Impact of Education on the level of Depression among Elderly of Pakistan

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ABSTRACT

As individuals age, psychological capacities may decay bringing about serious inabilities. Depression in old age is very common. Researchers worldwide have been designed to measure an impact of education as a demographic variable on level of depression among elderly. In the present study Geriatric depression scale (GDS) short form was used to measure the level of depression among elderly people. Moreover, education was determined based on five categories. The main aim of the present research was to determine whether educational status effects the level of depression of older adults. A total of 384 elderly participated in this study. One-way ANOVA was used to check the impact of education on the level of depression among elderly of Pakistan. The findings revealed that education has negative impact on the level of depression. As the level of education increases, level of depression in old age also increases. The article discusses contemporary studies highlighting the role of education for elderly.

Keywords: older adults, depression, years of education, disabilities

INTRODUCTION

Internationally, advancing information and practices combined with financial advancement has tremendously increase the life expectancy of elderly. which has offered ascend to aging population, characterized as an increase in the lifetime of individuals from young to elderly (Gavrilov and Heuveline, 2003). An expanded increase in persistent ailments of elderly, physical handicaps, psychological sicknesses and other co-morbidities is a burden (Boutayeb and Boutayeb, 2005).

Depression in elderly is a major global public health concern (Blazer, 2000). Depression encompasses a range of mental issues and associated emotional, cognitive and behavioural symptoms (Penninx, Milaneschi, & Lamers, 2013). Depression suffering geriatrics was related with expanded clinical morbidity, disabled body working, upset social working, and dementia (Steffens, Otey, and Alexopoulos, 2006). Depression is characterized by less sleeping hours, low or non-appearance of diet, mood swings, glumness or separation, and self-destruction ideation (Sherina, Rampal, Aini and Norhidayati, 2005). Pathology of depression among elderly has been under discussion and evaluated by researchers in the current time. Investigators portrayed that elderly experienced commonness of depression (Ernst, 1997). In 2006 more 400 million victims of depression were recorded across the globe.

Recurrence in prevalence of depression incredibly enhanced and remained on fourth position as per worldwide burden of disease. Depression was reported a disturbing psychological well-being problem. In under develop nations, it is reported to be on second position continuously in 2020 (Desjarlais, 2001). Studies directed by Pakistani investigators uncovered that elderly people are seriously overlooked by basic populace due to absence of awareness. It is possible that they went under or over acknowledgment of depression explicitly in under developing nations like Pakistan (Itrat, Taqui,Qazi and Qidwai, 2007). However, in 2008 around 30% frequency of depression has been found in a Pakistani study done on eldery people (Ganatra, Zafar, Qidwai, Rozi, 2008).

Important thing that should be taken into consideration is that literature on geriatrics reflects numerous psychological variables like family support, religious orientation, and marital conflict; however, there is scarcity of evidences that depict relationship of geriatric depression with socio demographic depression specifically level of education of the elderly. However, numerous studies have tried to capture relationship of demographic variables and elderly depression and their results of their study show that there are significant contrasts exists among male and female, married and unmarried, family unit and broad family framework, and employed and jobless on depression, financial status.

It is also found out that those Elderly ladies go through late life depression more than men. Widowhood, family clashes, unacceptable family disposition, monetary unsteadiness, gap in communication, demise of loved one, unfulfilled early life wishes, feeling of blame, and later life general ailment all things considered go about as solid predictor of depression among elderly. (Javed, S., 2014).

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Furthermore, there were strong relationship with gender and other risk factors with almost 80% of the female members being financially dependent and widowed (almost 70%). One research by Padayachey, Ramlall and Chipps, (2017), uncovered a close relationship among gender and depression with an expanded predominance in females, in this manner the research supports that female are in danger for the development of late-life depression.

In Pakistan there is a lack of empirical data on depression among this segment of the population particularly with reference to their level of education. Based on these observations, the objectives of our study were to determine the prevalence of depression and its association with level of education in elderly population (age 60 and above) in Pakistan. Hence, keeping in mind the changing socio-demographic trends and paucity of evidence on depression among older Pakistani adults, this study aims to estimate and compare the prevalence of depression in relation to level of education.

Objective of the Study

The objectives of the study were as follows.
1) To see the level of education (Matric, Intermediate, Graduation, Masters & M.Phil./ Ph.D. in elderly depression.
2) To examine the difference at different levels of Education among elderly population.

RESEARCH DESIGN

Participants

The sample of the study used in the research consisted of the older people of Punjab, Pakistan. Both males and females were of age ranges between 60 and above. Further, it has been divided into three categories i.e. 60-64, 65-69 and 70-74. In this study, appropriate location of the study was selected since Punjab is the most populated state (Province) of Pakistan (Pakistan Bureau of Statistics, 2016). To ensure the sample size for primary data collected from the eight main Divisions of Punjab is 384 respondents, which have been selected according to the rural and urban population percentage of each division. For this purpose, the biggest state that has been selected were Bahawalpur, Dera Ghazi Khan, Multan, Faisalabad, Gujranwala, Lahore, Rawalpindi and Sargodha. Thus, the total number of old people from selected divisions was counted and the proposed sample size was distributed proportionately to the number of old people in each sampled area Pakistan Statistical Bureau (2o17).

