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Depression, Anxiety and Loneliness among Elderly Living in Geriatric Homes

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Abstract **Background:** Elderly "living in old age care homes" are expanding in numbers; and are prone to psychological stress such as depression, anxiety and loneliness. **Aim:** This study was to assess depression, anxiety, and loneliness among elderly living in old aged homes**. Research design:** A descriptive exploratory design was utilized in this study. **Setting:** The study was conducted at the geriatric home in Benha City, Kaluobia Governorate, and the geriatric home in Tanta City, Gharbiya Governorate. **Sample:** A purposeful sample of 50 elderly (males & females) residing in elderly homes was included for the conduction of this study. **Study tools:** *Tool (1):* Structured Interview Questionnaire Schedule; *Tool (2):* Beck's Depression Inventory; *Tool (3):* Geriatric Anxiety Scale (GAS); and *Tool (4):* UCLA Loneliness Scale (Version 3). **Results:** About three quarters of the studied elderly have depression and more than two thirds have anxiety, while the majority of them suffer from loneliness. Regarding depression levels, less than two thirds have severe depression; more than of one third of them have severe and moderate anxiety. Regarding level of the loneliness, majority of the studied sample have severe loneliness. There is a highly statistical significant correlation between total loneliness and total depression, also between total geriatric anxiety and depression at p value <0.001, while there is statistical significant correlation between total loneliness and geriatric anxiety at p value <0.05**. Conclusion:** The study concluded that the studied elderly living in geriatrics homes had higher levels of depression, anxiety and loneliness. **Recommendations:** Intervention program or measures to manage or overcome anxiety, depression and loneliness among elderly living in geriatric homes.

Keywords: *anxiety, depression, elderly, geriatric homes, loneliness*

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1. Introduction

Aging is a part of natural developmental process in the life of any living being. The world's population is ageing rapidly and between 2015 and 2050, the proportion of the world's elderly is estimated to almost double from about 12% to 22 %. In complete terms, this is an expected increase from 900 million to 2 billion people over the age of 60. As such, it is expected that elderly would face special physical and mental health challenges which should be taken cognizance of [1]. The life expectancy of human is increased in both developed and developing countries due to advancement and improvement of latest technology in medical field. Currently, the world wide life expectancy for males is 62.7 years and for females is 66 years. About 13% of the national population is over 65 years of age [2].

Aging involves all aspects of the organism and largely characterized by a decline in functional efficiency and decreased capability to compensate and recover from stress. However the period of old age is a time of challenge exemplified by changes in roles such as becoming a grandparent, and other significant life events such bereavement, potential reductions in social network and support, poverty, feeling of rejection, trying to find the meaning of life, dependence, despair and hopelessness, regretting the past and concerns about deterioration of mind and body and the threat of death [3].

The enormous growth in the proportion of elderly in the country, change in family structure, and other contemporary changes in the psychosocial matrix and values often compel the elderly to live alone or to shift from their own homes to institutions and old age homes [4]. Many families who lives in the urban localities tend to send the elderly to the institutions which provokes the feeling of loneliness and neglect in elderly. Such living arrangements may have negative effects on the mental health of its residents, because placement is often accompanied by feelings of lack of control over one's own life, and inability to make decisions regarding daily issues [5].

Furthermore, the elderly face a life situation that is often characterized by stressful events such as the loss of loved ones, progressive health impairment and disability, reduced mobility, chronic pain, frailty or other health problems or a drop in socioeconomic status with

retirement which makes them vulnerable to emotional disturbance. The elderly can be regarded as a risk population that is confronted with illness, dependency, social isolation, loneliness or psychological distress such as anxiety and depression for which they may require long-term care. With an increasing life-expectancy rate of population, it has become a challenge for younger generation to deal the issues related to elderly [1,6].

Depression and anxiety are psychological symptoms of stress. These disorders are important factors affecting mental health that interferes with the professional roles or responsibilities assumed by elderly. Depression and anxiety are common psychiatric disorders among elderly in geriatric homes [7]. Depression is one of the most common psychiatric disorders and suicide risk factor in the elderly that cause 24% of completed suicides, reduction of quality of life, and increase in drug consumption, care costs and many other social and economic problems in the elderly. Depression can reduce a satisfaction of late life and also, can significantly reduce life expectancy [8].

Depression in elderly has been considered as the second cause of disability in this phase. People with the history of depression, will experience it more intensive in their old ages. The previous studies showed that one third of the elderly in geriatric homes suffer from most common mental disorders such as depression, cognitive and anxiety disorders respectively [9]. Many people experience depression, either as a result of living alone or due to lack of close family ties and reduced connections with their culture of origin, which results in an inability to actively participate in the community activities [10].

Elderly, like everyone else, may feel anxious and very worried but an anxiety disorder is more than just feeling stressed or worried. Anxiety in elderly can depend on their situation and if they have a past history of anxiety there is a greater chance that they will experience it again [11]. Previous researches showed that prevalence of anxiety among institutional elderly persons was 94.6% when compared with 92.6% among those living in the community [12].

Elderly is very vulnerable to loneliness and it is a barrier to achieve successful ageing. Loneliness is a subjective and negative feeling that occurs when is a difference between an individual's expectations and their social network [13]. Prevalence of loneliness among the elderly is increasing as well as other associated factors that make it worse for example, living alone, social isolation, bereavement, being divorced or never married, age 85 or over, being in poor health, having a disability or sensory or cognitive impairment. In addition, loneliness has a negative impact on quality of life, mental and physical health and associated with unhealthy lifestyle [14].

Elderly may experience loneliness even if they 'are surrounded by other people. While there are no specific criteria for recognizing loneliness in older people as each person perceives loneliness differently, it is often accompanied by symptoms such as disturbed sleep, reduced satisfaction from social networking, diminished interest in social activities, and weight gain [15,16]. The prevalence of loneliness in older adults is estimated to be 40 %, and this figure has been relatively constant over the last 25 years [6]. People live in the most technologically connected age in the history of civilization, and yet the rates of loneliness have doubled [14]. Finally, elderly behave just like kids. They seek more attention from family members which is hard to get as everyone is busy in their life. This makes aged persons reside in older age homes, more insure and vulnerable for many emotional disturbances such as depression, anxiety, and loneliness.

1.1. Significance of the Study

The incidence of depression, anxiety and loneliness was higher in older people who were in worse health, living in a care facility or nursing home, or who were otherwise isolated [17]. Previous studies done on geriatric homes have shown increased psychiatric morbidity when compared to general population. The results indicated that the prevalence rates of loneliness (56% to 95.5%), anxiety (3.6% to 38%), and depression (11% to 85.5%) in elderly living in long-term care settings are generally high [18]. Therefore, the third age is the main category of people exposed to psychological problems [19].

Psychiatric conditions among the elderly as depression and anxiety if left untreated may result in the onset of physical, cognitive, functional, and social impairments and decreased quality of life among elderly persons. Additionally, is a preventable risk factor for mortality, particularly suicide attempts [20]. It was observed that little is known about loneliness and late-life depression and anxiety among institutionalized elderly in Egypt. Although nurses play a pivotal, multifaceted role in bio-psychosocial assessment and meeting holistic health care needs of elderly. With this background, this study has been taken up with the objective to assess depression, anxiety and loneliness among the elderly in geriatric homes.

