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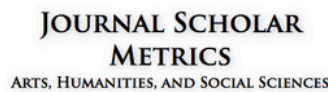
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A Comparative Study of Depression in Elderly Institutional Residents and Elderly Home Residents

Shemaila Saleem

Federal Medical and Dental College, Islamabad, Pakistan

Tamkeen Saleem*

Shifa Tameer-e-millet University, Islamabad, Pakistan

Mohammad Tahan

University of Tehran, Tehran, Iran

Irshad Ahmed

International Islamic University, Islamabad, Pakistan

ABSTRACT

When people experience aging, their need for care and institutionalization rises. Sending Parents to elderly or nursing homes has been prevalent in western countries while not a standard practice in Eastern communities. The present study based on a cross-sectional study design aspired to compare the depression in elderly institutional residents and elderly home residents. A purposive sample of 150 elderly were assessed for depression by using the Beck Depression Inventory-II. The results indicated that the level of depression was significantly higher in institutionalized elderly compared to the elderly living in their homes with families. Further, elderly females reported higher depression in comparison to elderly male respondents. Moreover, findings indicate that the institutionalized elderly had moderate to severe levels of depression and that the elderly home residents had no to a mild mood disturbance. The elderly may feel more psychological health living with families. The study concludes that elderly individuals living in institutional homes were much more suffering from depression as compared to elderly individuals living at home with families. The concerned authorities should devise strategies to enhance the mental health and quality of life of the elderly which may contribute to reduce the prevalence of depression.

Key words: depression; elderly, nursing homes, living with family.

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Novelty and Significance

What is already known about the topic?

- There is consensus on the low quality of life of the elderly.
- Likewise, there is a consensus that living in a family is an important aspect for the well-being of the elderly.
- There are abundant data on the prevalence of affective disorders in the elderly.

What this paper adds?

- The results show that mental health of elderly population in institutionalized care is low.
- The results show that depression in elderly living in institutional-homes is higher than in elderly living in family-homes.
- Elderly females show higher depression in comparison to elderly males.

The extraordinary expansion in human life expectancy is one of the most remarkable outcomes of medical advancement and health awareness in the XXI century. As per the World Health Organization (2002), in the XXI century an increase in population aging is expected. It will happen across the globe, including the Eastern Mediterranean Region.

* *Correspondence:* Dr. Tamkeen Saleem, Department of Clinical Psychology, Shifa Tameer-e-millet University, Islamabad, Pakistan, Email: tamkeen.dcp@stmu.edu.pk. Acknowledgments: The authors thank Dr Tahan, for their Cooperation in Article, as well as anonymous reviewers. Data Availability Statement: The raw data supporting the conclusions of this manuscript will be made available by the authors, without undue reservation, to any qualified researcher.

By the year 2025, the global population with over and above the age of 60 will be around 1.2 billion. By 2050 it will reach 2 billion. There will be almost 22% of the population in the age bracket of 60 and above, and out of these, 4% are expected to be 80 years and above (Bloom, Canning, & Fink, 2010; World Health Organization, 2002).

Similarly, demographic trends in the Kingdom of Saudi Arabia (KSA) are also changing, and there is an increase in the aging population. Life expectancy has gained a boost from 64.4 years in 1980 to 74.3 years at present as per recent statistical reports (World Bank, 2014). In 2015, elderly population was only 5% of the population in KSA, nevertheless, it is likely to reach to 20.9% by 2050 and 33.5% by 2100 (United Nations, 2015). Research suggests that suggest as the Saudi population is aging, more, which will be a challenge in Kingdom of Saudi Arabia The total number of elderly people 1.5 million in 2015, and it is expected to rise to 4.3 million by 2030 in KSA (Alsulami, & Atkins, 2016) and more scientific research is required to understand the experience and problems of aging with a specific underscoring on issues relevant to older people (Karlín, Weil, & Felmban, 2016). When people experience aging, their need for care rises. It is not only physical or basic needs; they require special attention in terms of their psychological needs as their psychological vulnerability increases. All this calls for the development of a comprehensive plan to take care of their psychosocial and physical needs.

