ORIGINAL ARTICLE:

A CROSS SECTIONAL STUDY ON PROTECTIVE FACTORS AGAINST SUICIDE IN INDIVIDUALS WITH SEVERE DEPRESSION.

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ABSTRACT

OBJECTIVE

This study aims to find out "factors that prevent those suffering from severe depression with suicidal ideation of committing suicide", admitted to the psychiatric unit of a tertiary care hospital in Khyber Pakhtunkhwa, Peshawar.

STUDY DESIGN

Cross sectional study

PLACE AND DURATION OF STUDY

This study was conducted in psychiatry department of Khyber Teaching Hospital, Peshawar from May 2023 till November 2023.

METHOD

We conducted this study on 230 admitted patients, and they were diagnosed with severe depression according to ICD-10. The Beck scale for suicidal ideation was applied and a score of ≥ 8 was considered positive for the presence of suicidal ideations and then a "modified version of reasons for living scale" to identify protective factors against suicide. Data was analysed using SPSS version 22.0.

RESULTS

The most common protective factor found in our study was religious and moral objections in 37.4% of patients followed by fear of social disapproval in 17.4%, hopefulness and fear of suicide in 15.7% each, and responsibility towards family was present in 13.9% of patients. Data stratification for protective factors and other demographic characteristics including gender, residential, socioeconomic, marital, educational status, and family system were statistically significant with their *P-values* of <0.001.

CONCLUSION

This study demonstrated that religious and moral objections were the most common protective factors in the prevention of suicide, followed by fear of social disapproval, hopefulness, fear of suicide, and responsibility towards family. Gender, residential, socioeconomic, marital, and educational statuses along with family system were significantly associated with the presence of protective factors against suicide.

KEYWORDS

severe depression, suicide, protective factors.

INTRODUCTION

Suicide is a health concern across the globe and the World Health Organization (WHO) reported that around 800,000 people die by suicide every year.[1] A systematic review and meta-analysis in Ethiopia found a pooled prevalence of 9% and 4% of suicidal ideation and attempted suicide respectively in the general population.[2] The rate of suicide is 5.13 times higher among patients suffering from mental disorders than the general population.[3] Depression and bipolar mood

disorder increase the risk of suicide by 20-fold and these conditions are responsible for half of the suicides globally.[4] Depression is the most common risk factor among psychiatric illnesses among both men and women. Various physical diseases including, chronic obstructive pulmonary disease (COPD), asthma, and diabetes increase the risk of suicide. Female gender, unmarried status, unemployment, low education, and income are the sociodemographic risk factors of suicide and self-harm.[5] In Pakistan, the prevalence of depression in the general population is very high, ranging from 22% to 60%.[6] All aspects of suicidality including suicidal ideations, suicidal plans, and suicidal attempts are higher among those suffering from major depressive disorder compared to non-depressed controls.[7] Certain factors including coping strategies, resilience, reasons for living, fear of death, religious beliefs, social support, and effective communication protect people from committing suicide.[8]
Another study found relational connectedness, meaningful activity, empowerment, and hope in men as protective factors against suicide in those who had suicidal thoughts and plans.[9] Similarly, positive affect, reasons for living, purpose, and meaning in life, gratitude, grit, optimism, social support, and hope were found to protect against suicidal ideations.[10] Hence, the existing data has found various protective factors against suicide The rationale behind this was to identify protective factors in our local setup in men and women and work through these factors can help devise targeted and effective suicide prevention strategies.

METHOD

This cross-sectional study was carried out from 2nd May 2023 till 3rd November 2023, at Psychiatry department of MTI, KTH hospital in Peshawar, Pakistan. A sample of 230 patients admitted suffering from severe depression to the department, was selected using non-probability consecutive sampling, where participants were included based on their availability during the study period. Hamilton Rating Scale for Depression (HAM-D) was used to assess the severity of depression. Prior to inclusion, participants provided written informed consent. Ethical approval was obtained from the hospital's ethical committee according to the ethical standards protocol. The assessment tools used in the study were the translated version of the Beck Scale for suicidal ideation.[11] Individuals scoring > 8 on this scale were categorized as having "depression with suicidal ideations and "modified version of reasons for living scale" was used to identify protective factors against suicide.[12]

Data analysis was performed using SPSS version 22.0, and the Chi-square test was administered to find out the association between different demographic parameters and the presence of suicidal ideations. A p-value of <0.05 was set as statistically significant in finding the associations of demographic variables with suicidal ideations. This study aimed to look into the

protective factors as per the "Modified version of reasons for living scale" against acting out on suicidal thoughts and how they relate to certain demographic parameters.

