

PREVALENCE OF DEPRESSION IN GERIATRIC POPULATION OF PAKISTAN

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Abstract

Depression is a major problem which is faced by elderly people every time, people feel depressed with mood swings, and decreases their joy. The prevalence rate of depression is about 40.6 percent in females than males likewise 50 percent versus 32 percent. Around the world depression mostly affects elderly persons is about 30 percent. Depression impacts the life of a person of all ages but the ratio of depression is higher in women than in men. The objective of the study was to evaluate the frequency of depression in the geriatric population of Pakistan. A cross-sectional survey was conducted between (May 2023 to November 2023) with a sample size of 664 calculated from the OpenEpi Version 3.0 software. The selection of sample size was done through a Non-probability convenient sampling technique. Data was collected from the general population of Pakistan by using a validated questionnaire named: GDS (geriatric depression scale). The data was analyzed by SPSS 23.0 software. There were 664 research participants selected from the general population. The results show a majority of research participants 431(64.90%) were not satisfied with their lives and 484(72.89%) avoided social gatherings due to depression, while 396(59.63%) participants responded that they could make decisions easily. Additionally, according to the GDS (geriatric depression scale) scoring amount of depression was found more in females:181(61.14%) as compared to males. We concluded from our study that females are more likely to be depressed as compared to males in Pakistan as well and they often avoid social gatherings due to depression.

Keywords: Incidence, Elderly, Depression, Gerontology, Population, Etc.

INTRODUCTION

Depression is a major problem which is faced by elderly people every time, people feel depressed with mood swings, and decreases their joy.¹ It is a very serious and important issue that has a bad impact on the person that how they pretend, their way of thinking, and how they behave in different situations.² Depression impacts the life of a person of all ages but the ratio of depression is higher in women than men.³ The prevalence rate of depression is about 40.6 percent in females than males likewise 50 percent versus 32 percent. Around the world depression mostly affects elderly persons is about 30 percent.⁴ World Health Organization reported that 15 percent elderly population faces neurological and mental disorders like depression and loss of memory.⁵ Depression is the main reason that causes disability in a person, hinders their daily activities of life, it gives influences their physical health, and also they are not able to concentrate in a specific situation.⁶ A feeling of sadness, decreased weight, lack of concentration, lack of participation in different activities of life, trouble sleeping, decreased hunger, reduced activity of daily

living, the feeling of fatigue, irritability, and problems in making decisions, all are the symptoms of depression.⁷ In 2020, it is a silent killer and 2nd leading cause of the disease after heart disease.⁸

The main cause of depression is the focus in a recent study that the status of marriage is a very important factor in social life. About 57.81 percent of geriatric people have lost their partners that why they are facing many problems in their lives and also they lead to depression in later life. Moral, physical, and mental support of the partner is very helpful to avoid many stresses in their lives and spend life more healthily.⁹ In some cases, their marriage life leads to the separation phase which also affects the life of a person. Some people do not get married and remain single for their whole life, the absence of children and moral support of a partner, can't be manageable in older age. These all are the factors leading to the depression stage of a person that impact the life of a geriatric person.¹⁰ According to the World Health Organization, these all factors can contribute to depression fact and increase the risk of depression in geriatric people due to prolonged diseases, impairment, functional limitation, personality factors, and worse experiences of life like isolation, breaking off from relationships, deficiency of money, and shortage of family support. The geriatric population, they are facing problems in a combo of community support, and the mental, and physical needs of a person.¹¹

The interventions for anxiety and depression people are using anti-depressant medicine or they are engaged in physical exercises to reduce their depressive thoughts and enhance their quality of life.¹² If geriatric people take only antidepressive medicines they can improve their mental status but it cannot impact the status of their behavior to elaborate the behavioral changes they can engage in activities like exercise because it directly affects the lifestyle of people, which encourages people to go outside to freshen up their moods, spend most of the time with people in any activity, make the specific goals and try to achieve their target. Exercising and engaging in different activities decreases their stress level.¹³ In our study, we evaluate the frequency of depression in the geriatric population in Pakistan.

