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Depression, Anxiety and Social Support as Predictors of Suicide Intent among Self-Harm Inpatients

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ABSTRACT

Objective: to examine depression, anxiety and social support as predictors of suicide intent among self-harm inpatients.
Study Design: Cross-sectional study.
Place and Duration of Study: Foundation University, Rawalpindi Pakistan, from Jun 2019 to Oct 2020.
Methodology: A clinical sample of 220 self-harm patients aged 18 to 35 years was collected from different mental health departments of Rawalpindi, Jhelum and Multan hospitals. Beck Suicide Intent Scale, Depression and Anxiety subscales of DASS-42 and Multidimensional Scale of Perceived Social Support were administered to assess suicide intent, depression, anxiety and social support.
Results: Results of current research revealed that depression and anxiety had a significant positive correlation with suicide intent (r = 0.71 & 0.29, respectively). Moreover, depression and anxiety were significantly positively predicted by suicide intent. Social support had a significant negative correlation with suicide intent and significantly negatively predicted suicide intent.
Conclusion: The study revealed that depression and anxiety were significant positive predictors of suicide intent among self-harm inpatients, whereas social support was a significant negative predictor of suicide intent and, thus, contributed to the continued growth of exploring an etiological model of self-harm.

Keywords: Depression, Anxiety, Social support, Suicide intent, Self-harm, Inpatients.

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INTRODUCTION

Self-harm is a major public health concern; it is considered the sixth major source of ill-being world-wide and 10-20% more common than a completed suicide.[1] The increased incidence of self-harm is grasping the attention of researchers and the health care system.[2] Social support is the quality of supposed care from social associations and pursues protection through help-seeking growth. Self-harming behaviours also reveal how an individual is connected to society and formed by social marines.[3,4] Social support is viewed as a rescue or protective factor; it minimizes stress and suicidal behaviour. Isolation and family conflicts are social factors tangled in the aetiology of suicide; social and cultural diversities may diverge expressively for different countries.[5] Research from developing countries also reveals that nerve-wracking social events can be an important risk factor for suicide attempts.[6] Thus, this is an important overlooked area as debatably understanding the predictive role of suicidal intent.[7]

Examining associated factors is an essential part of being able to distinguish and better identify between individuals who will experience non-suicidal intent and those who will attempt suicide.[8,9] Thus, the current study aimed to investigate the intent underlying self-harming behaviour among self-harm patients. Besides, self-harm may worsen and be a risk factor for future suicidal behaviour, specifically a more common risk factor among the clinical population than the general population.[10] Limited knowledge of self-harm in the clinical population, grasping that there is a requirement for a healthier understanding of the relationship between depression, anxiety and social support on suicidal intent among self-harm clinical patients. Hence, the current study intends to determine the correlation and examine the impacts of these predictive factors on suicide intent among self-harm patients.

METHODOLOGY

The cross-sectional study was carried out at Foundation University, Rawalpindi, from June 2019 to October 2020. The sample of self-harm patients was gathered from the Emergency Room of the Mental Health Departments of Rawalpindi, Jhelum and Multan hospitals. The sample size was calculated through EpiTools Epidemiological Calculator.[11]

Inclusion Criteria: Patients of either gender, aged 18 to 35 years, with self-harm history were included in the study.

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Exclusion Criteria Patients with psychosis or intellectual disability were excluded from the study. In addition, patients other than depression, anxiety and bipolar spectrum disorder were excluded.

Three participants met the criteria of drug abuse disorders, and two participants were in the psychotic phase of mood disorder thus, were not included. Consequently, a total of 220 participants were recruited in the study. Self-reported measures were used to assess suicide intent, depression, anxiety and social support; a demographic data sheet was designed to get information regarding the personal information of participants. To assess suicidal intention *Beck Suicide Intention Scale* was employed.[12] It comprises 15 items referring to the patient's protections and views of the act. Each question is recorded from 0 to 2 with a maximum score of thirty, suggesting the highest intention of suicide. The questionnaire pertains to planning, precautions, preparation, communication, the expectation of medical aid, and the intensity of the wish to live or die.[13] The recommended cut-off value is 15, i.e. 15-19 raw score indicates low suicide intention; a 20-28 raw score indicates medium suicidal intention; a 29 and above raw score indicates a high intention of suicide. Subscales of depression and anxiety were used from the Urdu version of Depression Anxiety Stress Scales-42, with 14 items in each subscale to assess the emotional and physical symptoms of depression and anxiety the preceding week. It is a 4-point Likert scale from 0 to 3. Alpha reliability Urdu translated subscales of DASS-42 (Depression and Anxiety) ranged from 0.84 and 0.82, respectively, demonstrating strong internal reliability and validity and also illustrating having more ability to differentiate between depression and anxiety symptoms comparatively with other instruments. A higher score indicated higher levels of depression and anxiety. Social support was assessed with a Multidimensional Scale of Perceived Social Support developed by Zimet in 1988, which has twelve items about friends, family, and significant others using a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). This scale has good internal reliability (α=0.93).[14]

All information regarding research, its necessities, and its process was delivered, and formal written consent was taken from each participant. Individual administration was carried out, in which questionnaires were employed. Statistical Package for Social Sciences (IBM-SPSS Version 23) was used to analyze data using descriptive statistics. Descriptive analysis and item-total correlations were computed to calculate the internal consistency of the scales. Biva-riate correlation analysis was employed to analyze the nature of relationships between study variables. To examine causal relations and mean differences between study variables, regression analysis and independent sample t-test were applied. The level of significance in the present study was set as 0.05.

