

ORIGINAL ARTICLE

Suicidal Ideation, its Influencing Factors, and Coping Strategies among Nursing Students: A Cross-Sectional Study from District Dehradun

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ABSTRACT

Background: Suicidal ideation is a significant mental health concern among nursing students, who are exposed to high academic workloads, clinical stress, and occupational demands. Limited research exists on suicidal ideation, its influencing factors, and coping strategies in nursing student populations in India.

Objectives: To assess suicidal ideation, influencing factors, and coping strategies among nursing students; and to examine their association with selected socio-demographic variables.

Methods: An exploratory cross-sectional study was conducted among 150 nursing students from two nursing colleges in District Dehradun, Uttarakhand, selected using non-probability convenience sampling. Data were collected using a modified scale assessing suicidal ideation (14 items), influencing factors (30 items across five domains), and coping strategies (12 items). Descriptive statistics and chi-square tests were applied for analysis using SPSS version 16.0.

Results: Majority of nursing students (66.7%) had mild suicidal ideation, while 33.3% had moderate suicidal ideation. Psychological domain was the most common influencing factor (mean = 3.58). Most students (68.7%) adopted average-level coping strategies. Suicidal ideation showed significant association with year of study ($p = 0.030$). Coping strategies were significantly associated with educational status ($p = 0.020$) and father's occupational status ($p = 0.016$).

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Conclusion: Suicidal ideation is prevalent among nursing students, with psychological stressors being the predominant influencing factor. Coping strategies are largely inadequate. Targeted mental health interventions and enhanced nursing curricula addressing suicidal ideation prevention are warranted.

KEYWORDS:

- Suicidal Ideation • Nursing Students • Coping Strategies • Psychological Factors
- Mental Health

INTRODUCTION

Suicidal ideation encompasses a spectrum of thoughts ranging from fleeting preoccupation with death to detailed planning of self-harm. It is recognized as a significant precursor to suicide attempts and represents a critical public health concern globally. Worldwide, nearly 800,000 people die by suicide annually, accounting for 1.4% of all deaths, making suicide the 18th leading cause of death.

Nursing students constitute a particularly vulnerable population. Beyond the academic burden common to all health profession students, they are simultaneously exposed to the emotional demands of clinical practice, extended duty hours, and direct encounters with human suffering and death. Studies have demonstrated that nursing students report higher rates of burnout, depression, and suicidal ideation compared to peers in non-health disciplines.

In India, the National Crime Records Bureau has reported alarming rates of student suicide, with approximately one student committing suicide every hour. In Dehradun, studies have documented that nearly 58% of suicide victims were below 30 years of age, with women under 25 years constituting a disproportionately large proportion.

Despite growing recognition of this problem, literature specific to nursing student populations in North India remains sparse. Understanding the prevalence of suicidal ideation, its multidimensional risk factors, and the coping strategies employed by nursing students is essential for designing targeted preventive interventions. This study was therefore undertaken to assess these parameters and their socio-demographic correlates among nursing students in Dehradun.

METHODS

Study Design and Setting

An exploratory cross-sectional study was conducted between January and February 2020 in two nursing colleges in District Dehradun.

Participants

The study population comprised nursing students above 17 years of age enrolled in GNM, B.Sc. Nursing, Post Basic B.Sc. Nursing. A total of 150 students were selected using non-probability convenience sampling technique. Students unwilling to participate and those below 17 years were excluded.

Instrument

Data were collected using a structured tool comprising two sections: (A) Socio-demographic variables (11 items), and (B) Modified which assessed: (i) Suicidal ideation – 14 items (scores 0–14; mild: 0–5, moderate: 6–10, severe: 11–14); (ii) Factors influencing suicidal ideation – 30 items across five domains (psychological, biological, family history, co-morbidities, social/environmental; scores 0–30; low: 0–10, average: 11–20, high: 21–30); (iii) Coping strategies – 12 items (scores 0–12; poor: 0–4, average: 5–8, good: 9–12). The tool was validated by 12 experts (6 external, 6 internal). Reliability was established using split-half (odd-even) correlation: suicidal ideation $r = 0.75$, influencing factors $r = 0.99$, coping strategies $r = 0.97$.

Ethical Considerations

Formal written permission was obtained from the institutional ethical committees and college principals. Written informed consent was obtained from all participants. Confidentiality of data was strictly maintained.

Statistical Analysis

Data were entered into SPSS Version 16.0 and Microsoft Excel. Descriptive statistics including

frequency, percentage, mean, median, and standard deviation were computed. Chi-square (χ^2) test was used to assess associations between categorical variables. A p-value < 0.05 was considered statistically significant.

RESULTS

Socio-Demographic Profile

The majority of participants (75%) were aged 18–21 years and 97% were female. Most were unmarried (93%) and residing in a hostel (75%). GNM students constituted the largest group (40%), with 66% in their second year of study. The majority (89%) belonged to nuclear families and 90% had mothers who were homemakers. None reported a family history of suicide.