The government of KSA has paid great attention for care of the elderly population. There have been various initiatives taken by the Ministry of Labour and Social Development to enhance the quality of life of the elderly in the society as well as in caring homes. There have been various social care homes developed for the care of elderly population to support their rights, care and improve their living quality. The social homes accommodate all male and female citizen over the age of 60 years, unable to daily chores on his/her own or live independently, not having family support to care, sick or financially constrained. As the proportion of elderly people is increasing, it is expected that the elderly people resident in social care homes and nursing homes will also rise -for example, there are more than 62 nursing homes in Jeddah (Arab News, 2014), which marks an exceptional level of increase in the population of elderly institutional residents.

The majority of previous studies have focused on long-term health care, hospital settings and home healthcare programs (Almoajel *et alia*, 2016; Al-Surimi *et alia*, 2019) focusing on the quality of life of patients (Lang *et alia*, 2006). However, studies assessing the mental health of elderly population in institutionalized care is very limited. There has been only one study found on the social care homes in Saudi Arabia and that too focused on the aspect of use of technology for assisting in monitoring health and daily activities of elderly (Alsulami, 2019). Depression has been assessed in elderly but that focused on elderly population accessed for health centres (Al-Shammari & Al-Subaie, 1999; Alabdulgader *et alia*, 2021; Alkhamash *et alia*, 2022). Therefore, the present study aimed to assess depression in elderly institutional residents and elderly home residents. It is hoped that the results will provide an empirical evidence-base for measuring and improving the mental health of elderly in the contexts in the region.

Depression is one of the most common psychiatric disorders among the elderly, compromising their quality of life significantly. Generally, around 23-40% of elderly individuals suffer from depression, whereas the prevalence of depression among the elderly institutional residents' ranges from 25-80% (Lampert & Rosso, 2015). The prime factors responsible for causing depressions were solitude and social seclusion, loss of

independence, loss of autonomy and self-determination, fear of death, deficiency of staff, and lack of domestic activities (Choi, Ransom, & Wyllie, 2008). Also, the elderly often suffer from various ailments and need to be taken care of. Shifting them to a nursing home makes it difficult for them to adjust to the new environment with all the disabilities. Self-esteem and depression are associated with social support, attending religious festivities, and the duration of stay at home (Fessman & Lester, 2000). Research has shown that elderly women are more prone to suffer from depression than their male counterparts. The psychosocial predictors of gender differences are widowhood/living alone, poor health and chronic illness, financial strain and poverty, cognitive decline or dementia, and caregiving (Girgus, Yang, & Ferri, 2017).

Sending Parents to elderly or nursing homes has been prevalent in western countries. However, these were not standard practices in Eastern communities. Still, today it evokes a sense of shame in people if they send their parents or are ridiculed by society. However, the trend is slowly and steadily making its way in Saudi Arabia, along with many other Arab countries. The reason may be that today's youth doesn't have the time and resources to take care. Parents tend to provide increasing support for longer. Still, when their aging hinders their ability for provision of care or calls for requirements of individual attention, they are sent to nursing homes. (Hussein & Ismail, 2017). There are more than 62 nursing homes in Jeddah (Arab News, 2014), which marks an exceptional level of increase in the population of elderly institutional residents.

Elderly institutional residents spend most of their time seated or lying down even though they can perform independent or assisted activities (Kvæl, Bergland, & Telenius, 2017). Research suggests that diagnostics and therapeutic decisions regarding depression in such institutions are disordered, and doctors hardly play any role in the diagnostic workup and generating treatment options (Iden, Engedal, Hjørleifsson, & Ruths, 2014). Psychosocial mechanisms enlighten us with the fact that depressive symptoms are attenuated in elderly individuals who enjoy social activities and have meaningful participation in the activities in these retirement homes (Hsu & Wright, 2014). So, the well-being of older people should be considered at a holistic level. Better care, social interaction, and engagement in day-to-day activities, social support, and raising self-esteem can alleviate the symptoms of depression.

To our knowledge, little work has been done to quantify the depression scores of elderlies in retirement or nursing homes and the elderly living at home. Therefore, the objective of this study was to compare the level of depression between home-residents elderly and institutionalized elderly.