1.2. Aim of the Study

The aim of this study was to assess levels of depression, anxiety, and loneliness among elderly living in geriatric homes.

1.3. Research Questions

To achieve the aim of this study the following research questions:

1. Is the elderly whose living in geriatric homes suffers depression, anxiety and loneliness?
2. What is the relation between depression, anxiety and loneliness among elderly living in geriatric homes?
3. What is the relation between depression, anxiety and loneliness with selected socio-demographic variables of elderly living in geriatric homes?

2. Subject and Methods

2.1. Research Design

A descriptive correlational design was utilized in this study.

2.2. Research Subject

A purposeful sample of 50 elderly (males and females) residing in geriatric homes was included for the conduction of this study, according to the following *inclusion criteria*: Both sexes and willingness to participate in this study, and *exclusion criteria:* Elderly who are terminally ill and those who are not willing to participate in the study.

2.3. Research Setting

The study was conducted at the geriatric home in Benha City, Kaluobia Governorate, and the geriatric home in Tanta City, Gharbiya Governorate.

2.4. Tools of Data Collection

The following tools were used for data collection

Tool (1):- Structured Interview Questionnaire Schedule.

This tool was developed by the researchers based on pertinent literature to elicit information about socio-demographic characteristics. It includes age, sex, and marital status, educational level, occupation, residence, and monthly income.

Tool (2):- Beck's Depression Inventory:

This scale was originally developed by [21]. Beck's Depression Inventory (BDI-II) was used for the data collection of the study. The questionnaire consists of 21 multiple-choice questions self-report items; each of these is rated with scores ranging from 0-3 on the severity of the participants' experiences over the last week with the intention of emphasizing states over traits. Sum of the relevant 21 items for each scale constitutes the participants' scores for each of the emotions leading to depression. Depression scores 1-10 indicates as mild ups and downs in mood disturbances, 11-20 as Mild mood disturbances,

Tool (3):- Geriatric Anxiety Scale (GAS):

This scale was originally developed by [22]. The scale 25-item scale that measures current anxiety in older adults. Participates rated their current feeling based on the 4-point Likert-type scale ranging from not at all (0) to all of the time (3). The GAS includes three subscales: somatic symptoms"9 items" (items 1, 2, 3, 8, 9, 17, 21, 22, 23), cognitive symptoms"8 items"(items 4, 5, 12, 16, 18, 19, 24, 25), and affective symptoms"8 items"(items 6, 7, 10, 11, 13, 14, 15, 20). The number of items for each subscale ranges from 8 to 9. Higher scores indicate greater anxiety.

Tool (4):- UCLA Loneliness Scale (Version 3):

The scale was originally developed by [23], in order to measure individuals' general levels of loneliness. The UCLA-LS consists of 20 (11 negative and 9 positive) statements to which responses are given on a 4-point Likert-type scale ranging from (1=indicate never, 2=rarely, 3=sometimes, 4=often). Questions (1-5-6-9-10 15-16-19-20) positive statements. The statement scores range from 20 to 80 with higher scores indicating higher levels of loneliness.

2.5. Validity of the Tools

Tools were tested for content validity by jury of five experts in the field of psychiatric Health Nursing and community nursing specialty to ascertain relevance and completeness. The tools proved to be valid.

2.6. Reliability of the Tools

Reliability was applied by the researcher for testing the internal consistency of the tool, by administration of the same tools to the same subjects under similar conditions on one or more occasions. Answers from repeated testing were compared (Test-re-test reliability). Cronbach's alpha reliability coefficient of UCLA Loneliness Scale is reported 0.68, Beck's Depression Inventory is reported 0.89, while Cronbach's alpha reliability coefficient of Geriatric Anxiety Scale is 0.93.

2.7. Methods

- Ethical Considerations

All subjects were informed that participation in the study is voluntary, no name was included in the questionnaire sheet and anonymity and confidentiality of each participant was protected by the allocation of a code number to the questionnaire sheet. Subjects were informed that the content of the tool will be used for the research purpose only.

-Pilot Study:

A pilot study was carried out in order to ascertain the clarity and applicability of the study tools. The study was tested on 10 % of total sample from elderly home. Sample who shared in the pilot study were excluded from the main study sample.

Field work:-

The present study was conducted into two phases:

Phase One: Preparatory phase:

- A review of the past, current Arabic and English related literature covering various aspects of the problem was done, using available books, articles, periodicals, and magazines to get acquainted with the research problem and develop the study tools.

- The researchers used and followed the translation procedure for verifying the translation of the tools. In this procedure, (a) the researchers translated the tools (English formats) into Arabic language, (b) rendered the same English formats to bilingual experts for more verification of the translation of the Arabic formats, (c) the resulting versions were translated back into the original language by other bilingual experts, and (d) minor discrepancies in the content were focused and necessary modifications were done.

-Administrative Approval:

Data collection was carried out as follows: Written official permission and approvals for conducting this study has been obtained from the authorized persons to conduct the proposed study from the Dean of Faculty of Nursing Benha University to the director of geriatric homes in both Benha and Tanta City. This letter includes permission to carry out the study and explains the purpose and nature of the study.

Phase Two: Implementation phase:

- Each geriatric home (males and females) was interviewed individually after explaining the purpose of the study and getting approval to participate in the research.

- Data had been collected from geriatric home (males and females) at Benha City, Kaluobia Governorate, and the geriatric home in Tanta City, Gharbiya Governorate.
- Collection of data took five months from beginning of March /2017 to end of July / 2017.
- The researchers applied interview for elderly home two days a week from 12.00 am to 1.00 pm.
- The researchers last from 30-40 minute with each one of the involved subjects for collecting data and filling the questionnaire.
- Each subject was interviewed individually for ensuring privacy.

2.8. Statistical Analysis

The collected data were organized, categorized, tabulated and analyzed using Statistical Package for Social Science (SPSS) by computer. Numerical data were expressed as mean, standard deviation (SD). Qualitative data were expressed as frequency and percentage. Relation between different numerical variables were tested using Pearson product-moment correlation coefficient. P-value < 0.05 was considered significant.

3. Results

Table 1: shows that more than half of the sample age between 60- <70 year with the mean age is 66.2±7.730 years old, more than half of the sample (56%) were female, while half of them (50%) were widowed. Regarding to educational level of the studied sample, about nearly to two thirds of them (60%) have basic education while regarding to occupation about more than half (56%) were retired. It also illustrates that the residence of more than two thirds of them (64%) live is urban area and about two thirds of them (64%) their monthly income not enough.

Table 2 reveals that nearly to two thirds of the studied elderly (60%) have severe depression and one third of them (30.0%) have moderate depression. As for anxiety, it reports that more than of one third of them have severe and moderate anxiety (38%; 32%) respectively. Regarding level of the loneliness, majority of the studied sample (86%) have severe loneliness, while only less than one tenth of them (6.0%) of them have mild loneliness.

