

Original Article

The Analysis of Correlation of Suicide Probability and Reason for Hospitalization in Psychiatric Clinics

Dhungana M¹, Ghimire SR², Thapa M³

¹Lecturer, Department of Psychiatry, Devdaha Medical College, Rupandehi, Nepal, ²Consultant Psychiatrist and Project Manager, Transcultural Psychosocial Organization Nepal (TPO Nepal), Baluwatar, Kathmandu, Nepal, ³Consultant Psychiatrist, Chautari Nepal Health Foundation, Manigram, Rupandehi, Nepal

ABSTRACT:

Background: To date, clinicians have lacked tools to reliably predict suicidal behavior. Most researchers have focused on the risk factors of suicidal ideation and attempts, instead of on positive emotions that reduce these risks. With the rise of positive psychology over the last two decades, more emphasis has been placed on the influence of positive attitudes, such as reasons for living and hope, on suicidal ideation. **Aim of the study:** To analyze the correlation of suicide probability and reason for hospitalization in psychiatric clinics. **Materials and methods:** The study was conducted in the department of psychology of the teaching institute. For the study we selected 50 patients hospitalized in psychiatric centers. Patients older than 18 years, voluntarily participating, having at least one psychiatric diagnosis according to the DSM- V, being approved by a psychiatrist to participate to the study and being hospitalized in psychiatry clinic were included in the study. For the collection of data personal information form, suicide probability scale (SPS), RFL, Beck’s depression inventory (BDI), and volunteer form were used. The collected data was statistically analyzed. **Results:** A total of 50 patients participated in the study. The mean age of the patients was 42.33±12.21 years. On comparing the results we observed statistically significant results in Educational status, living status and suicidal thoughts. With respect to patients having history death of close friend or relative and death by suicide of close friend or relative, we observed statistically significant results. **Conclusion:** Significant parameters are responsible for increasing the suicide probability in patients at psychiatry hospitals. So, psychiatric personnel at the hospital are requested to contribute to the safety of the patients and the therapeutic environment by observing these results during patient observation, patient interviews, and patient treatment within the mental health service.

Keywords: Psychiatry, suicide, depression, probability.

Corresponding author: Dhungana M, Lecturer, Department of Psychiatry, Devdaha Medical College, Rupandehi, Nepal, E mail: drdhungana3536@hotmail.com

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INTRODUCTION:

Over 30,000 people commit suicide each year in the United States. The rate of attempted suicide may be as much as 10 times higher than the rate of completed suicide. Of community-residing persons, 4.6% admit to attempting suicide at least once in their lifetime.^{1, 2} The rate of attempted suicide is about 6 to 80 fold higher in persons with psychiatric disorders. Prediction of suicide attempts may facilitate prevention efforts and result in the reduction of the associated morbidity and cost including medical consequences, utilization of medical services and facilities, and loss in productivity.³ To date, clinicians have lacked tools to reliably predict suicidal behavior. Most researchers have focused on the risk factors of suicidal ideation and

attempts, instead of on positive emotions that reduce these risks.⁴ With the rise of positive psychology over the last two decades, more emphasis has been placed on the influence of positive attitudes, such as reasons for living and hope, on suicidal ideation. There is some evidence that lower suicidal ideation is related to positive factors, such as feeling satisfied with interpersonal relationships, feeling useful to family and friends, feeling that life has meaning, and pursuing a meaningful life.^{5, 6} Hence, we planned the study to analyze the correlation of suicide probability and reason for hospitalization in psychiatric clinics.

MATERIALS AND METHODS:

The study was conducted in the department of psychology of the teaching institute. For the study we selected 50 patients hospitalized in psychiatric centers. The ethical approval for the study was approved from the ethical committee of the institute. An informed written consent was obtained from the participating subjects. Patients older than 18 years, voluntarily participating, having at least one psychiatric diagnosis according to the DSM-V, being approved by a psychiatrist to participate to the study and being hospitalized in psychiatry clinic were included in the study. For the collection of data personal information form, suicide probability scale (SPS), RFL, Beck’s depression inventory (BDI), and volunteer form were used. The collected data was statistically analyzed.

The statistical analysis of the data was done using SPSS program for windows. The Student’s t-test and Chi-square test were used to check the significance of the data. A p-value less than 0.05 was predetermined to be statistically significant.