RESULTS

The participants included in our study were nearly equally distributed in terms of gender, with 112 males (48.7%) and 118 females (51.3%). However, the age distribution was 52.6% of 18-30 years and 47.4% were of age 31-65 years. The marital status showed a wide variation of married people (55.2%), followed by singles (28.7%), divorced (10.4%), and separated (5.6%). A major chunk of them had primary education (40%) and 38.7% were illiterate. Most of the patients were living in the joint family system, as shown in Table 1.

Various factors, protect individuals who experience severe depression and suicidal thoughts from taking their own lives. The most significant and prevalent protective factor found was religious and moral objections in 86 out of 230 patients (37.4%) followed by fear of social disapproval in 40 out of 230 patients (17.4%), hopefulness, and fear of suicide in 36 out of 230 patients (15.7) each, and family responsibility in 32 out of 230 patients (13.9%), as protective factors.

Demographic characteristics exhibited different degrees of protective factors against suicide in severe depression. The protective factors included fear of social rejection, moral and religious objections, hopefulness, family responsibilities, and suicide fear.

In terms of age, the distribution of protective factors did not show a significant difference between people aged 18–30 years and those aged 31–65 years ($p = 0.106$). Other than age, all other demographic variables showed a statistically significant difference like women were found to have higher levels of hopefulness, fear of social rejection, and family responsibility than men. On the other hand, men expressed more moral and religious reservations ($p<0.001$). Similarly, those living in their own homes had higher levels of protective factors than those living in rented homes ($p < 0.001$).

A notable difference was found in the levels of protective factors ($p < 0.001$) according to socioeconomic position as well. Middle-class people showed more moral and religious objections, hope, and family responsibilities than lower-class people. However, people with higher socioeconomic status showed the greatest levels of moral and religious objections. People living in the nuclear family system and those who were married had higher levels of religious and moral objections and a sense of responsibility towards family compared to those in extended family structures and those who were single or divorced respectively ($p<0.001$). Surprisingly, similar findings were found for illiterate individuals compared to more educated groups with bachelor's or master's degrees ($P<0.001$) (Table 3). These findings suggest that

different family, marital, and educational backgrounds can influence the presence of protective factors against suicide in severe depression.

Table 1

Sociodemographic characteristics of participants

Characteristics	N	Percentage (%)
Gender		
Male	112	48.7%
Female	118	51.3%
Age groups (years)		
18-30	121	52.6%
31-65	109	47.4%
Marital Status		
Single	66	28.7%
Married	127	55.2%
Divorced	24	10.4%
Separated	13	5.6%
Residential Status		
Personal	132	57.4%
Rental	98	42.6%
Socio-Economic Status		
Lower Class	94	40.9%
Middle Class	87	37.8%
High Class	49	21.3%
Educational status		
Illiterate	89	38.7%
Primary	92	40%
Secondary	13	5.6%
Intermediate	16	6.9
Bachelor	12	5.2%
Master	8	3.5%
Family Setup		
Nuclear	62	27%
Joint	123	53.5%
Extended	45	19.5%
Occupational status		
Unemployed	56	24.35%
Government job	24	10.43%
Private job	72	31.30%
Others	78	33.91%

Table 2: Frequency of protective factors

		Frequency	**Percentage**
Protective factors	Fear of social disapproval	40	17.4
	Religious and moral objections	86	37.4
	Hopefulness	36	15.7
	Responsibility towards family	32	13.9
	Fear of suicide	36	15.7
	Total	230	100

Table 3: Data stratification for protective factors and demographic characteristics