Table 3 shows that less than half of the sample were having sever level of somatic and affective symptoms of anxiety (42%, 38% respectively), and more than half of them were having moderate level of cognitive symptoms of anxiety (40. %).

Table 1. Frequency distribution of studied sample regarding socio-demographic characteristics (n=50)

Socio-demographic characteristics	n	%
Age		
40-<50 year	2	4.0
50-<60 year	6	12.0
60-<70 year	26	52.0
≥70 year	16	32.0
Mean ± SD	**66.2±7.730**	
Sex		
Male	22	44.0
Female	28	56.0
Marital status		
Single	13	26.0
Widowed	25	50.0
Divorced	12	24.0
Education level		
Illiterate	6	12.0
Basic education	30	60.0
University education	14	28.0
Occupation		
Retired	28	56.0
Employed	4	8.0
Unemployed	18	36.0
Residence		
Rural	14	28.0
Urban	36	72.0
Monthly income		
Enough	12	24.0
Enough and saves	6	12.0
Not enough	32	64.0
Geriatric home		
Benha	22	44.0
Tanta	28	56.0

Table 2. Distribution of the studied sample according to their level of depression, anxiety and Loneliness (n=50).

Scales	Mild		Moderate		Severe		Score	
	N	%	N	%	N	%	Range	Mean±SD
Total Depression	5	10.0	15	30.0	30	60. 0	0-40	15.36±10.08
Total Geriatric Anxiety Scale	15	30.0	16	32.0	19	38.0	25-75	49.24±15.47
Total Loneliness	3	6.0	4	8.0	43	86.0	32-55	48.76±4.50

Table 3. Distribution of the studied sample according to their level of anxiety and each subscale (n=50)

Scales	**Mild**		**Moderate**		**Severe**		**Score**	
	N	**%**	**N**	**%**	**N**	**%**	**Range**	**Mean±SD**
Somatic subscale	15	30.0	14	28.0	21	42.0	6-27	17.90±6.37
Cognitive subscale	11	22.0	20	40.0	19	38.0	8-24	15.96±4.69
Affective subscale	13	26.0	18	36.0	19	38.0	8-24	15.38±4.93
Total Geriatric Anxiety Scale	15	30.0	16	32.0	19	38.0	25-75	49.24±15.47

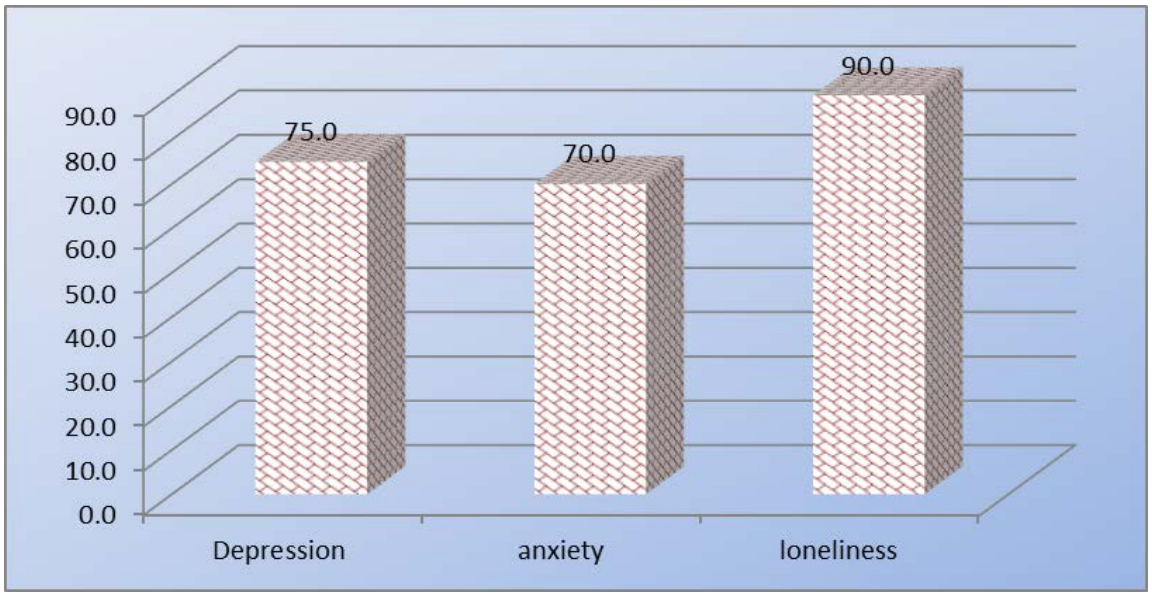

Figure 1. Distribution of total scores of depression, anxiety and loneliness among the studied sample (n=50)

Figure 1 shows that three quarters of the studied elderly (75%) have depression and more than two thirds (70%) have anxiety, while the majority of the them (90%) suffers from loneliness.

Table 4 illustrates that a highly statistical significant correlation found between total loneliness and total depression, also between total geriatric anxiety with depression at p value <0.001, while there is statistical significant correlation between total loneliness and total geriatric anxiety at p value<0.05.

Table 4. Correlation between total Depression, Anxiety and Loneliness Scales of the studied sample (n=50).

Scales		Loneliness Scale	Depression Scale
Depression	**R**	0.738	-
	P-value	<0.001**	-
Geriatric Anxiety Scale	**R**	0.455	0.538
	P-value	0.015*	<0.001**

**<0.001 a highly statistically significant, *<0.05 statistically significant.

Table 5. The relationship between socio-demographic characteristics of the studied sample and their level of depression (n=50)

Socio-demographic data		n	Total Depression Scale	F or T	ANOVA or T-test	
			Mean±SD		test value	P-value
Sex	Male	22	13.000±9.904	T	-1.485	0.144
	Female	28	17.214±10.001			
Age	40-< 50 year	2	5.000±0.000	F	1.605	0.201
	50-< 60 year	6	10.333±8.017			
	60-<70 year	26	15.769±8.315			
	≥70 year	16	17.875±12.800			
Marital status	Single	13	14.000±9.165	F	1.552	0.214
	Widowed	25	16.300±8.511			
	Divorced	12	11.000±9.005			
Educational level	Illiterate	6	11.333±9.852	F	0.548	0.582
	Basic education	30	15.733±10.133			
	University education	14	16.286±10.388			
Occupation	Retired	28	12.444±12.734	F	4.034	0.042*
	Employed	4	6.000±6.928			
	Unemployed	18	18.643±7.894			
Geriatric home	Benha	22	15.571±8.112	T	0.092	0.927
	Tanta	28	15.278±10.854			
Monthly income	Enough	12	18.563±11.233	F	7.765	0.001*
	Enough and saves	6	12.333±7.050			
	Not enough	32	13.000±13.000			

*<0.05 statistically significant.