MATERIALS AND METHODS

It was a cross-sectional survey conducted among the geriatric population of Pakistan. The sample size of 664 was made through the online software OpenEpi Version 23.0 with a hypothesized geriatric population of 50%. Statistical conditions were 95% confidence interval and 5% margin of error. The non-probability convenience sampling technique was used to choose the research participants before the collection of data. The duration of our study was May 2023 to November 2023. The inclusion of our study included both male and female genders, age groups between 60 to 69 years and more than 70 years, and all diseased and disease-free older adults. People who are not willing to participate and who are schizophrenic, or crazy were excluded from this study. A validated questionnaire named: GDS (Geriatric depression scale) was used to determine the prevalence of depression among older adults. Statistical analysis was done through SPSS Version 23.

RESULT

The total number of 664 geriatric people was evaluated through a validated questionnaire; a Geriatric Depression score from the general population of Pakistan was used in a previous study. The demographic data of participants is shown in Table No.1:

Table 1: Demographic Data of Research Participants

Demographic Data		Frequency (n) & Percentage (%)
Sex	Male	368 (55.42%)
	Female	296 (44.57%)
Age	60-69 Years	513 (77.25%)
	≥ 70 Years	151 (22.74%)
Education	Illiterates	307 (46.23%)
	Literates	357 (53.76%)
Occupation	Working	403 (60.69%)
	Non-working	261 (39.30%)
Economical Status	Upper class	189 (28.46%)
	Middle class	361 (54.36%)
	Lower class	114 (17.16%)
Marital Status	Widowed/Unmarried/Divorced	413 (62.19%)
	Married	251 (37.80%)

In response to a question about the satisfaction level of participants are they satisfied with their lives 233 (35.09%) participants responded yes 431 (64.90%) participants replied no 484 (72.89%) participants avoided social gatherings due to depression while 180 (27.10%) participants were socially active and taking part in the social gatherings. In response to a question related to decision-making, 396 (59.63%) responded that they could make the decision easily while 268 (40.36%) were unable to make decisions efficiently as shown in Figure No.1:

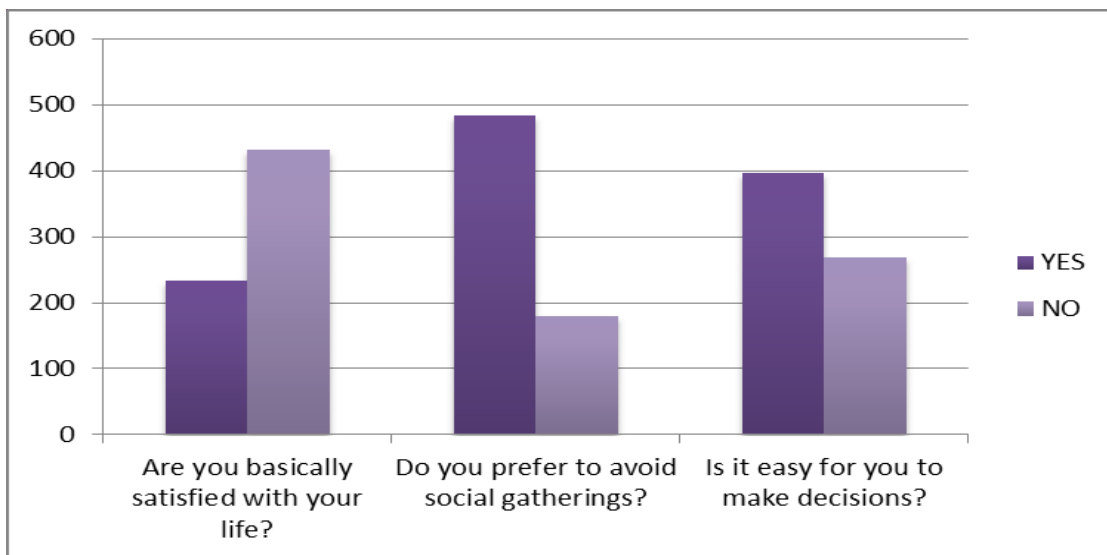


Figure 1: Level of Satisfaction of Research Participants

GDS score showed the amount of depression among the geriatric population. From our observation 101(27.44%) male and 214 (72.29%) female found mild depression. While 113 (30.70%) of male, 181 (61.14%) females lie in normal values of GDS score. Furthermore, 17(4.61%) males, and 38 (12.83%) females the case of severe depression are shown in Table No.2:

Table 2: Geriatric Depression Scale

GDS Score	Male (%)	Female (%)	Total (%)
NORMAL (0-9)	113 (30.70%)	181 (61.14%)	294 (44.27%)
MILD DEPRESSIVE (10-19)	101 (27.44%)	214 (72.29%)	315 (47.43%)
SEVERE DEPRESSIVE (20-30)	17 (4.61%)	38 (12.83%)	55 (8.28%)
TOTAL	231 (62.77%)	433 (146.28%)	664 (100.00%)

DISCUSSION

The most common issue of mental state associated with old age is Depression in which disturbance in sleep patterns, eating and daily actions can take place and also the affected person is unable to think.¹⁴ A study reported that any changes that occur in different systems of the body like neurological, endocrine system, cardiovascular system, and immune systems can directly affect the old age person and cause depression¹⁵ but in the present study, the prevalence of depression is found in 513(77.25%) more in participants between the ages of 60 to 69 years as compared to the age more than 70 years as 151(22.74%). The study reported about the economic problems related to the geriatric population that the expenses of people with comorbid diseases along with depression were more as compared to the people without depression.¹⁶ In our study, the middle class according to social status was more suffered i.e.: 361(54.36%) as compared to the other classes.

Concerning age a study concluded that the prevalence of depression is higher in females as compared to males and old age females are more experienced depression recurrently as compared to old age males.¹⁷ Another study reported the gap between the prevalence of depression among male and females was reduced with the increased age¹⁸ but in over study males have more depression i.e: 368 (55.42%) However, The study reported there is a direct and indirect effect of education with depression in female while only indirectly the effect of depression on male¹⁹ as compared to this our study found the more prevalence of depression in literate people i.e: 357(53.76%) as compared to illiterate people i.e: 307(46.23%). Research reported that occupation has positively affected the level of cognitive function, reduced depression and improved the quality of life of the geriatric population.²⁰ However the results of our study show that working people have more depression i.e: 403(60.69%) as compared to nonworking people i.e: 261(39.30%) means the geriatric population of Pakistan has a negative impact of occupation on cognitive function and level of depression.

A study done in India concluded, that geriatric females who are alone (widow/divorced/unmarried) and who have no support from family and friends are more likely to have depression and they should be equally managed by the healthcare providers to control their level of depression.²¹ Same as in our study the data extracted from participants shows the prevalence of depression is more in widowed/unmarried/divorced females i.e: 413 (62.19%) in comparison to married females i.e: 251 (37.80%) A study conducted in Bialystok reported as the level of satisfaction of geriatric population is high in the males as compared to females as well as that was not affected by the change in age, and education.²² in our study the results show 35.09% of research participants were satisfied with their lives and about 72.89% population avoid social gatherings due to depression and the decision making power of the participants was found to be 59.63% According to the literature, GDS (Geriatric Depression Scale) was an easy tool for assessment of depression and the other issues related to depression in addition to this it also show the economic as well as social status of an old person with depression.²³ In our study 315(47.43%) research participants lie in the mild depression category of GDS (Geriatric Depression Scale) in which 101(27.44%) were males and 214(72.43%) were females. According to the study, the recovery rate of depression in the geriatric population is very low as compared to the younger people.²⁴ In addition, the major reason for poor prognosis was comorbid diseases along with depression and advanced age.²⁵

CONCLUSION

According to the observations of our study, it is revealed that the satisfaction level of life of research participants is found to be low and the females of our country are more prone to depression as compared to males as well as they avoid social gatherings. Although, the respondents can make decisions effectively about family matters.

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