Gender is also a significant factor in determining long-term institutional care (Martikainen, Moustgaard, Murphy, Einiö, Koskinen, Martelin, & Noro, 2009). Research indicates that senior women have less willingness to get institutionalized care in comparison to senior men. The findings also showed that psychological stress has strong links with readiness for institutionalization across the male and female groups. (Qian, Chu, Ge, Zhang, Sun, & Zhou, 2017). Literature reveals that gender is a strong factor for poor health-related quality of life and mental health problems among the elderly over 65 (Orfila, Ferrer, Lamarca, Tebe, Domingo-Salvany, & Alonso, 2006). A survey from the Kingdom of Saudi Arabia indicates that the most registered diseases for elderly people are hypertension, diabetes, and pain disorder like joint pain, and the most frequently prescribed medicines are anti-diabetic and anti-hypertensive drugs. However, not much research has been carried out in assessing the gender disparity towards institutional care willingness among the elderly in the Kingdom of Saudi Arabia. The presence of

symptoms of depression or other mental health problems may be evidence that they do not prefer to live in institutionalized care. Similarly, there is less research indicating gender difference in depression in elderly residing institutional homes and elderly family-home residents. Therefore, another objective of the present study was to examine the gender difference in depression in the elderly.

METHOD

Participants

A total of 150 elderly individuals having age above 60 years located in the Jeddah and Riyadh cities of KSA were selected for the current study by using a purposive sampling technique. Of these, half of the individuals lived in the home environment, and half were living in old homes. The mean age of participants was 77.11 ($SD= 9.66$), with an equal number of elderlies based on residents and almost were similar based on gender. The participants filled the research questionnaire on request.

Before conducting this study, ethical approval was attained from the Ethical Review Board, Department of Psychology, International Islamic University Islamabad. Further, the permission was obtained from the institutes in the Jeddah and Riyadh, cities of KSA. Moreover, with ensuring privacy and confidentiality, informed consent was taken from elderly individuals. They were requested to fill the depression scale. A thank you note was given to respondents as a mode of appreciation for their cooperation. Informed consent was obtained from all subjects involved in the study.

Instruments

Demographic Questionnaire. A self-structured questionnaire about the demographics was filled by the participants, including their age, gender, and Home/shelter home environment. *Beck Depression Inventory-II* (BDP, Beck, Steer, & Brown, 1996). Beck Depression Inventory is frequently used for assessing depression across different cultures. This inventory has three versions, and the last version was utilized in this study. The internal consistency of the BDP ranged from Cronbach Alpha 0.893-0.94. For the present study, the Beck Depression Inventory-II in Arabic (Alansari, 2006) was utilized. Cronbach alpha ranges from .67 to .89.

Data Analysis

The data were analyzed by using SPSS for windows version 23. Descriptive statistics were used for the sociodemographic and clinical characteristics of 150 elderly individuals. Further, to assess the association of level of depression with types of residents, a Chi-square test was used. Moreover, to determine the mean difference between elderly institutional residents and elderly home residents besides with mean difference between elderly male and female individuals, the independent sample t-test was used.

RESULTS

The results showed that 75% of the elderly were suffering from mild to an extreme level of depression. Most of the elderly had severe depression (27%), followed by moderate depression (23%). However, 25% of the elderly had no depression (see Table 1).

Table 1. Sociodemographic and Clinical Characteristics of Participants.

Variable		N (%)	M(SD)
Age			77.11 (9.66)
Male		74 (49.3)	
Female		76 (50.7)	
Place of residence	Home Residents	75 (50)	
	Institutional Residents	75 (50)	
Normal or No Depression		38 (25.3)	
Mild Mood Disturbance		24 (16)	
Prevalence/Severity levels of Depression	Borderline Clinical Depression	9 (6)	
	Moderate Depression	34 (22.7)	
	Severe Depression	41 (27.3)	
	Extreme Depression	4 (2.7)	

The Table 2 shows details of level of depression in elderly living in institutionalized care and elderly living as home residents. Further, results indicate that the institutionalized elderly had moderate to severe levels of depression, and elderly home residents had no to a mild depression ($p < .001$). The results reveal that $\chi^2 = 135.56$ which is significant ($p < .01$).