Table 6. The relationship between socio-demographic characteristics of the studied sample and their level of Anxiety (n=50)

Socio-demographic data		N	Total Geriatric Anxiety Scale	F or T	ANOVA or T-test	
			Mean±SD		test value	P-value
Sex	Male	22	44.455±13.852	T	-1.997	0.052
	Female	28	53.000±15.868			
Age	40- <50 year	2	50.500±7.778	F	5.495	0.028*
	50-<60 year	6	51.000±17.967			
	60-<70 year	26	45.000±12.538			
	≥70 year	16	56.938±18.405			
Marital status	Single	13	58.375±9.441	F	2.149	0.107
	Widowed	25	50.750±15.532			
	Divorced	12	47.583±18.657			
Education level	Illiterate	6	43.833±17.383	F	2.100	0.134
	Basic education	30	47.133±15.001			
	University education	14	56.071±14.489			
Occupation	Retired	28	51.000±13.652	F	0.947	0.395
	Employed	4	39.750±16.153			
	Unemployed	18	48.611±17.919			
Geriatric home	Benha	22	48.571±16.204	T	-0.189	0.851
	Tanta	28	49.500±15.404			
Monthly income	Enough	12	51.500±16.833	F	1.341	0.271
	Enough and saves	6	57.333±9.709			
	Not enough	32	46.875±15.560			

*<0.05 statistically significant.

Table 7. The relationship between socio-demographic characteristics of the studied sample and their level of loneliness (n=50)

Socio-demographic data		N	Loneliness Scale	F or T	ANOVA or T-test	
			Mean±SD		test value	P-value
Sex	Male	22	48.000±5.674	T	-1.059	0.295
	Female	28	49.357±3.302			
Age	40-<50 year	2	48.120±0.000	F	12.298	<0.001*
	50-<60 year	6	48.559±0.000			
	60-<70 year	26	51.540±5.443			
	≥70 year	16	55.660±3.416			
Marital status	Single	13	46.89±1.773	F	4.347	0.025*
	Widowed	25	52.15±3.238			
	Divorced	12	50.11±7.247			
Education level	Illiterate	6	51.667±2.733	F	1.450	0.245
	Basic education	30	48.400±4.896			
	University education	14	48.286±3.950			
Occupation	Retired	28	48.071±5.142	F	0.967	0.388
	Employed	4	51.000±0.000			
	Unemployed	18	49.333±3.757			
Geriatric home	Benha	22	50.000±2.287	T	1.221	0.228
	Tanta	28	48.278±5.057			
Monthly income	Enough	12	49.500±1.168	F	1.305	0.281
	Enough and saves	6	51.000±1.789			
	Not enough	32	48.063±5.418			

*<0.05 statistically significant.

Table 5 reports that there is no statistical significant relationship found between socio-demographic characteristics of the studied sample and depression except with occupation and monthly income.

Table 6 illustrates that there is no statistical significant relationship found between socio-demographic characteristics of the studied sample and anxiety except with age.

Table 7 reveals that there is no statistical significant relationship found between socio-demographic characteristics and loneliness except with age and marital status.

4. Discussion

Old age is considered as a curse being associated with deterioration of all physical, psychological factors, isolation from social, economic and other activities. Old age has been viewed as problematic period of one's life where one indulges in introspection and starts getting meaning out of his life and weak physique makes them increasingly dependent on others and fearful anticipatory speculations of life process makes them anxious whereas, low income and consequent declining position in the family and society leaves them in deep despair [24].

The term old age brings to mind, the end of one's productive and fulfilling life. Understanding of this inevitable and essential part of one's life in bio-psychosocial perspective is thus needed as this stage is interdependent on previous stages and adjustment in old age is dependent on person's physical, psychological and social interaction. Psychiatric morbidity is one of the domains which can significantly influence the quality of life of elderly people. Because depression and anxiety are the most common psychiatric morbidity among elderly persons, understanding this issue is vital for comprehensive geriatric assessment and care, however, about half of cases are undiagnosed [20].

Present study aimed to assess depression, anxiety, and loneliness among elderly living geriatric homes. Regarding the socio-demographic features of the sample, the mean age of them was 66.2±7.730 that ranged from 60-<70 year. The researchers'' view of point that elderly people leave their homes due to conflicts as financial problems or bickering between elderly and their sons' wives. This result is consistent with [25], who stated that mean age for studied elderly was 66.1 ±3.5 ranged between 60-75 years old. This result inconsistent with the result by [26], who stated that the studied elderly ages that ranged from 65 to <75 years, also the result inconsistent with the result by [27], reveals that less than half of the studied sample their age between 85–94years with mean age 84.8 years (SD 7.6).

Concerning to sex, the present study revealed that more than half of the studied sample were females, this may be due to increased female longevity more than males their sensitivity and frequent mood swings due to hormonal changes in females that age. This result consistent with [28], who found that the majority of the elderly were female. In the other hand this result inconsistent with [29,30], who founded that more than half of the elderly comprised of males.

In the current study, it was evident that half of the studied sample (50%) were widowed, which indicates that being widowed is considered one of the main causes for admission in residential home. This may be due to that the fact that females in Egyptian culture are married younger than males so that, loss of spouse is much more frequent for women than for men. This result agreement with [31,32], who stated that more than half of elderly were widowed. In the other hand this result disagreement with study result by [33,34] who stated that most of the studied elderly were married.

Regarding to level of education nearly to two thirds have basic education. This may be because there was a widespread belief that marriage was best than education for girls or due to lower economic status. This result consistent with result of a study by [35] his result illustrated that less than one third have secondary school. This result disagreement with result by [36], who founded about one third of the elderly were illiterate. While the result by [37], showed that about one-third had no formal education.

Concerning to occupation, about more than half were retired. This result agreement with result by [38] who founded that more than one third of the elderly retired. This result disagreement with [39], who found that the majority of the studied sample did not work. Also the result disagreement with result by [40], whose result illustrated that more than one third of elderly were farmers. In the same side the result inconsistent with result by [36], whose result reveals that nearly to two thirds of the elderly sample were working and earning.

The results of current study showed that more than two thirds of them live in urban area. This may be due to people in rural areas are still live in extended families and they still stick to the family raptures than in urban. This result consistent with [41], whose result illustrated that more than half of the studied elderly live in urban area. This result inconsistent with result by [42], who stated that half of the studied sample lives in rural.

The findings revealed that about two thirds of them their monthly income not enough. This may be due to most sample were retired. The result supported also with the result by [34], who stated that more than two thirds of the sample were financially dependent on others. In the other side, this result inconsistent with [43], who stated that the majority of the sample had no monthly income.

Concerning to the level of the depression among the studied elderly in the current findings, it was evident that nearly to two thirds of the elderly living in old-age homes were having severe depression. From the view point of researchers, the reasons could be being detached from family; having no privacy; lacking special care, love, and affection which represents a stressor, which is close to the findings of many prior studies in Egypt exploring depression prevalence among the elderly population. For example, [44,45], measured elderly depression prevalence and identified that the majority of the elderly population was found to suffer from severe depression. Also, a study done in Cairo by [46], exhibited that the estimated depression prevalence among elderly people was more than half. Finally, in a study carried by [32], whose result represents that reveals that, more than half among studied institutionalized elderly reported that they had high levels of depression. Carefully examining the literature, depression is the most common mood disorder in elderly People [47].