Inclusion Criteria of Respondents: All respondents were of age 6o and above.

Exclusion Criteria of Respondents: People below the age of 60 is excluded from the research.

Sampling Technique

Respondents were randomly selected and purposive sampling technique was used to collect data in the current study.

Measures

Following measures were used in the present research.

Urdu Version of GDS

In order to check the level of depression among elderly, Urdu version of geriatric depression scale was used. It has been extensively used to measure the depression of older population. In this study a Short Form GDS will be used which has 15 questions and was developed in 1986. Because, as the sample of the present study consisted of old people, so it is easy for them to answer the short form of the scale. Out of the 15 items, positive answer to 10 items shows the presence of depression, while negative answer to the rest (question numbers 1, 5, 7, 11, 13) also shows depression. Scores for normal condition is 0-4, depending on education, age, and complaints; 5-8 score for mild depression; 9-11 score for moderate depression and 12-15 score for severe depression.

Measurement of demographic variable

In the current research the measurement of the education (EDU) is 1 = primary, 2 = Middle, 3 = Matric, 4 = F. A/F. Sc, 5 = B.A/ B.Sc., 6= M.A / M.Sc., 7= M.Phil./ Ph.D. respectively as illustrated by (Chou & Chi, 2005).

Procedure

Initially permission was taken from the higher authorities of Punjab, Pakistan to use of data by Statistical Department of Punjab, Pakistan for research purpose. The questionnaires were used for the purpose of gathering the information for this research. Questionnaires were administered by giving them personally, depending on the situation. Before starting the study, all participants were assured that their information would be kept confidential and the data will be used only for research purpose.

Informed Consent

Informed consent form was distributed among respondents that give the brief description of the research its objectives and purpose of the research. Informed consent form was taken from the respondents after briefing the above-mentioned purpose.

RESULTS AND DISCUSSION

Data Analysis

The data for the present study was analyzed using the Statistical Package of Social Sciences (SPSS) software. However, the data were statistically analyzed through the following process in detail. The first step; data were summarized and initially analyzed through descriptive statistics. The second step was to test the hypothesis through one-way ANOVA.

Table 1: Descriptive and Demographic Profile of the Sample (n=384).

Demographics	F	%
Gender		
Male	192	50%
Female	192	50%
Education		
Primary 1-5	96	25%
Middle 6-8	16	4%
Matric 9-10	16	4%
Intermediate 11-12	64	17%
Masters 15-16	48	13%
M.Phil/ PhD	32	8%

Note. f= frequency of the Demographics.

The education level is expressed as the maximum number of years of schooling completed. This study has used seven groups based on the education level namely Primary, Middle, Matric, Intermediate, Degree, Masters and MPhil/ Ph.D. The Table 4.1 shows that the two groups have the same number of respondents 16 (4%) which are middle and matric level. So, these two groups have equal no of respondents in terms of middle and matric education. There are 48 (13%) respondents who have a master's degree. 112 (29%) respondents have degree level education. Sixty-four (17%) respondents have higher secondary school (intermediate) education level. Thirty-two (8%) respondents are M. Phil and PhD education. The number of respondents are 96 (25%) have primary education. The mean education level is matric which is the level of nine years to ten years of education.

Table 2: ANOVA Comparisons of categories of Education in terms of Geriatric Depression (n=384)

	Sum of Squares	Df	Mean Square	F	Sig
Between groups	26.358	6	4.393	7.352	.000*
Within groups	225.267	377	.598		
Total	251.625	383			

Table 2 exhibited that there is an effect of education on depression $F_{(6,377)} = 7.352$, $p<.05$ since there was a significant difference between these seven educational groups on their level of depression, the researcher examined where the difference of depression level existed. According to the result, F-ratio signified that population means were probably not all equal. This suggested that any pair of means was unequal and where the significant differences needed to be worked out through post hoc test using Tukey HSD.