A total of 50 patients participated in the study. The mean age of the patients was 42.33±12.21 years. **Table 1** shows the characteristic variables of the study group. In the study group 27 male patients were present and 23 female patients. 23 patients were married whereas 27 were single. 13 patients were graduated from college and 37 were educated up to 12 or less. 7 patients were living alone but 43 patients were living with family. 8 patients had suicidal ideas but 42 patients denied them. On comparing the results we observed statistically significant results in Educational status, living status and suicidal thoughts (p<0.05).

Table 2 shows the history of adverse life events in patients. 15 patients had experienced violence in life; 10 patients had experienced death of close relative or friend; 4 patients experienced suicide attempted by close friend or relative. 8 patients had experienced death by suicide of close friend or relative. On comparing the results we observed statistically significant results with respect to patients having history death of close friend or relative and death by suicide of close friend or relative (p<0.05).

RESULTS:

Figure 1: Showing the frequency of different characteristic variables

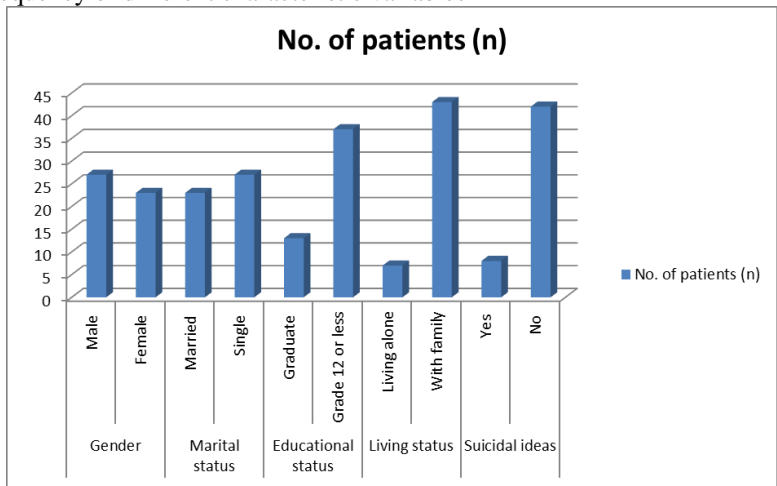


Table 1: Characteristic variables of the study group

Characteristic variables	No. of patients (n)	p-value
Gender	Male	27
	Female	23
Marital status	Married	23
	Single	27
Educational status	Graduate	13
	Grade 12 or less	37
Living status	Living alone	7
	With family	43
Suicidal ideas	Yes	8
	No	42

Table 2: History of adverse life events in the patients

Adverse life events	Yes, n	No, n	p-value
Experienced violence in life	15	35	0.221
Death of close relative or friend	10	40	0.02*
Suicide attempted by close friend or relative	4	46	0.9
Death by suicide of close friend or relative	8	42	0.04*

DISCUSSION:

Considering studies conducted on the possibility of clinical or nonclinical suicide, to be a woman, to be young, to have no income, to experience feelings of depression, loneliness, and hopelessness, and to have fewer reasons for living can be seen as important risk factors. In this study, a series of analyses were conducted to examine the suicide probability and associated factors of the patients hospitalized at the psychiatric clinic. According to the findings obtained from this study, the suicide probabilities of the university graduates are lower than the other education level individuals. Also, significant results were observed in patients having history of death of close friend or relative and death by suicide of close friend or relative. The results were compared to previous studies in the literature. We observed consistent results. Britton PC et al tested the hypothesis that reasons for living (RFL) are inversely related to suicide ideation. This report is a secondary analysis of cross-sectional data. Participants were recruited from the clinical services of three teaching hospitals in Rochester, NY. The sample consisted of 125 adults 50 years or older receiving treatment for a mood disorder. A diagnostic interview and measures of suicide ideation, depression, hopelessness, and RFL were included in the assessment battery. Dependent variables were presence and severity of suicide ideation. Data were analyzed using multivariate logistic and linear regressions. Patients who reported higher levels of fear of suicide were less likely to report suicide ideation. The relationships between hopelessness and both the presence and severity of suicide ideation were stronger among those who reported greater levels of responsibility to family. They concluded that clinicians working with at-risk older adults are encouraged to explore their patients' RFL. These cross-sectional findings point to the need for prospective research examining the associations among different RFL, hopelessness, and suicide ideation in depressed older adults. Oquendo MA et al reported that whether sex differences exist in clinical risk factors associated with suicidal behavior is unknown. The authors postulated that among men with a major depressive episode, aggression, hostility, and history of substance misuse increase risk for future suicidal behavior, while depressive symptoms, childhood history of abuse, fewer reasons for living, and borderline personality disorder do so in depressed women. Patients with DSM-III-R major depression or bipolar disorder seeking treatment for a major depressive episode (N=314) were followed for 2 years. Putative predictors were tested with Cox proportional hazards regression analysis. During follow-up, 16.6% of the patients attempted or committed suicide. Family history of suicidal acts, past drug use, cigarette smoking, borderline personality disorder, and early parental separation each more than tripled the risk of future suicidal acts in men. For women, the risk for future suicidal acts was sixfold greater for prior suicide attempters; each past attempt increased future risk threefold. Suicidal ideation, lethality of past attempts, hostility, subjective