In the same side, this result agreement with the study result by [42], who stated that about two-thirds of elderly suffered from depression. In a study carried by [48], his study illustrated that more than half of the institutionalized elderly were having severe depression. Carefully examining the literature, [49], who stated that depression among the elderly a major public health concern that attracts worldwide attention. Its prevalence rates range between 10 and 55%. The explanation of this great variation in the prevalence of depression among the elderly may be the variation in the study design and sampling technique, variation in socioeconomic-demographic factors and variation in the geriatric depression scales used.

As for anxiety level among the studied elderly, it reports that more than of one third of them have severe and moderate anxiety. From the view point of researchers, this may be due to the unfavorable financial situation experienced by Egyptian population in recent years or due to the lack of a psychosocial support network both for the elderly individuals and for their families. Another causes for the presence of anxiety older age, sex, insufficient income, a lower social class, a partially independent functional status, the presence of comorbidities, more frequent loneliness feeling and being married or divorced were found to be significant predictors for these problem.

This was in agreement with the result by [30], who stated that an anxiety score higher of the sample, stating the presence of anxiety symptoms. The study result by [50] supported the present study as it represented that anxiety levels in the elderly were particularly high. Also the result of the current study was congruent with result by [51], found that, more than one-third of residences at geriatric home have higher level of anxiety than more than quarter of non-residences at geriatric home. In the other side, the result disagreement with [52], who found that more than two thirds of respondents had no anxiety. Also [53], stated that most of the elderly in geriatric homes geriatric homes suffer from negative life events like divorce, loss of spouse, rejection of care and support by family members, which makes them more prone to psychological problems such as anxiety and depression than elderly living with their families. Other causes stated by [4], the elderly living in geriatric homes often confront problems due to highly institutionalized, depersonalized and bureaucratic atmosphere in OAHs. Elderly living in such homes face problems of adjustment with tight and rigid schedules, separation from the family, isolation from the social milieu, anxiety over adopting oneself to a new environment and close encounters with death and ailment in the institutions. These factors make the older adults living in geriatric homes vulnerable to psychological problems

Regarding level of the loneliness, majority of the studied elderly were having severe loneliness. This may be due to living arrangements may have negative effects on psychological health of residents, and it is accompanied by their feeling of lack of control over one's own life, and inability to make decisions regarding daily issues. Residences at geriatric home feel neglecting from others, feeling of boring and isolation from society. Other reasons retirement, disability or illness, absence of an intimate partner, family members, friends and acquaintances reduced the structure and the quality of their social network and social integration and results in the emergence of loneliness. This result familiar to with the result by a study by [48], whose result shows that loneliness was more among institutionalized elderly as compared to non-institutionalized elderly. Also the result consistent with a study by [39], whose result showed the prevalence of moderate and severe levels of loneliness among elderly. In the other side, the result is congruent with the result by [54], which shown that the majority of the sample had no loneliness.

Concerning to level of somatic symptoms of anxiety among elderly sample. the result reveals that less half of the sample were having sever level of somatic symptoms of anxiety, sever level of affective symptoms, also more than half of them were having moderate level of cognitive symptoms of anxiety. This result consistent with literature that the clinical manifestation of anxiety in the elderly is defined as a condition of excessive feeling of fear, concern, terror, nervousness, irritability, inability to concentrate and to pay attention as well as sleep disorder. The feeling of pressure or “heaviness” in the chest or throat and that of pain in various body areas prove the embodied form of anxiety, which requests targeted treatment, palliative interventions and special care [55].

Concerning to the aim of the present study to assess depression, anxiety, and loneliness among elderly living in geriatric homes in order to understand how often older people living in long term care develop these problem. The result illustrates three quarters of the studied elderly have depression and more than two thirds have anxiety, while the majority of the them suffers from loneliness. From the researcher point of view this may be due to in our Egyptian society, the emerging social and cultural transformations are leading to a decline in traditional family values as we are segregating from joint family system, which is directly affecting elderly population particularly in the form of institutionalization. This changing value system makes elderly people mentally isolated from their families that make them vulnerable for psychological disturbances such as death anxiety and depression. Previous reviews supported the results of the present study by [18], whose results indicated that the prevalence rates of loneliness, anxiety, and depression in older people living in long-term care settings are generally high. Also the result supported by [56], study involved older people with cognitive impairment, which is associated with increased risk of loneliness and depression.

The present study illustrates that there is a highly statistical significant correlation between loneliness and depression. The researcher view that this may be due to that the elderly reside in the old age home and leave his family and live alone, which feeling of loneliness lead to feeling of depression. Other causes, Loneliness were the source of many of the mental problems such as depression, suicide and despair. These might have been due to the fact that, limited social network and loneliness were associated with depressive symptoms and depression. Many people experience loneliness either as a result of living alone, a lack of close family ties, reduced connections with their culture of origin or an inability to actively participate in the local community activities when this occurs in combination with physical disablement, demoralization and depression are common accompaniment.

This result is consistent and similar association between loneliness and depression has been documented in previous studies of [57,58]. Some of the previous studies suggest that loneliness can be a risk factor for developing depression and it can increase the severity of depression [59,60]. It can be said that higher level of depression leads to loneliness and vice-versa. An important factor which significantly affects depression in the elderly is loneliness. Loneliness is a negative and multilateral emotion. It is a unique, complex and painful experience with direct consequences on the individual's spiritual and social life affecting at the same time the physical and psycho-emotional condition [61].

In the same side, the result of the present study goes with [62], who found that, depression with feelings of loneliness leads to more pronounced motivational depletion and serious consequences, including social isolation, reduced self-care, decreased mobility and poor diet. In the same line, [63], demonstrated that, an older person in good physical health had a relatively low risk of depression. Physical health is indeed a major cause of reduced depression in late life. There were many reasons for this, which include the psychological effects of living with an illness and disability, the effects of chronic pain; the biological effects of some conditions and medications that can cause depression through direct effects on the brain; and the social restrictions that some illnesses place upon older people's life style resulting in isolation and loneliness. Other studies have revealed that a gradual increase in depressive symptoms predicted loneliness [64]. Current researchers suggest that, feeling lonely may not only depends on the number of connections one has with others but also whether or not one is satisfied with his life style. An expressed dissatisfaction with available relationships is a more powerful indicator of loneliness.

The present study illustrates that there is a highly statistical significant correlation between total geriatric anxiety with depression of the studied elderly at p value <0.001.This mean that anxiety increase the depression among the elderly. The present study illustrates that there is statistical significant correlation between total loneliness and total geriatric anxiety at p value <0.05. Considering normal separation, anxiety corresponds to an individual's painful sense of fear when an affective relationship with an important person in one's circle is threatened with interruption or is actually interrupted. The interruption may result from loss of the affective link (loss of love), or it may be due to the actual loss of the important person. Phantasies of separation tend to be confused with ones of loss, and separation is then experienced as a loss.

This result consistent with findings by [6], who found a significant positive relationship between loneliness and anxiety in older adults. This is also consistent with [65], who stated that while anxiety is generally considered a high-energy state and depression a low-energy state, anxiety and depression are more closely related than you might think. A person with depression often experiences a lot of anxiety, possibly even to the extent of having panic attacks. Just as anxiety and depression tend to be worse when occurring together, treatment of these disorders is most effective when both conditions are addressed at the same time.

