

STRESSORS AMONG PSYCHIATRIC OUT-PATIENTS WITH SUICIDE ATTEMPT ATTENDING TERTIARY CARE HOSPITAL IN EASTERN NEPAL

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Abstract. Life changes could act as a stressor causing physiological arousal and enhance susceptibility for suicidal behavior. Suicide victims have experienced more changes in living conditions, work problems and object losses than normal controls. Objective of this study was to assess common stressors and stress level among psychiatric out-patients with suicide attempt. It was a descriptive study conducted with purposive sampling in a tertiary care hospital among suicide attempt cases visiting out-patient department of psychiatry. Calculated sample size of 113 cases were enrolled within 1 year period. Stressor factor (stressors, its type-acute or ongoing etc.) was explored and documented in a semi-structured Proforma in all subjects. Stress level was measured with Perceived Stress Scale (PSS). Demographic variables were recorded in a semi-structured proforma. Majority of the subjects were female, married and literate, with the commonest age group of 20- 29 and <20 years. Most subjects were homemakers, urban dwellers, Hindu and, were from low socioeconomic status and joint family. Among the patients; 86 (76.1%) had chronic on-going stressor, 23 (20.4%) acute stressor within 1 month and 4 (3.5%) did not reveal any stressor. Common stressor revealed were: economic (22.12%), marital (21.23%), relationship issue (20.35%), physical and mental illness (17.69%), substance use (13.27%), parental issue (6.19%), physical violence (6.19%), and loss or death of close ones (5.30%). Perceived Stress Scale showed 39% with high, 36% moderate and 21% low stress level within past 1 month. Management of suicide cases, hence, integrally involves stress management.

Keywords: *BPKIHS, mental illness, psychiatry out-patients, stress, stressor, suicide attempt*

Introduction

Life stress is central to virtually all major theories of suicide (O'Connor and Nock, 2014). Moreover, a recent review found that stress, as broadly defined (e.g., acute life events, chronic difficulties, trauma), is consistently associated with suicide ideation and attempts in adolescents and adults (Liu and Miller, 2014). All human beings will periodically experience psychological burdens, pain, and stressors during their lifetime. Having transient thoughts of wanting to die may be a natural response to emotional pain. In the midst of the psychological pain, suicide can become a gripping and viable means of escape (World Health Organization, 1993). Contemporary ideation-to-action frameworks posit that stress exposure contributes to both the development and worsening of suicide ideation, as well as to the escalation from ideation to attempts (Klonsky et al., 2017). Individuals are at greatest risk for attempts when the severity of these states exceeds connectedness (i.e., attachment to things that provide a sense of purpose or meaning). The loss of interpersonal relationships may reduce connectedness, and thus, the 3ST insinuates such losses may be implicated in attempts among ideators (O'Connor and Nock, 2014).

In a review of the suicide literature, Nock et al. (2008) posit that biological and psychological factors, in combination with stressful life events, may place individuals at risk. Local Nepalese literature reveals relational or interpersonal issues among suicide attempt cases (Sapkota et al., 2011; Shakya, 2014, Pandey et al., 2015). Elbogen et al. (2020) provide a sobering harbinger of the potential effects on suicide of the collective stressors borne by the COVID-19 pandemic and other mass traumatic events that are accompanied by substantial financial stressors. Current study was carried out among the patients with suicide attempts visiting Psychiatry out-patient service of a teaching hospital in eastern Nepal to assess their common stressors and the stress level.

Materials and Methods

This is a descriptive study conducted in Psychiatry OPD, B.P. Koirala Institute of Health Sciences, a tertiary care hospital in eastern Nepal among psychiatry out-patients with history of suicide attempt. Department of Psychiatry of this institute provides out-patient services along with other services, e.g. in-patient, psychiatry emergencies, consultation liaison etc. (Shakya et al., 2008). Sample size calculated based on the previous study of the same setting (Pandey et al., 2015) was 113. It is a part of the study done with the approval of Research Committee of BPKIHS (Ref. No. 403/074/075 and Code: IRC/1216/018). Potentially eligible patients with suicide attempt, consulting in the Psychiatry out-patient service were enrolled with a written informed consent. Strict confidentiality of information was maintained and the results were utilized for management of the problem concerned and similar problems in general. Demographic profiles (age, sex, ethnicity, occupation, education and geographical areas, etc.) were documented in a semi-structured Proforma. Stressors of all patients were explored and recorded.

All enrolled subjects were assessed with the application of the Perceived Stress Scale (PSS) for stress level (Cohen et al., 1983). The PSS is a measure of the degree to which situations in one's life are appraised as stressful. Questions in the PSS ask about the feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way. Although some of the questions are similar, there are differences between them and each one is treated as a separate question. The PSS scores are obtained by reversing responses (e.g., 0= 4, 1= 3, 2= 2, 3= 1 and 4= 0) to the four positively stated items (items 4, 5, 7 and 8) and then summing across all scale items. Scores of (0 - 13) is considered as low, (14 - 26) as moderate and (27 - 40) as high perceived stress level. The coded proforma was collected and information were entered into computer. Quantitative and qualitative data processing were done to calculate data as percentage, mean and standard deviation and was summarized using frequency distribution tables and Pie chart.