Table 2. Levels of Depression based on Residents.

Level of Depression	Home Residents n (%)	Institutional Residents n (%)	χ^2
Normal or No Depression	38 (57.7)	0	
Mild mood disturbance	24 (32)	0	
Borderline Clinical depression	9 (12)	0	
Moderate depression	0	34 (45.3)	
Severe Depression	4 (5.3)	37 (49.3)	
Extreme depression	0	4 (5.3)	
Comparative			135.56***

Note: *** = $p < .001$

The mean difference was measured between elderly institutional residents and elderly home residents in terms of depression. The results indicated that the mean score on depression was significantly higher in elderly institutional residents ($M = 31.79$, $SD = 5.30$) than elderly home residents ($M = 10.92$, $SD = 6.86$), $t(148) = 20.83$, $p < .001$. The 3.40 value of Cohen's d indicated that the mean difference between elderly institutional residents and elderly home residents in terms of depression is huge. The upper limit and lower limit of confidence interval indicates that 0 does not lie between the limits, therefore, the findings are significant at the level of .001. Further, the mean difference was measured between elderly male and elderly females in terms of depression. Finally, the results indicated that the mean score on depression was significantly higher in elderly female ($M = 24.09$, $SD = 12.00$) than elderly male ($M = 18.54$, $SD = 11.66$), $t(148) = -2.87$, $p < .01$. The upper limit and lower limit of confidence interval indicates that 0 does not lie between the limits, therefore, the findings are significant at the level of .001 (see Table 3).

Table 3. Mean difference between institutional residents and home residents and gender in terms of depression.

Depression	M (SD)	t (148)	p	95% CI		Cohen's d
				LL	UL	
Institutional Residents	31.79 (5.30)	20.83	<.001	-22.84	-18.88	3.40
Home Residents	10.92 (6.86)					
Male (n=74)	18.54 (11.66)	-2.87	<.005	-9.37	-1.73	0.47
Female (n=76)	24.09 (12)					

Notes: CI= Confidence Interval, LL= Lower Limit; UL= Upper Limit.

DISCUSSION

The results revealed that all elderly people suffer from some level of depression. 75% of the respondents exhibited some degree of depression, with 27% reporting severe depression. In a study by Barua, Ghosh, Kar, and Basilio (2011), it was found that geriatric depression was significantly higher among Indians, in recent years compared to the rest of the world. The prevalence rate of depression among the elderly Indian individuals was 21.9% compared with the rest of the world, where it is 10.3% (Barua, *et alia*, 2011). Steffens and colleagues showed that the overall depression prevalence was 11.19%. Depression in Whites and Hispanics was three times the prevalence among African-Americans (Steffens, Fisher, Langa, Potter, & Plassman, 2009). Research has revealed a high rate of undetected depression among the older population (Padayachey, Ramlall, & Chipps, 2017; Grover & Malhotra, 2015).

A research work done by Nazemi *et alia* (2013), revealed that amongst the people residing in a nursing home at Tehran, Iran, 29.5% of the population suffered from severe anxiety, which is in concordance with our study (Nazemi *et alia*, 2013). A survey by Kafle and colleagues at Kathmandu Valley also suggested that depression is highly prevalent among elderly residents in nursing homes (Kafle *et alia*, 2015). So depression is relatively common among the institutional elderly individuals (Almomani & Bani-Issa, 2017). Another study by Chalise showed some conflicting results concerning the prevalence of severity of depression, stating that 46.7% of the elderly in nursing homes had mild, 8.9% had moderate, and 2.2% had severe Depression (Chalise, 2014). These results were consistent with other studies (Goud & Nikhade, 2015). Levin and colleagues found 48% of residents suffering from active depression but did not classify it as mild, moderate, or severe (Almomani & Bani-Issa, 2017).