depressive symptoms, fewer reasons for living, comorbid borderline personality disorder, and cigarette smoking also increased the risk of future suicidal acts for women. These findings suggest that the importance of risk factors for suicidal acts differs in depressed men and women. This knowledge may improve suicide risk evaluation and guide future research on suicide assessment and prevention.^{7,8}

Heisel M et al investigated the roles of reasons for living (RFL) and meaning in life (MIL) in potentially promoting mental health and well-being and protecting against suicide ideation among community-residing older adults and to investigate the psychometric properties of the Reasons for Living Scale-Older Adult version (RFL-OA). Of 173 older adults initially recruited into a longitudinal study on late-life suicide ideation, 109 completed the RFL-OA and measures of cognitive and physical functioning and positive and negative psychological factors at a two-year follow-up assessment. We tested a model in which RFL and MIL protect against suicide ideation, controlling for demographic and clinical factors. We also assessed the psychometric properties of the RFL-OA in community-residing older adults, investigating its internal consistency and its convergent (MIL, perceived social support, and life satisfaction), divergent (loneliness, depressive symptom severity, and suicide ideation), and discriminant validity (cognitive and physical functioning). RFL-OA scores explained significant variance in suicide ideation, controlling for age, sex, depressive symptom severity, and loneliness. MIL explained significant unique variance in suicide ideation, controlling for these factors and RFL, and MIL significantly mediated the association between RFL and suicide ideation. Psychometric analyses indicated strong internal consistency, convergent, divergent, and discriminant validity for the RFL-OA relative to positive and negative psychological factors and cognitive and physical functioning. These findings add to a growing body of literature suggesting merit in investigating positive psychological factors together with negative factors when assessing suicide risk and planning psychological services for older adults. Diaconu G et al explored the association between obsessive-compulsive personality disorder (OCPD) and suicidal behavior. Subjects referred for a psychiatric consultation were evaluated with structured interviews for mood and personality disorders (the Structured Clinical Interview for DSM-III-R and the Structured Clinical Interview for DSM-III-R Axis II Disorders), a history of suicidal behavior, and levels of coping. A total of 311 subjects were investigated using a 3-group design to test the association between OCPD and suicidal behavior, controlling for the presence of depression. Subjects with OCPD and a history of depression were compared to depressed subjects without any Axis II diagnosis and to subjects without depression or personality disorders. The study was conducted at Verdun Community Psychiatric Clinic, Douglas Hospital, McGill University, in Montreal, Quebec, Canada, and subjects were recruited from 2003

until 2005. Subjects in the comorbid OCPD-depression group presented increased current and lifetime suicide ideation compared to the groups with depression alone or without depression or personality disorders; they also had increased history of suicide attempts, which were often multiple attempts. They also scored lower on the Reasons for Living Inventory (RFL) and the Death Anxiety Questionnaire. Interestingly, comorbid OCPD-depression patients differed from patients with depression alone on the Moral Objections items of the RFL, on which individuals with OCPD-depression scored lowest. Limitations of this study were its cross-sectional design, retrospective sample, and limited generalizability to the population at large. They concluded that obsessive-compulsive personality disorder is a factor increasing risk for nonfatal suicidal behavior independently of risk conferred by depressive disorders.^{9,10}

CONCLUSION:

From the results, we conclude that significant parameters are responsible for increasing the suicide probability in patients at psychiatry hospitals. So, psychiatric personnel at the hospital are requested to contribute to the safety of the patients and the therapeutic environment by observing these results during patient observation, patient interviews, and patient treatment within the mental health service.

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