Results and Discussion

In this study, out of total of 113 enrolled cases, 71 (62.8%) were female and 42 (37.2%) male. Mean age was 28.27 years with mean standard deviation of 12.317. Age groups (20- 29) and (< 20) years were the largest. Among these patients seeking psychiatric consultation; 70 (61.9%) were Hindu, 23 (20.4%) Kirat, 10 (8.8%) Buddhist, 3 (2.7%) Muslims and 1 (0.9%) Christian and 6 (5.3%) other religion. Most of the

subjects 74 (65.5%) were married, 35 (31.0%) single, 1 (0.9%) separated and 3 (2.7%) divorcee. About 21% of the suicide attempt subjects were illiterate (*Table 1*).

Table 1. Socio-demographic characteristic.

| Characteristics | Category | Frequency (Percentage %) | Total |
|----------------------|-------------------|--------------------------|---------------|
| Ages (in years) | <20 | 34 (30.1) | 113 (100%) |
| | 20- 29 | 39 (34.5) | |
| | 30- 39 | 15 (13.3) | |
| | 40- 49 | 17 (15.0) | |
| | > 50 | 8 (7.1) | |
| Sex | Female | 71 (62.8) | 113 (100%) |
| | Male | 42 (37.2) | |
| Marital status | Single | 35 (31.0) | 113 (100%) |
| | Married | 74 (65.5) | |
| | Divorced | 3 (2.7) | |
| Residential setting | Separated | 1 (0.9) | 113 (100%) |
| | Urban | 66 (58.4) | |
| | Semi-urban | 23 (20.4) | |
| | Rural | 24 (21.2) | |
| Education | Illiterate | 24 (21.2) | 113 (100%) |
| | Literate- Grade 3 | 4 (3.5) | |
| | Grade 4- 7 | 19 (16.8) | |
| | Grade 8 – SLC | 42 (37.2) | |
| | Intermediate | 19 (16.8) | |
| | Graduate | 4 (3.5) | |
| | Higher | 1 (0.9) | |
| Occupation | Homemaker | 40 (35.4) | 113 (100%) |
| | Farmer | 11 (9.7) | |
| | Student | 33 (29.2) | |
| | Others | 29 (25.7) | |
| Socioeconomic status | Low | 59 (52.2) | 113 (100%) |
| | Middle | 46 (40.70) | |
| | High | 8 (7.07) | |
| | Hindu | 70 (61.9) | |
| Religion | Kirat | 23 (20.3) | 113 (100%) |
| | Buddhist | 10 (8.8) | |
| | Muslim | 3 (2.6) | |
| | Christian | 1 (0.9) | |
| Ethnicity | Others | 6 (5.3) | 113 (100%) |
| | Dalit | 17 (15.1) | |
| | Janajati | 50 (44.2) | |
| | Madhesi | 20 (17.6) | |
| | Muslim | 4 (3.5) | |
| | Brahmin/Chhetri | 17 (15.1) | |
| | Others | 5 (4.4) | |

Most common stressors were economic problem (22.12%), marital problem (21.23%) and relationship issue (20.35%). Others were: physical and mental illness (17.69%), substance use (13.27%), parental issue (6.19%), physical violence (6.19%), loss or death of close ones (5.30%) (*Table 2*).

Table 2. Stressors present at the time of suicide attempt.

| Stressor at the time of suicide attempt | Frequency (Percentage %) |
|---|--------------------------|
| Economic problem | 25 (22.12) |
| Marital problem | 24 (21.23) |
| Relationship issue | 23 (20.35) |
| Physical and mental illness | 20 (17.69) |
| Alcohol and substance abuse | 15 (13.27) |
| Parental issue | 7 (6.19) |
| Physical violence | 7 (6.19) |
| Loss or death of closed ones | 6 (5.30) |
| Not revealed | 4 (3.53) |
| Others | 4 (3.53) |

Among the total 113 patients; 86 (76.1%) had chronic on-going stressor, 23 (20.4%) had acute stressor within 1 month and 4 (3.5%) did not reveal about any stressor (*Figure 1*). Stress level assessment using Perceived Stress Scale showed: 44 (38.9%) patients had high stress level, 41 (36.3%) had moderate stress and 24 (21.2%) had low stress level within the last 1 month. In 4 (3.5%), stress level could not be known as they did not reveal any (*Figure 2*).