Demographic characteristics		Protective factors						P- value
		Fear of social disapproval	Religious and moral objections	Hopefulness	Responsibility towards family	Fear of suicide	Total	
Age groups (years)	18-30	16(13.2%)	41(33.9%)	20(16.5%)	20(16.5%)	24(19.8%)	121(100.0%)	0.106
	31-65	24(22.0%)	45(41.3%)	16(14.7%)	12(11.0%)	12(11.0%)	109(100.0%)	
Gender	Male	12(10.7%)	52(46.4%)	20(17.9%)	4(3.6%)	24(21.4%)	112(100.0%)	<0.001
	Female	28(23.7%)	34(28.8%)	16(13.6%)	28(23.7%)	12(10.2%)	118(100.0%)	
Residential Status	Personal	20(15.2%)	60(45.5%)	28(21.2%)	16(12.1%)	8(6.1%)	132(100.0%)	<0.001
	Rented	20(20.4%)	26(26.5%)	8(8.2%)	16(16.3)	28(28.6%)	98(100.0%)	
Socioeconomic Status	Lower class	20(21.3%)	26(27.7%)	8(8.5%)	20(21.3%)	20(21.3%)	94(100.0%)	<0.001
	Middle class	20(23.0%)	35(40.2%)	20(23.0%)	12(13.8%)	0(0.0%)	87(100.0%)	
	High class	0(0.0%)	25(51.0%)	8(16.3%)	0(0.0%)	16(32.7%)	49(100.0%)	
Family System	Nuclear	4(6.5%)	26(41.9%)	8(12.9%)	4(6.5%)	20(32.3%)	62(100.0%)	<0.001
	Joint	28(22.8%)	51(41.5%)	20(16.3%)	8(6.5%)	16(13.0%)	123(100.0%)	
	Extended	8(17.8%)	9(20.0%)	8(17.8%)	20(44.4%)	0(0.0%)	45(100.0%)	
Marital Status	Single	13(19.7%)	21(13.8%)	9(13.6%)	0(0.0%)	23(34.8%)	66(100.0%)	<0.001
	Married	19(15.0%)	58(45.7%)	15(11.8%)	31(24.4%)	4(3.1%)	127(100.0%)	
	Divorced	4(16.7%)	3(12.5%)	10(41.7%)	1(4.2%)	6(25.0%)	24(100.0	
	Separated	4(30.8%)	4(30.8%)	2(15.4%)	0(0.0%)	3(23.1%)	13(100.0	
Educational Status	Illiterate	20(22.5%)	29(32.6%)	16(18.0%)	8(9.0%)	16(18.0%)	89(100.0%)	<0.001
	Primary	12(13.0%)	32(34.8%)	12(13.0%)	24(26.1%)	12(13.0%)	92(100.0%)	
	Secondary	0(0.0%)	9(69.2%)	0(0.0%)	0(0.0%)	4(30.8%)	13(100.0%)	
	Intermediate	8(50.0%)	4(25.0%)	0(0.0%)	0(0.0%)	4(25.0%)	16(100.0%)	
	Bachelor	0(0.0%)	8(66.7%)	4(33.3%)	0(0.0%)	0(0.0%)	12(100.0%)	

	Master	0(0.0%)	4(50.0%)	4(50.0%)	0(0.0%)	0(0.0%)	8(100.0%)	
Employment status	Unemployed	16(28.6%)	0(0.0%)	4(7.1%)	8(14.3%)	28(50.0%)	56(100.0%)	<0.001
	Government job	4(16.7%)	4(16.7%)	8(33.3%)	0(0.0%)	8(33.3%)	24(100.0%)	
	Private job	16(22.2%)	32(44.4%)	16(22.2%)	8(11.1%)	0(0.0%)	72(100.0%)	
	Others	4(5.1%)	50(64.1%)	8(10.3%)	16(20.5%)	0(0.0%)	78(100.0%)	

DISCUSSION

Religion and moral objections were found as the most prevalent protective factor against suicide in our study, with a major proportion of patients reporting this as a restraining factor against suicide. This finding is consistent with previous research which has shown the mitigating effect of religion and moral objections against suicide.[13,14,15] In this study, fear of social disapproval was found an important protective factor in suicide prevention. This social disapproval named suicide stigma in a study played a crucial role in suicide prevention in the form of fear of rejection, loss of status, and discrimination.[16]

Hopefulness, fear of death, and responsibility toward family were other notable protective factors in our study. All these findings were in agreement with past research which has shown that family responsibility, fear of death and social disapproval, moral objections to suicide, and greater survival and coping skills play an important role in suicide prevention. Hopelessness was associated with a higher rate of suicide attempts.[17] Hope in individuals suffering from depression acts as a buffer against suicidal ideations and behavior and hopefulness prevents depressed people from committing suicide attempts, especially in adolescents.[18,19]

Our study showed no significant association of age with protective factors in contrast to the results of a previous study.[20]. Rest of the demographic factors including gender, residential, socioeconomic, marital, educational status, and family system, all were significantly correlated with protective factors, consistent with past studies.[21] The above demographic variables influence one's access to resources, social support, and coping strategies, hence impacting their resilience against suicide.[22]

In a nutshell, the findings of our study were consistent with previous research, where religious and moral objections were major buffers against committing suicide, followed by fear of social disapproval, fear of death, hopefulness, and responsibility towards family.

CONCLUSION

The findings of this study may have several practical implications for suicide prevention strategies. Interventions such as strengthening the above identified factors including promotion of religious and moral values, reducing stigma, instillation of hope, and enhancing social support networks may play a pivotal role in the prevention of suicide.

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