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To Assess the Relationship between Depression and Religious Belief among Medical Students of Larkana

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ABSTRACT

Depression is considered as a disorder which involves thoughts, mood and body, Medical colleges environment is considered to be stressful, which leads to negative effects on health, wellness and academic performance. Unfortunately, in Pakistan depression among medical students are being neglected and because of that high proportions of depression is being reported worldwide especially in medical students. The increase in interest has been found recently between mental or physical health and religion and majority of studies have variable like positive health and religion. A Cross Sectional Descriptive study was conducted at SMBBMU Larkana from 1st July 2023 to 30th December 2023 having a sample size of 376 with a validated questionnaire was being used. In this study only those students were selected who were studying at SMBBMU Larkana and all those students who were not enrolled at SMBBMU Larkana were excluded. The data was analyzed with the help of Spearman's correlation test and the p value was of significance but the association between BDI and religious belief was very weak and statistical significant distribution of data was also found with the help of One-Sample Kolmogorov-Smirnov Test. This study has revealed many important aspect and factors related with mental health and religious life and a positive correlation has been associated with religious belief and depression, but still there is certainty that which part of religious life are most psychological beneficial to whom and why and the future research on health and religion requires a careful consideration between this complex and multifaceted relationship.

INTRODUCTION

Depression is considered as a disorder which involves thoughts, mood and body, it is directly related with person natural phenomenon like how they sleep and eat and how much they feel about themselves and other related things, Medical colleges environment is considered to be stressful, which leads to negative effects on health, wellness

and academic performances¹. Unfortunately, in Pakistan depression among medical students are being neglected and because of that high proportions of depression are being reported worldwide especially in medical students².

Depression is considered as one of the highest global burden contributor of the diseases associating with high level of economic, personal and societal burden. The growing concern is presence of depression in young peoples, its prevalence has increased sharply in this age group, especially in females and Depression describes a variety of mood-related concepts and a spectrum of difficulties (Figure A)³⁻⁴. In previous studies it has been found that reduction in plasma BDNF levels leads to depression (Figure B)⁵. In clinical patients' different degrees of hippocampal plasticity changes have been noted (Figure C)⁶.

The increase in interest has been found recently between mental or physical health and religion and majority of studies have variable like positive health and religion. Previous studies have reported that because of religious beliefs there has been decrease in suicide, decrease substance abuse, decreased anxiety, meaning of life, optimism and having more satisfaction in married life⁷⁻¹⁰ and even some suggested that religion and behavior have negative correlation and there has been few studies published and mostly have one variable to measure and only countable studies have been done in Islamic regions in comparison to Christianity having more studies¹¹⁻¹⁵. The main objective of current study is to assess the relationship between Depression and religious belief.

Figure A

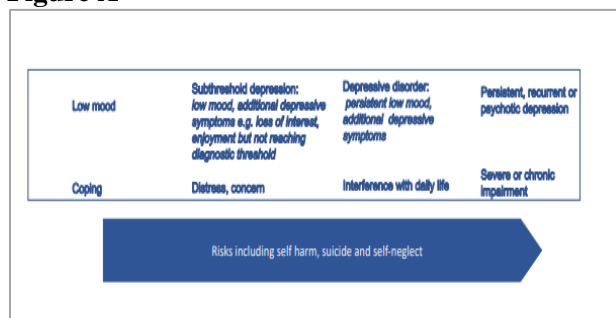


Figure B

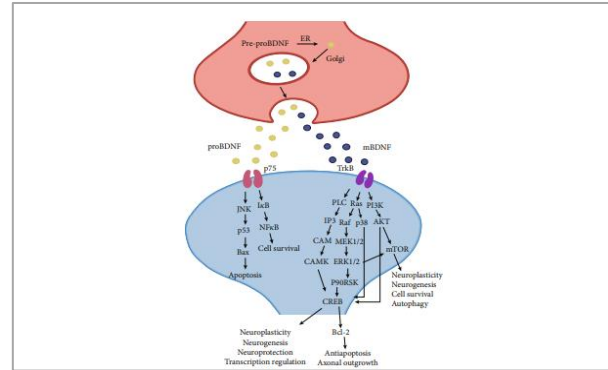
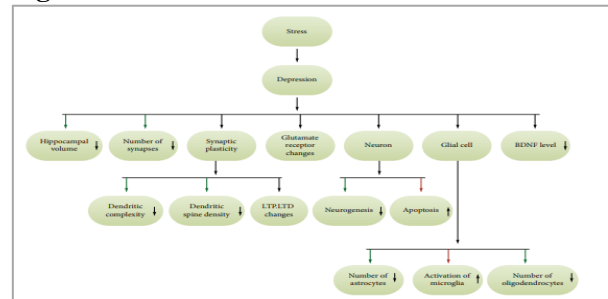