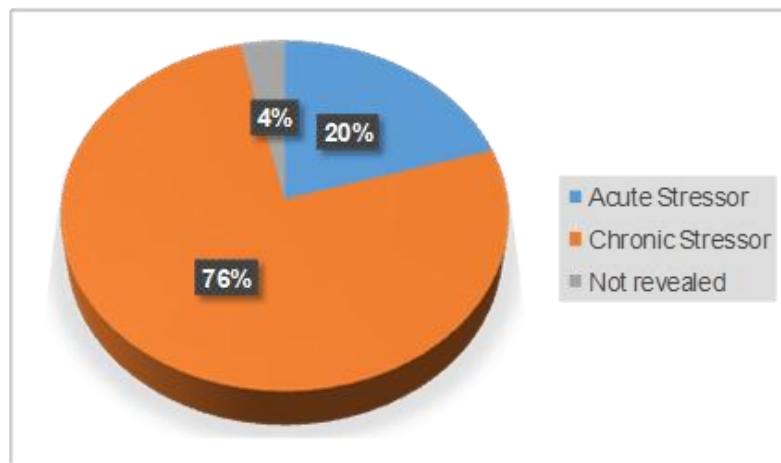


Figure 1. Types of stressor among psychiatry out-patient suicide attempt cases.

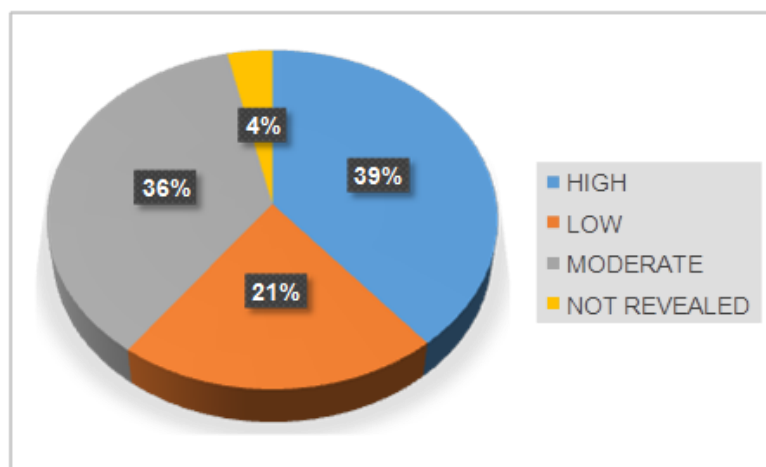


Figure 2. Stress level distribution according to Perceived Stress Scale.

In our study, majority (96.5%) of the subjects had some kind of stressors; on-going or just prior to the attempt. The finding corresponds to the study done in same setting by Shakya (2014) which reported 97.4% had one or other stressor. Economic problem was accounted in the highest number of cases in this study, closely followed by marital issue and relationship issue with family, friends, relatives or spouse. Classified together as interpersonal conflict, Shakya (2014) and Sapkota et al. (2011) reported interpersonal conflict as the most common stressor among suicide attempter out patient cases. This way, current finding is in line with the previous studies of the same set up. The reason for this finding with economic or financial problem as a remarkably common stressor may be that along with the urbanization and development, the lifestyle of the people is getting more challenging for which most of them fall into economic problem as a major stressor these days. Some Indian studies (Ayehu et al., 2017; Sabari Raja and Shashikiran, 2016) reported the financial problem second to the familial dispute. A descriptive cross sectional survey at JIPMER hospital Puducherry by Mani et al. (2017) reported family conflicts 31 (62%) as most common stressor with financial loss or problem 25 (50%) as the second most commonly occurring event. Zhao et al. (2015) in China reported that marriage frustration, work and study problems, family fanaticism and conflict, somatic disease and history of mental disorders were all significantly associated with suicide attempts.

Our study replicates the notion that many people suffer from psychological and social stresses before committing suicide. We used Perceived Stress Scale (Cohen et al., 1983) in which perceived stress was defined as the degree to which situations in one's life during the past month were perceived as stressful, as measured by 10 items. In this study, we found 44 (38.9%) with high stress level (score ranging from 27 - 40), 41 (36.3%) moderate stress (score ranging from 14 - 26) and 24 (21.2%) low stress level (score ranging from 0 - 13) within last 1 month. This finding corresponds to the study by Pandey et al. (2015) where 65% of the suicide attempters scored more than 15 on Cohen's Perceived Stress Scale indicating that persons with suicide attempters face high perceived stress level. Stress management, hence should be an integral part of the efforts towards the promotion of mental health, and the prevention and management of suicide attempts (Shakya, 2020).

Conclusion

More of the psychiatric out patients with suicide attempt were young by age, female by gender, Janajati by caste ethnicity, married, urban dwellers, with mid level education and low socioeconomic status in this study. A great majority of the psychiatry out-patients presenting with suicide attempt revealed stressors and the most common stressor included economic problem, marital problem and relationship issue, physical and mental illness, substance use, parental issue, physical violence and loss or death of close ones. Perceived Stress Scale showed 39% with high, 36% with moderate and 21% with low stress level within the past 1 month. Hence, stress identification, management and coping is essential component of the prevention and management of suicide problem along with the treatment of underlying psychiatric disorders and over all upliftment of living standard and quality of life. This study reemphasizes the need to address the local stress issues of interpersonal conflict and poverty alleviation through various measures.

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Conflict of interest

The authors confirm there are no conflict of interest involving any parties in this research study.

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