Demographic Data Structured Interview schedules: This interview schedule developed by the researchers included the demographic data of the study subjects, It Includes age, sex, level of education, Marital statues, occupation.

Tool (2): Socioeconomic scale: This scale developed by Fahmy & Elsherbini, (2004) (8) to assess the socioeconomic status of the family. It assesses the family status according to the 7 items scoring system. It includes father's education and work, mother's education and work, monthly income, crowding index and sanitation. The total score summed up to 42. families whose score are 42- 36 considered high social class , those who score 35- 27 were considered as middle social class , while those who score 26-21 had low social class , those who score less than 21 are very low social class. This scale reliable and valid according to Egyptian culture.

Tool (3): Self-Esteem scale: This scale developed by Sayed Yusuf (2007) (10). It is used to measure self-esteem among students. It consists of 14 items. The selected students answer with either yes (2) or no (zero). The self-esteem divided into three levels:

High self-esteem ranges from 22-30 grads

Moderate self-esteem ranges from 19- 21 grads

Low self-esteem ranges from 18 – 15 grads

This scale reliable and valid according to Egyptian culture.

Tool (4) Social Support scale by Zimet and Farley (1990) (11).

This scale translated into Arabic language which composed of (12 items) measured on a 7 points (1-7) Likert scale. The translated questionnaire had shown adequate validity based on jury opinion. Reability test was done to be modified scale by using Crombach alpha. It was $r=0.89$. The items tended to divided into factor groups relating to the source of the social support, namely family (Fam), friends (Fri) or significant others (SO). Patients will choose the most suitable of these statements that describe his social support. The total score is (84). This divided into three levels:

Low social support level ranges from 1to 27

Moderate social support level ranges from 28 to 55

High social support level ranges from 56 to 84

Tool (5): Geriatric depression scale (short form) by Sherikh and Yesavage, 2012

This tool translated into Arabic language. Both the Arabic and English items were submitted to five experts from the English section, Faculty of Art, Assiut University to be reviewed for its translation. A jury of five experts in the psychiatric field examined the content validity. Reliability done by using Crombach alpha coefficient, it was $r=0.88$.

It is a 15 – items, 10 indicated the presence of depression when answered positively, while the rest (question numbers 1, 5, 7, 11, 13) indicated depression when answered negatively. scores of 0-4 are considered normal , depending on age , education and complaints ; 5- 8 indicate mild depression ; 9- 11 indicate moderate depression ; and 12- 15 indicate severe depression . it takes about 5- 7 minutes to complete , answers in bold indicate depression . Score 1 point for each bolded answer

Methods

- 1- Permission was obtained from the dean of the faculty of nursing –Assiut University directed to health insurance hospital.
- 2- The aim of the study was explained to each person before starting data collection. Individual informed about what was done for them.
- 3- The investigator will interview the person at their homes in the tow villages ,that villages attached to Assuit city, and the other place inside the health insurance hospital out patient clinic include medical disease and hymnodies at Assuit university hospital . All ethical considerations were clarified to each person before explanation of the nature of the study in both places .
- 4- Data will be collected by using direct face to face interview with all elderly.
- 5-The data were collected for six months, October 2014 to March 2015. Each person was interviewed individually by the investigator at their homes and who are out patient clinic include medical disease and hymnodies.
- 6- The persons who livings in villages were interviewed at twice days during filed trip (Wednesday and Thursday), from 2 to 3 persons. And the other persons were interviewed inside the hospital twice days as possibly. The average time taken for filling each sheet was around 30 to 45 minutes depending on the response of the person. Each older person was reassured that the information obtained was confidential and used only for the purpose of the study.

Statistical analysis

Categorical variables were described by number and percent (N, %), where continuous variables described by mean and standard deviation (Mean, SD). Chi-square test used to compare between categorical variables where compare between continuous variables by t-test and ANOVA. Continuous variables were tested for normal distribution using KolmogoroveSmirnov test and Q-Q Plots. Pearson Correlation coefficient used to assess the association between continuous variables. Multiple linear regression analysis used to assess the most predictors of geriatric depression. A two-tailed $p < 0.05$ was considered statistically significant. All analyses were performed with the SPSS 20.0 software.

Results

Results of the present study showed that:

Table (1) shows that more than half of men (65.0%) the rang of age group were 59 to 81years old, with the mean age 65.3+ 4.7. As regards education, the highest percentages were who have basic education (54.0%). 60.0 % of the studied sample was married, and a quarter of them were employees (25.5%).

Descriptive statistics for the socioeconomic level are presented in **Table 2**. A higher percentage were who have very low socioeconomic class (39.5%), with mean among socioeconomic level($M \pm SD$ 22.7 + 7.2)

Descriptive statistics for the self – esteem level are presented in **Table 3**. More than half were had low level of self – esteem (58.5%) with mean among self – esteem level ($M \pm SD$ 16.4 + 7.9).

Regards the level of social support, the majority of sample had moderate social support level (63.5%) **Table 4**.

Table (5) indicates that the nearly half of geriatric (46.5%) had normal level of depression.