The present study shows that there is no statistical significant relationship found between sex, age, marital status, educational level and older home place with depression. This result consistent with the result of the study by [66,67], who stated that association was not seen among the age, sex, educational level, and marital status and older home place. In the other side, there is statistical significant relationship found between age, marital status, and educational level of the elderly in a study carried by [30].

The present study also shows that significant relationship found between occupation and level of depression with the highest percentage was pensioner. From the researcher point of view, this may be due to that older persons in age of pension is being alone comparing to the past, in addition to external pressures such as limited financial resources, often give rise to negative emotions such as depression sadness, anxiety, loneliness, and lowered self-esteem, which in turn lead to social elderly late-life events including chronic and debilitating medical disorders, failing eyesight, hearing loss, and other physical changes, this events lead to may be early retired.

Other causes of depression among person in pension that many people, work brings a sense of usefulness and purpose. There is a lifelong desire to be a good provider for one's family, an achiever and a useful part of society. The person's sense of self is tied up very strongly in what he or she does for a living; and, with retirement, a sense of loss can occur, leaving a person struggling to understand who they are and what their value is. Another reason for depression is the fact that that the dynamics at home are changing. Where one or both spouses may have worked out of the home and been away a significant portion of the day, now both spouses may be spending more time at home together, or one reside in elderly homes. Roles may be changing and a greater need for joint decision-making may be occurring. Finally, retirement may be seen as a reminder of the fact that the person is aging, with fears about death, sickness, and disability arising [68].

The present study shows that there is significant relation between monthly income and depression level with the highest percentage of monthly income not enough. From the researcher point of view this may be due to insufficient income resulting from over needs in the Egyptian community daily, also the majority of the sample were retired with no job and low income this lead to increase depression among them. This result supported with the result by [69], whose result reveals that low socioeconomic status was found to be associated with severe depression symptoms in both men and women.

In our study the result illustrates that there is statistical significant relationship found between age and total anxiety level of elderly with the highest percentage being among the 60-70years. From the researcher point of view this may be due to that the elderly face a life stressful event such as the loss of loved ones, progressive health impairment and disability, reduced mobility, chronic pain, a drop in socioeconomic status with retirement which makes them vulnerable to emotional disturbance. The aged can be regarded as a risk population with increase their age that is confronted with illness, dependency, social isolation, loneliness or psychological distress such as anxiety.

The present study reveals that there is statistical significant relationship found between age and loneliness with the highest percentage being among the 60-70years. From the view point of the researcher this may be due to Egyptian old age is living with no future to look forward to and consider themselves in the last stage of life. In addition, growing of age can decrease social network size, decrease social roles, increased functional limitations, social isolation, and chronic diseases for elderly people that reduce social involvement. Also, deaths of friends or family members may cause their feeling of loneliness. So, all of these factors explain the effectiveness of age on feeling of loneliness.

The finding of [70], were consistent with our results. Also, finding by [32], study finding also showed that, statistically significant difference was found between feeling loneliness and age among the studied elderly. This indicates that age can affect on feeling of loneliness through old age with 60-70years is more easily influenced to feel loneliness especially after retirement phase. In contrast, in a study by [71], observed a significant relationship between age. This result also inconsistent with other study showed that age did not affect loneliness [39].

Concerning to the relation between marital status and loneliness of elderly with the highest percentage being among widow elderly. The present study reveals that there is statistical significant relationship found. From the view point of view of the researcher, it may be due to that never widowed, in contrast to married, and who live in nursing home in contrast to those living with spouse or children had expectantly more feeling of loneliness. The reason having a spouse is a factor that prevents individuals from loneliness. Lack of a secure attachment figure in one's life such as a spouse may cause emotional loneliness. Other result supported the present study by [72], who founded that marital status were significant predictors of loneliness. Loneliness increased with windowed participants reported higher loneliness than single or married people. In the other hand, this result disagreement with a study by [34], who found that marital status did not affect loneliness.

5. Conclusion

This study clearly concludes that, the elderly whose living in geriatric homes had higher levels of depression, anxiety and loneliness. There is also a highly statistical significant correlation between total loneliness and total depression, also between total geriatric anxiety and depression at p value <0.001, while there is significant correlation between total loneliness and total geriatric anxiety at p value <0.05. The present study showed that there is no statistical significant relationship found between socio-demographic characteristics and depression, anxiety and loneliness except with occupation and monthly income, with age and marital status respectively.

6. Recommendations

Results from this study highlight the need for the following recommendations:

1. Intervention program or measures to manage or overcome anxiety, depression and loneliness.
2. There must be a social and health programs for caregivers in elderly home about the importance of family support for the elderly in our community.
3. Institutionalized elderly should be encouraged to participate in regular physical and recreational activities including exercise and sports to enhance their physical, social, psychological health and wellbeing.
4. A specialized Gerontological mental health nurses should be there for elderly living geriatric homes in Egypt.
5. Further studies are needed on large numbers of elderly people in different geographical areas to generalize results.
6. Merging between geriatric homes and orphans' home to decrease anxiety and depression among them.

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References

[1] World Health Organization, WHO, (2018). Ageing and health. Available at: https://www.who.int/news-room/fact-sheets/detail/ageing-and-health. Accessed on: 2/3/2019.

[2] Maktha, S., & Kumar, M. (2015). Study on level of depression among elderly residing in an old age home in Hyderabad, Telangana. The International Journal of Indian Psychology. Volume 3, Issue 1, No.6. PP. 12-17.

[3] Dahlberg, L., Andersson, L., McKee, K., & Lennartsson, C. (2015). Predictors of loneliness among older woman and men in Sweden: A longitudinal study. Aging and Mental Health, 19, 409-41.

[4] Akbar, S., Tiwari, S.C., Tripathi, R., Pandey, N., & Kumar, A. (2018). Prevalence of psychiatric illness among residents of old age homes in Northern India. J Neurosci Rural Pract. 9(2): 193–196.

[5] Sridevi, G., & Swathi, R. (2014). Death anxiety, death depression, geriatric depression and suicidal ideation among institutionalized and non-institutionalized elders. International Journal of Scientific and Research Publications, Volume 4, Issue 10. PP.1-8.

[6] Khademi, M., Rashedi, V., Sajadi, S., & Gheshlaghi, S. (2015). Anxiety and loneliness in the Iranian older adults. International Journal of Psychology and Behavioral Sciences. 5(2): 49-52

[7] Bekta, H., Körükcü, Ö., & Kabukcuoğlu, K. (2017). Undercover fear of elderly people in nursing home: Death anxiety and depression. Journal of Human Sciences, 14(1), 587-597.

[8] Babazadeh, T., Sarkhoshi, R., Bahadori, F., Moradi, F., Shariat, F., & Sherizadeh, Y. (2016). Prevalence of depression, anxiety and stress disorders in elderly people residing in Khoy, Iran (2014-2015). J Anal Res Clin Med. 4(2): 122-8.