RESULTS

Results revealed that out of 220 self-harm patients, ninety-three patients had suicidal intent at the time of engaging in self-harm behaviour. The sample consisted of males 96(44%) and females 124(56%) with a mean age of 26.44±8.1 years. Different methods of self-harm were reported like an overdose of medicines 79(35.9%), cutting off important veins 58(26.4%), body cut scars 43(19.5%), hanging 12(5.5%), burning 11(5%), jumping from heights 7(3.2%) and gunshot 5(2.3%) respectively. Table-I represents the correlation coefficient between study variables. Depression and anxiety had a significant positive correlation (r=0.71**, 0.29** respectively) with suicide intent. At the same time, social support had a significant negative correlation with suicide intent (r=-0.51**).

Table-I: Bivariate Correlation among Study Variables (n=220)

Variables	Depression	Anxiety	Social Support	Suicide Intent
Depression	-	0.58**	-0.52**	0.71**
Anxiety	-	-	-0.27**	0.29**
Social Support	-	-	-	-0.51**

Results of Table-II show that depression significantly predicted suicide intent positively. Depicting higher depression leads to a higher risk of suicide intent among self-harm patients. Moreover, it accounted for a 15% variance in suicide intent. Results are statistically significant as the *p*-value was less than 0.05.

Table-II: Suicide Intent Predicted by Depression in Self-harm Patients (n=220)

Outcome	Predictor	Unstandardized Coefficient		Standardized Coefficient	*p*-value
		B	S.E	β	
Suicide Intent	(Constant)	1.16	0.89		0.19
	Depression	0.50	0.03	0.71	<0.001

Results of Table-III reveal that anxiety positively predicted suicide intent among self-harm patients. Results were statistically significant as *the p-value* was <0.001.

Table-III: Suicide Intent Predicted by Anxiety in Self-harm Patients (n =220)

Outcome	Predictor	Unstandardized Coefficient		Standardized Coefficient	*p*-value
		B	S.E	B	
Suicide Intent	(Constant)	8.73	1.19		<0.001
	Anxiety	0.23	0.05	0.29	<0.001

Table-IV reveals that social support strongly predicted suicide intent in a negative direction, which means that if social support was high, there is a low prediction of suicide intent among self-harm patients. Moreover, it accounted for a 25% variance in suicide intent. Self-harm patients with suicidal intent had more depression (M=31.05±5.72) and anxiety (M=23.89 ±8.82) than patients without suicidal intent. In addition, there is a significant group difference in social support, revealing that patients with non-suicidal intent had more social support than patients with suicidal intent (Table-V).

Table-IV: Suicide Intent Predicted by Social Support in Self-harm Patients (n=220)

Outcome	Predictor	Unstandardized Coefficient		Standardized Coefficient	*p*-value
		B	S.E	β	
Suicide Intent	(Constant)	21.17	0.94		<0.001
	Social Support	-0.19	0.02	-0.51	<0.001

Table-V: Differences on Depression, Anxiety and Social Support on Suicide Intent among Self-harm patients (n=220)

Variables	Non-Suicidal self-harm (n=127) Mean ±SD	Suicidal self-harm (n=93) Mean±SD	*p*-value
Depression	20.56±8.87	31.05±5.72	<0.001**
Anxiety	20.30±7.64	23.89±8.82	<0.001**
Social Support	45.90±17.98	14.12±1.46	<0.001**

DISCUSSION

In the current study, depression, anxiety and social support were examined as predictors of suicide intent among self-harm patients. Results revealed that depression and anxiety significantly correlated with suicide intent. In comparison, social support had a significant negative correlation with suicide intent. Depicting high depression and anxiety increases the risk of suicide intent among self-harm patients, whereas high social support decreases suicide intent.[13] The results are consistent with previous research, that found depression and comorbid psychiatric disorders were significantly positively related to suicidal behaviour among self-harm.[14] Moreover, another study showed that suicide attempts with and without psychiatric illnesses. They found that 79.6% met the criteria for depression, and those self-harm patients without psychiatric illness showed interpersonal issues and a lack of social support.[15] Moreover, another past study revealed that depression and anxiety positively predicted suicide intent. Whereas social support negatively predicted suicide intent which means that if social support is high, there is also a low prediction of suicide intent among self-harm patients.[16] These findings are consistent with our study. Similarly, a case-controlled study found that lack of social support was positively associated with self-harm.[17] Findings of group differences in depression, anxiety and social support were found in current research among suicidal and non-suicidal patients based on suicide intent. Self-harm patients with suicidal intent had more depression, anxiety, and less social support than patients without suicidal intent, consistent with previous research also revealed that the high suicide intent group perceived less social support and less suicide intention significantly related to perceiving more social support.[18] If healthy social support is established in times of need, it yields a sense of contentment, lowering the risk of suicidal intent among self-harm patients . Previous studies also revealed that social support is an important protective or risk factor for suicide in clinical and normal populations.[18,19] Thus, all findings of the current study are consistent with the above-mentioned empirical evidence.

LIMITATION OF STUDY

The findings highlight predicting the roles of depression, anxiety and social support in suicide intent among self-harm patients. However, the current study did not study the interaction between study variables regarding mediation or moderation.

CONCLUSION

Overall, current research results concluded that high depression, anxiety and less social support were strong predicting factors of suicidal intention among self-harm patients. Furthermore, the findings highlighted that social support plays a significant role in saving lives among self-harm patients. Therefore, healthy social support should be encouraged in the general psychotherapy approaches and pharmacological treatments for suicidal self-harm patients.

Conflict of Interest: None.

Authors' Contribution

Following authors have made substantial contributions to the manuscript as under:

NY: Supervision, Conception, Study design, analysis and Interperitation of data, Critically reviewed manuscript & approval for the final version to be published.

SA: Co-supervision, Data entry, analysis and interpretation, manuscript writing & approval for the final version to be published.

SS: Critically reviewed, Drafted manuscript & approval for the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investi-gated and resolved.

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