Table 6 shows the relation between geriatric depression level, demographic data and socioeconomic level, self – esteem and social support level. There were a highest significant differences between geriatric depression level and demographic data(males had mild depression than others , married persons with basic education had normal depression , but un worked persons had severe depression) ,and there were a highest significant differences between geriatric depression level and socioeconomic , self – esteem and social support (persons who had very low social class had mild depression , persons with low self – esteem had severe level of depression and the geriatric persons who had moderate level of social support had moderate level of depression).

Table (7) illustrates the correlation between geriatric depression scale and age, socioeconomic scale, self – esteem scale and social support scale. It shows that there were a highest significant correlation between geriatric depression and age, socioeconomic, self – esteem and social support.

Table (8) shows that Self-esteem scale, Social support, Marital status, Socioeconomic scale, Occupation and sex most significant predictors respectively according to beta value.

Table 1: Demographic characteristics of the studied sample (No. 200)

Demographic characteristics	No.	%
Age		
Range		59 – 81
Mean+SD		65.3 + 4.7
Sex		
Male	130	65.0
Female	70	35.0

Level of education		
Illiterate	61	30.5
Read & write	3	1.5
Basic education	108	54.0
University	28	14.0
Marital status		
Single	4	2.0
Married	120	60.0
Separation/divorced	11	5.5
Widow	65	32.5
Occupation		
Not work	19	9.5
Worker	36	18.0
Employee	51	25.5
Retirement	21	10.5
House wife	41	20.5
Farmer	32	16.0

Table 2: Socioeconomic level of the studied sample (No. 200)

Socioeconomic scale level	No.	%
Very low social class	79	39.5
Low social class	72	36.0
Middle social class	38	19.0
High social class	11	5.5
Range		8 – 42
Mean+SD		22.7 + 7.2

Table 3: Self-esteem level of the studied sample (No. 200)

Self-esteem scale level	No.	%
Low self esteem	117	58.5
Moderate self-esteem	26	13.0
High self-esteem	57	28.5
Range		0 – 28
Mean+SD		16.4 + 7.9

Table 4: Social support level of the studied sample (No. 200)

Social support level	No.	%
Low social support	27	13.5
Moderate social support	127	63.5
high social support	46	23.0
Range		18 – 91
Mean+SD		43.7 + 15.3

Table 5: Geriatric depression level of the studied sample (No. 200)

Geriatric depression scale level	No.	%
Normal depression	93	46.5
Mild depression	49	24.5
Moderate depression	37	18.5
Severe depression	21	10.5
Range		0 – 15
Mean+SD		5.7 + 4.4

Table 6: Relationship between geriatric depression level and demographic data and other psychosocial factors of the studied sample (No. 200)

Variables	Geriatric depression scale level								P. value
	Normal depression scale (n=93)		Mild depression (n=49)		Moderate depression (n=37)		Severe depression (n=21)		
	No.	%	No.	%	No.	%	No.	%	
Sex									
Male	67	72.0	39	79.6	19	51.4	5	23.8	<0.001**
Female	26	28.0	10	20.4	18	48.6	16	76.2	
Level of education									<0.001**
Illiterate	16	17.2	17	34.7	17	45.9	11	52.4	
Read & write	0	0.0	0	0.0	0	0.0	3	14.3	
Basic education	56	60.2	28	57.1	17	45.9	7	33.3	
University	21	22.6	4	8.2	3	8.1	0	0.0	

Marital status									
Single	0	0.0	2	4.1	2	5.4	0	0.0	<0.001**
Married	72	77.4	22	44.9	21	56.8	5	23.8	
Separation/divorced	3	3.2	5	10.2	2	5.4	1	4.8	
Widow	18	19.4	20	40.8	12	32.4	15	71.4	
Occupation									
Not work	2	2.2	4	8.2	1	2.7	12	57.1	<0.001**
Worker	16	17.2	12	24.5	6	16.2	2	9.5	
Employee	29	31.2	13	26.5	9	24.3	0	0.0	
Retirement	16	17.2	4	8.2	1	2.7	0	0.0	
House wife	16	17.2	6	12.2	13	35.1	6	28.6	
Farmer	14	15.1	10	20.4	7	18.9	1	4.8	
Socioeconomic scale level									
Very low social class	22	23.7	28	57.1	20	54.1	9	42.9	<0.001**
Low social class	35	37.6	13	26.5	14	37.8	10	47.6	
Middle social class	27	29.0	7	14.3	2	5.4	2	9.5	
High social class	9	9.7	1	2.0	1	2.7	0	0.0	
Self-esteem scale level									
Low self esteem	50	53.8	23	46.9	24	64.9	20	95.2	0.005**
Moderate self-esteem	16	17.2	7	14.3	2	5.4	1	4.8	
High self-esteem	27	29.0	19	38.8	11	29.7	0	0.0	
Social support level									
Low social support	23	24.7	3	6.1	1	2.7	0	0.0	<0.001**
Moderate social support	60	64.5	31	63.3	26	70.3	10	47.6	
High social support	10	10.8	15	30.6	10	27.0	11	52.4	