Table 1: Distribution of Nursing Students According to Level of Suicidal Ideation, Influencing Factors, and Coping Strategies

Variable	Level	Score Range	Frequency (n)	Percentage (%)
Suicidal Ideation (N=131, Mean=4.49, SD=2.35)	Mild	0–5	100	66.7
	Moderate	6–10	50	33.3
	Severe	11–14	0	0.0
Factors Influencing Suicidal Ideation (N=131, Mean=6.16, SD=2.58)	Low	0–10	127	96.9
	Average	11–20	4	3.1
	High	21–30	0	0.0
Coping Strategies (N=131, Mean=5.69, SD=2.02)	Poor	0–4	33	25.2
	Average	5–8	90	68.7
	Good	9–12	8	6.1

Suicidal Ideation

Two-thirds of nursing students (66.7%) demonstrated mild suicidal ideation, while 33.3% showed moderate ideation. No student reported severe suicidal ideation. Item-wise analysis revealed that 72% felt sad or depressed, 55.3% experienced hopelessness and helplessness, and 51.3% felt that life was not worth living.

Factors Influencing Suicidal Ideation

The large majority (96.9%) of students were at a low level of factors influencing suicidal ideation. The psychological domain was the most prevalent influencing domain (mean 3.58, SD 1.617), with 82.4% reporting stress and 83.2% feeling overburdened. This was followed by biological factors (mean 1.05) and social/environmental problems (mean 0.89).

Table 2: Domain-wise Mean Scores of Factors Influencing Suicidal Ideation (N=131)

Domain	Mean	Median	SD
Psychological	3.58	4	1.617
Biological	1.05	1	1.159
Family History	0.59	1	0.494
Co-morbidities	0.05	0	0.210
Social/Environmental	0.89	1	0.955
Total	6.16	6	2.577

Coping Strategies

Approximately two-thirds of students (68.7%) used average-level coping strategies. One quarter (25.2%) demonstrated poor coping, while only 6.1% employed good coping strategies. The most commonly used strategies included obtaining adequate sleep (87.8%), visiting favourite places (85.5%), using social media (78.6%), and engaging in stress-relieving activities such as music (72.5%).

Associations with Socio-Demographic Variables

Chi-square analysis revealed that suicidal ideation had a statistically significant association with year of study ($\chi^2 = 7.006$, $df = 2$, $p = 0.030$). Students in the second year showed a higher proportion of moderate suicidal ideation compared to those in the first and third years. No significant association was found between suicidal ideation and age, gender, marital status, educational program, place of residence, family income, family type, or occupational status of parents.

Factors influencing suicidal ideation showed no significant association with any of the socio-demographic variables studied.

Coping strategies demonstrated significant associations with educational status ($\chi^2 =$

14.990, $df = 6$, $p = 0.020$) and occupational status of father ($\chi^2 = 18.791$, $df = 8$, $p = 0.016$). B.Sc. Nursing students showed better coping

compared to GNM students. No significant associations were noted with other socio-demographic variables.

Table 3: Significant Associations of Suicidal Ideation and Coping Strategies with Socio-Demographic Variables

Variable	Chi-square (χ^2)	df	p-value	Significance
Suicidal Ideation – Year of Study	7.006	2	0.030	Significant*
Coping Strategies – Educational Status	14.990	6	0.020	Significant*
Coping Strategies – Father's Occupation	18.791	8	0.016	Significant*

* $p < 0.05$

DISCUSSION

This study provides important insights into suicidal ideation, its influencing factors, and coping strategies among nursing students in North India. The finding that 66.7% of participants had mild and 33.3% had moderate suicidal ideation is concordant with prior studies. Harikrishna et al. reported that 80% of nursing students had moderate suicidal ideation in Trivandrum, while Quarshie and Cheataa-Plange reported 8.5% mild ideation in Ghanaian nursing students, indicating variation across populations and measurement instruments.

The predominance of psychological stressors – including stress (82.4%) and feelings of being overburdened (83.2%) – reflects the intense academic and clinical demands of nursing education. These findings are consistent with literature linking academic pressure, workload, and affective distress to suicidal ideation in health profession students. The finding that second-year students showed higher suicidal ideation may reflect the transition to more demanding clinical exposure and heavier coursework in that academic year.

The majority of students (68.7%) employed only average-level coping strategies, with stress-relief activities such as music, sleep, and accessing favourite places being the most prevalent. Formal coping approaches such as counselling (utilised by only 27.5%) and help-seeking (29.0%) were underutilised. Zhang et al. similarly found that suicidal ideation was negatively associated with effective coping in Chinese college students. This finding underlines the need to strengthen both the availability and awareness of formal psychological support services within nursing colleges.

The significant association of coping strategies with educational level and father's occupational status may reflect differential access to social capital, family support, and economic resources. Students from families with higher socioeconomic status may have greater access to psychological resources and a stronger sense of security, enabling more adaptive coping responses.

A key limitation of this study is its cross-sectional design, which precludes causal inference. The convenience sampling method and restriction to two colleges in a single district limits generalisability. The use of a modified tool, while validated, was not standardised internationally. Future research should employ longitudinal designs, random sampling across multiple institutions, and validated instruments such as the Columbia Suicide Severity Rating Scale.

CONCLUSION

Suicidal ideation is highly prevalent among nursing students in Dehradun, with psychological stressors emerging as the dominant influencing domain. Coping strategies are largely inadequate, particularly with respect to formal help-seeking and counselling. Year of study and educational level emerged as key socio-demographic correlates. Institutional interventions should focus on integrating mental health literacy, stress-management programmes, and accessible psychological support services within nursing education. Development and dissemination of evidence-based informational materials on coping strategies represent a practical first step towards suicide prevention in this vulnerable population.

Conflict of Interest: None declared.

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Ethical Clearance: Obtained from the Institutional Ethical Committee, Dev Bhoomi Uttarakhand University, Dehradun.

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