There is a scarcity of data stating the comparison between the institutional residents and elderly home residents. However, in one study, while comparing the elderly institutional residents with home residents, it was found that the elderly inhabitants of nursing homes were more depressed than those of the community (Zalavadiya *et alia*, 2017). So it is observed that depression is more prevalent in the dwellers of nursing homes in comparison with the homes. It may be because of poor living conditions, lack of social interaction, and inadequate provision of medical help. Moving into a nursing home can turn out to be a critical life experience if elderly individuals are afraid of losing their independence and identity. Caregivers may give several explanations for the placement of elderly individuals in nursing homes, such as inadequacy of provision of appropriate nursing care, lack of social bonding, and turmoil of the caregiver's daily schedule. Often, children fail to realize their responsibilities and are immersed in their personal lives, that they think of their parents as a mere burden. They feel as if the

existence of the parents in their home is an interference in their lives. The ego clash between mother-in-law and daughter-in-law is also a source of despair at home, and finally, both cannot continue to share the same roof. The new generation is becoming more materialistic, and their attitude towards parents is changing. They seem to have lost their patience. Ill-planned or forcefully implemented relocations to nursing homes lead to stress and are negatively associated with health and survival. A research study conducted to find out the level of depression among institutionalized and non-institutionalized elderly showed that level of anxiety and depression were much high among institutionalized elderly (Azeem & Naz, 2015). Elderly living in nursing homes experience several problems like loss of friends, family, work roles, companionship, health, and income. Each loss amongst the elderly decreases the extent of choices available (Cameron, 1996). Although elderly residing in both the nursing home and at home experience such damages, institutionalized elders are more vulnerable to take the stress and develop depressive symptoms (Mathew, George, & Paniyadi, 2009).

In contrast to the findings of our study Steffens *et alia* (2009) showed that the prevalence of depression was similar for men (10.19%) and women (11.44%). Whereas other studies have found depression to be more common amongst elderly females and female gender, widowhood and poor health were found to be significantly related to Depression (Padayachey, Ramlall, & Chipps, 2017; Grover & Malhotra, 2015). Research has shown that being a woman is an essential predictor of depression. This finding is consistent in many other studies (Zalavadiya *et alia*, 2017). Almomani, *et alia* (2017) explained that women residing in assisted living are at increased risk of developing depression. Females are the primary sufferers of the care homes group that may be because they cannot take the feeling of abandonment that leads to stress, loneliness, and despair. Due to the lack of close family ties and reduced connections with their culture of origin, they fail to participate in the community activities in these care homes actively. The cause might be the attachment patterns of the women of our society. In our cultures, the mother's whole world revolves around her children. When she enters motherhood, she negates her personal life totally and dedicates all her energies, focus, attention, care, affection, and time to her child, which does not change as children grow up. As Asian women are very sentimental and emotional, they develop expectations from their family members. At a later age, if these women have to move to care homes detaching themselves from their families, they drown into depression. Separation from their children and family affects their mental and physical health severely. These results are supported both in and across cultures.

The current study included samples belonging to only two cities Jeddah and Riyadh of KSA. Therefore, the nature of this study was limited. It is difficult to assess the accuracy of research and to generalize it to the whole population with small sample size. It is recommended to take a large sample for future studies so that the results more significant and can be generalized. Since it was quantitative research, so the information gathered was not enriched and extensive. Possible reasons for depression and low life satisfaction among institutionalized elderly were not focused on this research. So we cannot rely wholly on correlation data as many factors other than the place of living might play their part. It is suggested for future researchers that qualitative data must also be collected in addition to quantitative data to gather detailed information and reasons for prevailing depression and low life satisfaction.

The research concludes that elderly individuals living in care homes were much more suffering from depression as compared to elderly individuals living at home with

families. Furthermore, it concludes that the rate of depression was higher among the elderly female population living in the care homes. Therefore, the concerned authorities should address the risk factors and predictors of depression at the institutional settings. They may devise strategies like providing a pleasant and comfortable living environment, discouraging poor perceived health status, and promoting the health of the elderly. Such strategies may contribute to reducing the prevalence of depression, which will support the well-being and quality of life of the elderly. The nursing home placement can bring a positive change in the lives of elderly individuals if carefully planned and managed. The results of this study would advise establishing strict criteria for institutionalizing the elder in nursing homes based on the condition of the elderly and family caring capacity. Family members must meet their elderly members if long-term care facilities are require.

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