Table 7: Correlation between age, sex, marital status, educational attainment, self- esteem, social support and geriatric depression scale of the studied sample (No. 200)

Variables	Geriatric depression scale	
	r	P. value
Age	0.18	0.011*
Socioeconomic scale	-0.38	<0.001**
Self-esteem scale	-0.50	<0.001**
Social support	0.46	<0.001**

Table 8: Multivariate analysis using linear regression to assess the most predictors of geriatric depression of the studied sample (No. 200)

Variables	B	Beta	t	P. value
Age	0.04	0.05	0.72	0.469
Sex	1.12	0.12	2.17	0.031*
Level of education	-0.36	-0.09	-1.22	0.223
Marital status	0.80	0.17	2.90	0.004**
Occupation	-0.47	-0.17	-2.87	0.005**
Socioeconomic scale	-0.13	-0.21	-2.90	0.004**
Self-esteem scale	-0.18	-0.32	-5.26	0.000**
Social support	0.06	0.21	3.48	0.001**

* Significant predictor at 0.05 levels

** Significant predictor at 0.01 levels

Discussion

Depression in elderly is an important but often unrecognized public health problem. numerous studies have examined depression in the general community , several psychological factors have been proposed as causes of depressive symptoms and disorders in late life including personality attributes , neuroticism , cognitive distortions and emotional control , these factors however are not specific to the origins of depression in older adults (Dang, et al.,2005) .

The present study aimed to estimate the prevalence of psychosocial factors predicting of depression among old age.

Related to demographic characteristics of the studied group, the present study showed that 65.3± 4.7 were aged from 59 to 81 years old, the majority of them were males(65.0%) and 54.0% were had basic education and 60.0% of them were married and 25.5% were employee. These findings not consistent with the study of Jill B. Hamilton, et al., 2014 who stated that the 77 African American cancer old patients who participated in the study had a median age of 58 years (IQR = 55–65) and a majority were women (66%) and married (53%). Participants were generally well-educated with nearly one third (30%) having completed high school and 51% with some college or completed college. At the time of the interview, 29% were employed in some manner, 30% were retired, and 34% had quit their jobs because of health concerns. Also, Ostbye, et al.,

(2005) found that in a Canadian study of health and aging, which the prevalence of major and minor depression was 2.6 percent and 4.0 percent respectively and were higher for females. **Daisy R, 2004** showed that majority of the respondents who are institutionalized are female, single and have acquired elementary level in terms of education. So the present study implies that married males who have immediate family of their own since they have married and have acquired stable jobs, this profile also implies the significance of the role of family members .

Concerning to socioeconomic status, the present study showed that a higher percentage were who have very low socioeconomic class, this finding consistent with **Mojtabai and Olfson, 2004**, who reported that socioeconomic disadvantage was associated with prevalence and persistence of depressive symptoms over 2- 4 years in a sample of community – dwelling adults 50 years or older who originally met criteria for major depression. Also, **Agarwal et al., 2010**, found that social factors likely to influence higher depressive scores included low socioeconomic.

The present study showed that the highest percentage of subjects have low self – esteem level. This results go with the findings of **Daisy R, 2004**, who showed that the self – esteem measurement revealed that majority of the respondents have moderate self – esteem, which implies that the respondents have certain degree of insecurity in unidentified aspects. **Meyers and Young and Eldercare online** support this result that elderly clients experience a sense of being low in their self due to possible indications of depression.

Concerning to social support, the present study showed that the highest percentage of the studied sample have moderate level of social support. this result consistent with the findings of **Daisy R, 2004** who stated that most of the respondents reported adequate social support and minority have highly adequate support , this is expected in these clients since most of them do not have family members with them , while **Hughes et al.**, reported that social support is low among elderly clients in geriatric institution.

Related to geriatric level of depression among the studied sample, the present study showed that the highest percentage of them had normal level of depression, this finding disagree with the results of **Daisy R, 2004** who stated that the majority of the respondents have either mild depression or severe depression, which lends support to the study made by **Ostbye, Kristjansson, Newman, et al 2005** who stated that elderly clients have experienced certain level of depression.

Concerning to correlation between age, sex, marital status, educational attainment, self- esteem, social support and geriatric depression scale of the studied sample, the present study showed that there were a highest significant correlation between geriatric depression and age, socioeconomic, self – esteem and social support. This result consistent to the results of **Daisy R, 2004** who reported that the level of depression of geriatric clients is correlated with certain variables to determine their degree of influence over the possible occurrence of depression among respondents. Also these results are in consonance with several studies which cited that social support is an integral variable that influence the development of depression among elderly clients (**Ostbye, et al., Roberts, 1997; Hughes, et al., 1993**). This finding implies that social support is an important factor in the prevention of depression among elderly.

Conclusion

Based on the findings obtained, it is concluded that low level of socioeconomic status, feeling of depression, moderate of social support, low self- esteem as a factors that predicting of depression among old aged.

Recommendation

In the light of the study findings, it is recommended to:

- Families of geriatric should be involved in the care of them
- Caregivers should be trained to provide empathy, sensitivity and understanding to old aged.
- A government should be facilitate social welfare services for old aged

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