[9] Dastbaaz, A., Yeganehfarzand, S., Azkhosh, M., & Shoaee, F. (2014). The Effect of group counseling "Narrative Therapy" to reduce depression and loneliness among older women. Iranian Rehabilitation Journal, Vol. 12, No. 20, PP.11-15.

[10] Goud, A., & Nikhade, N. (2015). Prevalence of depression in older adults living in old age home. IAIM; 2(11): 1-5.

[11] Ann, M. (2014). Depression and anxiety in older people. Available at. https://nationalseniors.com.au/uploads/0714826PAC_PAF_FactSheet_DepressionAndAnxiety_FN_0.PDF. Accessed on 7-3/2019.

[12] Praveen, B.A., Udayar, S., Sravan S., & Arun, D. (2015). Depression and anxiety among the elderly persons from institutional and non-institutional settings in the field practice area of a tertiary-care institute, Andhra Pradesh: a comparative study. Int J Med Sci Public Health 2015; 4 (Online First).

[13] Aung, K., Nurumal, M., & Bukhari, W. (2017). Loneliness among elderly in Nursing homes. International Journal for Studies on Children, Women, Elderly and Disabled, Vol. 2, PP.71-78.

[14] Higuchi, M. (2018). Managing loneliness in the elderly and finding meaning in ageing. J Comp Nurs Res Care 3: 125.

[15] Pitkala, K. (2016). Loneliness in nursing homes. J Am Med Dir Assoc. 1;17(8):680-1.

[16] Ong, A., Uchino, B., & Wethington, E., (2016). Loneliness and health in older adults: A mini-review and synthesis. Gerontology. 62(4): 443–449.

[17] Ahmed, D.1., El Shair, I., Taher, E., & Zyada, F. (2014). Prevalence and predictors of depression and anxiety among the elderly population living in geriatric homes in Cairo, Egypt. J Egypt Public Health Assoc. Dec; 89(3):127-35.

[18] Elias, S. (2018). Prevalence of loneliness, anxiety, and depression among older people living in long-term care: A Review. International Journal of Care Scholars (IJCS). 1(1), 39-43.

[19] Barjam, L. (2015). A Comparative study on the level of depression between older women living in retirement homes in the City of Tirana and those living with their families in Tirana As Well. American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS). Volume 14, No 2, pp 80-90.

[20] Sharan, P., & Rai, S. (2016). Anxiety and Depression in Women in India. Available at: http://www.womenshealthsection.com/content/print.php3?title=gynmh001&cat=54&lng=english. Accessed on. 7/3/2019.

[21] Beck, A. (1996). Beck Depression Inventory BDI-II. (Appendix 14 Beck Depression Inventory).

[22] Segal, D.., June, A., Payne, M., Coolidge. F., & Yochim, B. (2010). Development and initial validation of a self-report assessment tool for anxiety among older adults: The Geriatric Anxiety Scale. Journal of Anxiety Disorders; 24(7):709-14.

[23] Russell, D. (1996). The UCLA Loneliness Scale (version 3): Reliability, validity, and factor structure. Journal of Personality Assessment, 66, 20-40.

[24] Panday, R., & Kumar, B. (2017). Quality of life among elderly living in old age home: a brief overview. Delhi Psychiatry Journal. Vol. 20 No. 2.PP.1-6.

[25] Badr, S., & Shaheen, H. (2017). Health status, family support and depression among residents of elderly homes and those living with Families in Benha City and Associated Factors. The Egyptian Journal of Community Medicine. Vol. 35 No. 1, PP. 81-97.

[26] Esmayel, E., Eldarawy, M., Hassan, M., Mahmoud, A., & Mohamed. S., (2013). Mental health problems and socio-demographic correlates in elderly medical inpatients in a University Hospital in Egypt. Current Gerontology and Geriatrics Research.Volume 2013, Article ID 923710, 4 pages.

[27] Drageset, J., Dysvik, E., Espehaug, B., Natvig, G., & Furnes, B. (2015). Suffering and mental health among older people living in nursing homes—a mixed-methods study. PeerJ 3:e1120.

[28] Abdul Manaf, M.,Mustafa, M., AbdelRahman, M., Aziz, N., and Hazadi, K. (2016). Factors influenhing the prevalence of mental health problems among Malay elderly residing in a rural community: a cross sectional study. PlosOne.

[29] Grover, S., Avasthi, A., Sahoo, S., Lakdawala, B., Dan, A., Nebhinani, N., et al (2018). Relationship of loneliness and social connectedness with depression in elderly: A multicentric study under the aegis of Indian Association for Geriatric Mental Health. J GeriatrMent Health; 5: 99-106.

[30] Vasilopoulos, A., Marinou, S., Rammou, M., Sotiropoulou, P., Roupa, Z., & Siamaga, E. (2018). A research on anxiety and depression of the elderly in the community. Hellenic Journal of Nursing Science 11(3): 59-66.

[31] Gonzalez, R. (2015). Risk factors associated with depression and anxiety in older adults of Mexican Origin. Dissertation submitted in partial fulfillment of the requirements for the degree of doctor of philosophy clinical psychology. Walden University.

[32] Hassan, W., Abd El-Halim, Z., Ahmed, S., & Mostafa, N. (2017). Psychological problems as perceived by institutionalized and non-Institutionalized elderly. Journal of Education and Practice.8, (33). PP. 61-67.

[33] Soni, S., Shukla, M., & Kumar, M. (2016). Prevalence of depression and associated risk factors among the elderly in rural field practice areas of a tertiary care institution in Katihar, Bihar. International Journal of Advances in Medicine.Nov; 3(4): 1016-1019.

[34] Arslantaş, H., Adana, F., AbacigilErgin, F., Kayar, D., & Acar, G. (2015). Loneliness in ederlypeople. Associated factors and its correlation with Quality of life: A Field Study from Western Turkey. Iran J Public Health; 44(1):43-50.

[35] Sayied, N., & Abd-Elaziz, N. (2015). Effect of Counseling Sessions as a Nursing Intervention on Depression and Loneliness among Elderly at AssiutCity. IOSR Journal of Nursing and Health Science. Volume 4, Issue 6. PP 16-22.

[36] Udayar, S., Patil, S., & Vadivel, K. (2016). Study of socioeconomic factors in relation to depression among elderly people living in rural area of and hra Pradesh. National Journal of Community Medicine. 7(5): PP.382-385.

[37] Abu-Bader, S., Hamed, E., & Alqdah, T. (2017). Prevalence of depression among older Arab individuals in the Middle East: A study of Egypt and Jordan. Journal of Muslim Mental Health. Volume 11, Issue 1.PP. 57-59.

[38] Bektaş, H., Körükcü, Ö., & Kabukcuoğlu, K. (2017). Undercover fear of elderly people in nursing home: Death anxiety and depression. Journal of Human Sciences, 14(1), 587-597.

[39] Vakili, M., Mirzaei, M., & Modarresi, M. (2017). Loneliness and its related factors among elderly people in Yazd. Elderly Health Journal; 3(1): 10-15.

