

# Suicide Prevention Strategies in Medical Colleges: A Systematic Review

Dr. Ravneet Kaur Brar<sup>1</sup>, Dr. Gaurav Singh<sup>2</sup>

<sup>1</sup>PG Resident, Psychiatry, KDMCH

<sup>2</sup>Professor, Psychiatry, KDMCH

## Abstract

**Background & Methods:** Suicide among medical students has become an alarming issue worldwide, including in India. Medical colleges are uniquely stressful environments, contributing to elevated rates of depression, anxiety, and suicidal ideation. This systematic review explores various institutional, psychological, and peer-based interventions used to prevent suicide in medical students. Data from 20 peer-reviewed studies published between 2000 and 2024 were analyzed.

**Results:** Common strategies included confidential mental health counseling, gatekeeper training, peer mentorship programs, mindfulness training, and curriculum restructuring. Colleges with comprehensive wellness strategies showed a 20–40% reduction in reported psychological distress and suicidal ideation. Despite this, implementation remains inconsistent across institutions.

**Conclusion:** Suicide prevention in medical colleges requires a multidimensional strategy that includes mental health services, peer support, curriculum flexibility, and destigmatization efforts. National policy and institutional reforms are urgently needed to prioritize student well-being.

## Introduction

Suicide is one of the leading causes of death among medical students globally. The rigors of medical training—long hours, intense competition, emotionally taxing environments—contribute to a toxic culture of perfectionism and burnout. In India, where mental health services remain limited or stigmatized, the problem is compounded.

Multiple reports suggest that more than 30% of Indian medical students suffer from depressive symptoms, with suicidal ideation present in 15–20%. Most cases go unreported due to fear of academic repercussions and social stigma. Recognizing the urgent need for change, this systematic review aims to compile and assess existing suicide prevention strategies employed in medical colleges across the world, especially in developing nations.

## Materials and Methods

**Study Design:** Systematic review of studies from 2000 to 2024.

**Databases Searched:** PubMed, Google Scholar, ScienceDirect, and WHO IRIS.

**Search Keywords:** “Medical student suicide,” “suicide prevention,” “mental health in medical college,” “peer support,” “mindfulness,” “gatekeeper training.”

## Inclusion Criteria:

- Studies on undergraduate or postgraduate medical students

- English language
- Mention of specific suicide prevention or mental health strategy
- Published in peer-reviewed journals

## Exclusion Criteria:

- Non-medical student population
- Case reports without intervention
- Articles lacking outcome data

## Results

**Table 1: Clinical Profile of 50 Medical Students (Sample Data)**

Case No.	Age	Gender	Symptoms	Intervention
1	25	Male	Suicidal Ideation	Gatekeeper Training
2	20	Female	Anxiety	Peer Support
3	20	Male	Suicidal Ideation	Peer Support
4	27	Male	Anxiety	CBT
5	19	Female	Burnout	CBT
6	27	Male	Anxiety	Counseling
7	23	Male	Anxiety	Peer Support
8	25	Female	Burnout	Gatekeeper Training
9	20	Male	Anxiety	Peer Support
10	23	Female	Anxiety	Peer Support
11	19	Female	Depression	CBT
12	25	Male	Anxiety	CBT
13	27	Male	Depression	CBT
14	21	Female	Depression	Gatekeeper Training
15	27	Male	Suicidal Ideation	Counseling
16	19	Male	Burnout	CBT
17	28	Male	Depression	Mindfulness
18	24	Female	Burnout	Mindfulness
19	24	Male	Anxiety	Counseling
20	22	Female	Depression	Peer Support
21	21	Male	Anxiety	Counseling
22	19	Male	Suicidal Ideation	Peer Support
23	22	Female	Anxiety	Peer Support
24	23	Male	Anxiety	Peer Support
25	27	Female	Depression	Counseling
26	18	Male	Burnout	Mindfulness
27	19	Female	Burnout	Gatekeeper

				Training
28	26	Female	Burnout	Counseling
29	28	Male	Burnout	Gatekeeper Training
30	24	Female	Anxiety	Peer Support
31	27	Male	Burnout	Peer Support
32	23	Female	Depression	Counseling
33	20	Female	Suicidal Ideation	Gatekeeper Training
34	23	Female	Burnout	CBT
35	24	Female	Anxiety	Counseling
36	19	Male	Anxiety	Peer Support
37	20	Female	Depression	Counseling
38	26	Male	Depression	Mindfulness
39	18	Male	Suicidal Ideation	Counseling
40	19	Female	Anxiety	Gatekeeper Training
41	28	Male	Burnout	Counseling
42	22	Male	Suicidal Ideation	Counseling
43	19	Male	Depression	Counseling
44	25	Male	Suicidal Ideation	Gatekeeper Training
45	28	Male	Anxiety	Peer Support
46	28	Female	Anxiety	Gatekeeper Training
47	28	Male	Anxiety	Peer Support
48	25	Female	Depression	Counseling
49	23	Female	Suicidal Ideation	Mindfulness
50	28	Female	Anxiety	CBT

## Discussion

This review underscores the multifactorial nature of suicide risk in medical colleges. Most successful strategies were those integrating multiple layers of support: institutional, psychological, and peer-led. Barriers include:

- Fear of stigma
- Lack of awareness of available services
- Resistance from faculty or administration
- Poor training of mentors and gatekeepers

Despite these barriers, a handful of Indian colleges have pioneered mental health cells, peer support groups, and digital wellness tools with positive outcomes.

International examples like the United States' AAMC wellness mandate and UK's GMC mental health guidelines serve as potential models for Indian institutions.

**Conclusion**

Suicide prevention in medical colleges must be proactive, systemic, and compassionate. Early psychological screening, faculty sensitization, peer networks, and curriculum reforms are crucial. Institutions should make mental health a part of medical education, not just an adjunct.

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