Table 3: Summary of Multiple comparison results of seven educational groups

Education Level	Years of Education	Mean difference	Std. Error	Sig
Primary	Middle	-.375	.209	.551
	Matric	.188	.209	.973
	F.A/F.Sc	-.609*	.125	.000
	B.A/B.Sc.	-.571*	.108	.000
	M.A/M.Sc.	-.292	.137	.335
	M.Phil./ PhD	-.375	.158	.211
Middle	Primary	.375	.209	.551
	Matric	.563	.273	.380
	F.A/F.Sc	-.234	.219	.932
	B.A/B.Sc.	-.196	.207	.964
	M.A/M.Sc.	.083	.223	1.000
	M.Phil./ PhD	.000	.237	1.000
Matric	Primary	-.188	.209	.973
	Middle	-.563	.273	.380
	F.A/F.Sc	-.797*	.216	.005
	B.A/B.Sc.	-.759*	.207	.005
	M.A/M.Sc.	-.479	.223	.327
	M.Phil./ PhD	-.563	.237	.211
F.A./F.Sc.	Primary	.609*	.125	.000
	Middle	.234	.216	.932
	Matric	.797*	.216	.005
	B.A/B.Sc.	.038	.121	1.000
	M.A/M.Sc.	.318	.148	.324
	M.Phil./ PhD	.234	.167	.801
B.A/B.Sc.	Primary	.571*	.108	.000
	Middle	.196	.207	.964
	Matric	.759*	.207	.005
	F.A./F.Sc.	-.038	.121	1.000
	M.A/M.Sc.	.280	.133	.356
	M.Phil./ PhD	.196	.155	.866
M.A/M.Sc.	Primary	.292*	.137	.335
	Middle	-.083	.223	1.000
	Matric	.479	.223	.327
	F.A./F.Sc.	-.318	.148	.324
	B.A/B.Sc.	-.280	.133	.356
	M.Phil./ PhD	-.083	.176	.999
M.Phil./ Ph.D.	Primary	.375	.158	.211
	Middle	.000	.237	1.000
	Matric	.563	.237	.211
	F.A./F.Sc.	-.234	.167	.801
	B.A/B.Sc.	-.196	.156	.866
	M.A/M.Sc.	.083	.176	.999

*significant at $p<0.05$

The results are depicted in Table 3. The result signified that there was significant difference of respondent's depression level between different educational groups. The depression level of the respondents who had education level of F. A / F. Sc, B. A / B.Sc. and M.A / M.Sc. was higher compared to the respondents who had education below and above. Meanwhile, the level of depression was lower for respondents had B.A / B.Sc. as compared to other respondents who had matric education. Similarly, level of depression of respondents had 12 years of education was lower compared to respondents had primary education. Consequently, respondents had B.A / B.Sc. education their level of depression was higher in contrast to respondents had primary and matric level of education. This means that the level of education has an impact on geriatric depression of people of Pakistan.

The foremost aim of the current research is to determine the effect of different level of education on geriatric depression. It was examined by applying one-way ANOVA. The result of the present study showed that education level has a significant effect on geriatric depression. Education has been observed to be one of the most grounded demographic variables in forecasting the person's psychological health. It is a contributing factor in

the incidence of depression among the elderly. Older adults with a high level of education especially at inter and bachelor levels are in danger for depression. Highly educated people have many expectations from the world. Positive aspirations can also have negative well-being consequences when undergrounded. Person has high hopes from the future. They work hard to achieve their goals. When these high aspirations and goals are not fulfilled after their long hard work then they develop depression in their later life. This is the main reason (Greenaway, Frye, & Cruwys, 2015).

Likewise, higher Education in a country like Pakistan is very difficult to achieve. Thus, people who have higher level of education have very high dreams and expectations from the future. When these hopes May not be fulfilled in later ages, they might develop depression. In Pakistan, there are no social security programs for the senior citizens of Pakistan. People who is highly educated and run his own business or doing job in private sector faced many problems in their later ages as their expectations might not be fulfilled although they have higher education level. Once they aged, they must face many problems as they become dependent on their kids for their survival. To most of them working hard in their early year and have good educational level would make them happier later in life. Unfortunately, they still face the psychological problems in their later life. The present study showed a significant high level of depression experienced by the more educated old folks then the less educated ones.

The present study did not support the results regarding the effect of education level on the geriatric depression. The findings could be explained by several justifications. Being a developing country, Pakistan has limited resources. In Pakistan, attaining good education is a key to have good job and secured future. Pakistani individuals acquire high education and professional trainings for high status in the society. But unfortunately, well learned individuals fail to get the expected success both economically and socially. They also do not get any proper benefits at the time of retirement. They are also deprived of old age benefits at later ages. Therefore, due to lack of proper resources and expected outcomes, Pakistani individuals develop depression in old age.

Beck cognitive theory focuses on the cognitions of the individuals as determinant of developing depression. According to the theory, due to constant failures in life resulting in lack of resources and social problems (mentioned above), the people develop a faulty cognition system and tend to perceive everything negative and pessimistic. This perception of negativity and pessimism leads towards depression in old age. The findings of the present study therefore support the Beck's theory that focuses on the role of irrational cognitions in the development of depression especially in older population.

Conclusion

The key aim of the current research is to check the effect of demographic variable education on the geriatric depression of the elderly. The result of the data focuses on the point that as the education level increase people are at great risk of having depression in their old age. Likewise, the more educated you are the more you are prone to depression in old age.

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