[40] Kafle, B., Sharma, V., Ojha, S., Chapagain, M., Tulachan, P., & Dhungana, S. (2015). Prevalence of depression among elderly living in old age homes of Kathmandu Valley and its association with Socio-demographic variants. J Psychiatrists' Association of Nepal Vol .4, No.1. PP.43-47.

[41] El-Gilany, A., Sarraf , B., & Elkhawaga, G. (2018). Depression and its associated factors among elderly: A community-based study in Egypt. Archives of Gerontology and Geriatrics. 77, 103–107.

[42] Aly, H., Hamed, A., & Mohammed, N. (2018). Depression among the elderly population in Sohag governorate. Saudi Med J; Vol. 39 (2).

[43] Kumar, R., Satapathy, S., Adhish, V., & Nripsuta, S. (2017). Study of psychiatric morbidity among residents of government old age homes in Delhi. J Geriatric Mental Health; 4:36-41.

[44] El-Sherbiny, N., Younis, A., & Masoud, M. (2016). Comprehensive assessment of the physical, nutritional, and psychological health status of the elderly populace in the Fayoum Governorate (Egypt). Arch Gerontological Geriatric; 66: 119-126.

[45] El Kady, H., & Ibrahim, H. (2013). Depression among a group of elders in Alexandria, Egypt/Depression dans ungrouped'anciens Alexandria (Egypt). Eastern Mediterranean Health Journal; 19: 167.

[46] Al-Kholy, R., El-Meshmeshy, E., & Saleh, A. (2016). Prevalence of geriatric depression among attendants of the family medicine outpatient clinics, in Kasr Al-Ainy, Faculty of Medicine: A Cross-Sectional Descriptive Study. Medical journal of Cairo University; 84: 97-106.

[47] Raspopovic, D., Maric, N., Nedeljkovic, U., et al. (2014). Do depressive symptoms on hospital admission impact early functional outcome in elderly patients with hip fracture? Psychogeriatrics. 14(2):118-23.

[48] Kaur, J., & Bajwa, A. (2017). A Comparative study to assess the prevalence of depression and loneliness among institutionalized and non-institutionalized elderly In selected community in district Amaritsar And Tarntaran(Punjab).

[49] Roh, H., Hong, C., Lee, Y., Oh, B., Lee, K., Chang, K., et al. (2015). Participation in physical, social, and religious activity and risk of depression in the elderly: A community-based three-year longitudinal study in korea. PLoS ONE, 10(7), e0132838.

[50] Kang, H., Bae, K., Kim, S., Shin, I., Yoon, J., & Kim, J. (2016). Anxiety symptoms in Korean elderly individuals: a two-year longitudinal community study. International Psychogeriatry. 28: 423-433.

[51] Singh, R., Lall, B., & Jain, V. (2013). Psychosocial problems: An issue among the elderly in Kathmandu, Nepal. International journal of health sciences and research,3(6), 48-53.

[52] Timalsina, R. (2013). Factors associated with elderly anxiety and depression. A Research Report. Availableat: http://library.nhrc.gov.np:8080/nhrc/bitstream/handle/123456789/523/696.pdf?sequence=1.

[53] Rahman, A. (2013). Anxiety and depression in lone elderly living at their own homes & going to geriatric clubs versus those living at geriatric homes. Available at: http://www.globalaging.org/health/world/2006/egyptelderly.pdf.

[54] Victor, C., & Bowling, A. (2012). A Longitudinal analysis of loneliness among older people in great Britain, The Journal of Psychology, 146:3, 313-331.

[55] National Institute of Mental Health, (2016). Anxiety disorders: Available at http://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml. Accessed 22.3.2019.

[56] Nikmat, A., Hashim, N., Omar, S., & Razali, S. (2015). Depression and loneliness/social isolation among patients with cognitive impairment in nursing home. ASEAN Journal of Psychiatry; 16(2):222-31.

[57] Aylaz R., Aktürk, Ü., Erci, B., Öztürk, H., & Aslan, H. (2012). Relationship between depressionand loneliness in elderly and examination of influential factors. Arch GerontolGeriatr; 55: 548-54.

[58] Desai, R., Abraham, D., Harshe, D., Ramakrishnan, A., Cholera, R., & Kale, S. (2016). Study of depression, perceived loneliness, cognitive function and independence in daily activities in home and institution based older people: A cross sectional comparative study. J GeriatrMentHealth; 3:140-4.

[59] Santini, Z., Fiori, K., Feeney, J., Tyrovolas, S., Haro, J., Koyanagi, A, et al. (2016). Social relationships, loneliness, and mental health among older men and women in Ireland: A prospective community-based study. J Affect Disord 2016; 204:59-69.

[60] Houtjes, W., Meijel, B., Van, M., Deeg, D., Tilburg, T., Beekman, A, et al. (2014). The impact of an unfavorable depression course on network size and loneliness in older people: A longitudinal study in the community. Int J Geriatr Psychiatry; 29:1010-7.

[61] Tiwari, S. (2013). Loneliness: A disease? Indian Journal of Psychiatry 55: 320-322.

[62] Sayied, N., & Abd-Elaziz, N. (2015). Effect of Counseling Sessions as a Nursing Intervention on Depression and Loneliness among Elderly at AssiutCity. IOSR Journal of Nursing and Health Science. Volume 4, Issue 6. PP 16-22.

[63] Singh, A., & Misra, N. (2009). Loneliness, depression and sociability in old age Ind Psychiatry J. Jan-Jun; 18(1): 51-55.

[64] Dahlberg, L., Andersson, L., McKee, K., & Lennartsson, C. (2015). Predictors of loneliness among older woman and men in Sweden: A longitudinal study. Aging and Mental Health, 19, 409-41.

[65] Healthy Place, (2016). Relationship between depression and anxiety. Available at: https://www.healthyplace.com/depression/anxiety-and depression/relationship-between-depression-and-anxietyAccess 12/12/2018.

[66] Bhattarai, B., & Poudyal, S. (2018). Depression among elderly people attending at Senior Citizen Home, Bhaktapur. Journal of Manmohan Memorial Institute of Health Sciences, 3(1), 36-44.

[67] Thilak SA, Sarada AK, & Neloopant SA. (2016). Prevalence and factors associated with depression among the elderly in rural areas of Kannur, North Kerala, India-a cross sectional study. Int J Community Med Public Health; 3:1986-91.

[68] Schimelpfening, N. (2018). How to deal with depression after retirement. Available at: https://www.verywellmind.com/depression-after-retirement-1067239.Accessed on .22/3/2019.

[69] Zhou, X. et al., (2014). The prevalence and risk factors for depression symptoms in a rural Chinese sample population. PLoS One. 9, e99692 (2014).

[70] Khosravan, S., Alaviani, M., Alami, A., Tavakolizadeh, J. (2014). Epidemiology of loneliness in elderly women. Journal of Research & Health; 4: 871-7.

[71] Teh, J., Tey, N., & Ng, S. (2014). Family support and loneliness among older persons in multiethnic Malaysia. The Scientific World Journal. V.

[72] Neto, F. (2014). Socio-Demographic predictors of loneliness across the adult life span in Portugal.An International Journal on Personal Relationships, l 8(2). PP.222-230.