Figure C



MATERIALS AND METHODS

A Cross Sectional Descriptive study was conducted at Shaheed Mohtarma Benazir Bhutto Medical University Larkana from 1st July 2023 to 30th December 2023 having sample size of 376 students at an anticipated frequency of 42.66% taken from previous literature and the sample size was calculated with the help of Open Epi. A validated questionnaire was used to obtain data having 21 Questions Related with Beck Depression Inventory (BDI) Scale, 3 questions were related with religious beliefs i.e. How often do you pray? How religious are you? How much influence does religion have on your life? And their responses were measured with the help of LIKERT Scale along with demographic data i.e. Name, Age etc. and Informed consent was taken from the participants. In this study only those students were selected who were studying at SMBBMU larkana and all those students who were not enrolled at SMBBMU larkana were excluded. The data was analyzed with the help of SPSS 26 and Spearman's correlation Test was used to measure correlation between Beck Depression Scale and religious beliefs and One-Sample Kolmogorov-Smirnov Test was used to assess the sample distribution.

RESULTS

The students participated in this study were ranging from 16 to 25 with the mean age and standard deviation of 21.029 ± 2.1408 , out of 376 samples 195 (51.8%) were females and 181 (48.1%) were males as mentioned in figure 4. The students from different religions participated in this study with highest number being Muslims i.e. 333 (88.5%) followed by Hindu community i.e. 39 (10.3%) and others. Majority of the students participated in this study were from second year i.e. 137 (36.4%) followed by final year i.e. 84 (22.3%) then first year 72 (19.1%), then fourth year 45 (11.9%), and from third year they were about 38 (10.1%). Mostly students were single 346 (92%) and 25 were married (6.6%) 4 were engaged (1.1%). The mean score with standard deviation for Beck Depression Anxiety Scale was 10.8005 ± 9.37401 and the mean score with standard deviation for the religious belief score was 5.75 ± 2.13 . With the help of Spearman's correlation test as mention in (Table 1) the p value was of significance but the association between BDI and religious belief was very weak and statistical significant distribution of data was also found with the help of One-Sample Kolmogorov-Smirnov Test (Table 2).

Table 1
Correlations

			BDI	Rscore
Spearman's rho	BDI	Correlation coefficient	1.000	.136**
		Sig.(2-tailed)		.008
		N	376	376
	Rscore	Correlation coefficient	.136**	1.000
		Sig.(2-tailed)	.008	
		N	376	376

**correlation is significant at the 0.01 level (2-tailed).

Table 2
One-Sample Kolmogorov-Smirnov Test

		BDI
N		376
Normal Parameters ^{a,b}	Mean	10.8005
	Std. Deviation	9.37401
Most Extreme Differences	Absolute	.130
	Positive	.130
	Negative	-.125
Test Statistic		.130
Asymp. Sig. (2-tailed)		.000 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

DISCUSSIONS

As far as previous literature is concerned the studies has revealed negative correlations between religious measures and depression in comparison with our studies we found positive correlations but that is very weak when analyzed with spearman's correlation test which shows that religion play very important role in protection against depression¹⁶. Majority of the studies have been done in Christianity religion and they have included elderly sick peoples but in our study we have included only adult's volunteers¹⁷. In a previous study it was found that they do not have any positive correlation between depression and religious score but in our study we found positive correlation scores, as per our knowledge there has been a single study found concerning the depression and five days Islamic prayers and in previous study they found negative correlation between them but in our study we asked how often they pray and we found positive correlations¹⁶. It should be noted that there is mix results from previous literature has been obtained while some showing increase in anxiety and some showed decrease anxiety and in that review ten studies were included and out of that six studies showed increase in anxiety and four showed non significance relationship as compared to our study our aim was to assess the correlations between religious beliefs and depression and it was found to be positive¹⁸.

CONCLUSION

Religion is very important factor and multi-dimensional in nature and each dimension can affect differently to different individuals. This is its first kind of study especially in medical university of larkana because a growing body of empirical research is emerging about the potential benefits of religion. This study has revealed many important aspect and factors related with mental health and religious life and a positive correlation has been associated with religious belief and depression, but still there is certainty that which part of religious life are most psychological beneficial to whom and why and the future research on health and religion requires a careful consideration between this complex and multifaceted relationship.

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