



# RISK FACTORS FOR SUICIDAL BEHAVIOUR AMONG ADOLESCENTS IN THE INDIAN CONTEXT THROUGH THE LENS OF THE INTEGRATED MOTIVATIONAL-VOLITIONAL MODEL

## / Scope

Adolescent suicide is one of the most common reasons for death among young people all around the world. India has the largest adolescent population of 25.6 crores (NCRB, 2020), between the ages of 15-25 years, and has one of the highest rates for death by suicide among young people. The aim of the research was to understand the nature of risk factors and to measure their intensity in relation to suicidal behaviour among young people. The data was reviewed by using the theoretical framework of the Integrated Motivational-Volitional Model of suicidal behaviour (IMV, 2018)<sup>1</sup> comprising of three phases:

#### **THREE PHASES**

1.
PRE-MOTIVATIONAL

(INDIVIDUAL-DIFFERENCE VULNERABILITY, DIATHESIS/STRESS FACTORS)

2.
MOTIVATIONAL

(THREAT TO SELF-MODERATORS, ENTRAPMENT, SUICIDAL IDEATION)

3.
VOLITIONAL
(SUICIDAL MODERATORS, BEHAVIOURS)

The IMV framework may help to trace and possibly predict the varied pathways leading to suicide.



1 O'Connor RC, Kirtley OJ. The integrated motivational-volitional model of suicidal behaviour. Philos Trans R Soc Lond B Biol Sci. 2018 Sep 5;373(1754):20170268. doi: 10.1098/rstb.2017.0268. PMID: 30012735; PMCID: PMC6053985. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6053985/

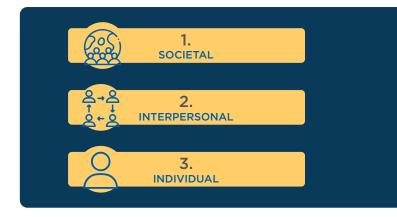
#### / Method

A systematic literature review consisting of primary research articles and news reports were analysed from 2008-2022, upon meeting the inclusion criteria such as age (10-19 years) and geographical location. Databases such as PubMed, Google Scholar, Scopus, and PsychInfo were used with appropriate keywords. The same was followed for news reports, using Google News as the primary database. Multiple rounds of screening were conducted using the PRISMA guidelines, and a total of 17 journal articles and 150 news reports were shortlisted and thematic analysis was used to meet the study objectives.

# / Main Insights

The themes that emerged as risk factors from the analysis included structural inequalities and pressure in academic institutions, physical, verbal and sexual abuse, ill-treatment and punishment at school, bullying by peers, family distress and conflict, including interpersonal conflict. Belonging to the female gender, being of a young age, and hailing from a poor socioeconomic background increased the risk of suicide.

The synthesised findings of this inquiry reveal a nuanced categorisation of risk factors into three overarching domains that seem interconnected in a young person's ecosystem:



Risk factors obtained from journal articles were categorised as interpersonal and individual factors. Where interpersonal factors were concerned, isolation due to poor relationships (with family, neighbours, school teachers and peer group), lack of psychosocial

support, conflicts emanating from families, social stressors experienced by the family as a whole, having a working mother, lower educational qualifications, and having a high number of siblings contributed to risk. Individual factors that created vulnerability included belonging to the female gender, poor academic performance, dropping out of school, having a history of abuse (verbal, physical and sexual), a sense of burdensomeness, presence of emotional difficulties, having body-image issues, and mental health conditions (examples of depression, obsessive compulsive disorder were cited, along with hyperactivity, inattention, substance use, and history of violent behaviours). There was only one study that studied suicide planning and found the presence of the symptoms of depression to be a significant risk factor.

Risk factors associated with suicidal attempts based on news reports were also grouped as societal, interpersonal, and individual factors. The interpersonal factors were found to be perceived humiliation. ill-treatment by peers and school teachers, social conflicts (with family, friends, school teachers/principle, schoolmates, or partner), or currently undergoing abuse (physical, verbal, and sexual), and having a suicide pact with friend. The individual risk factors were age (older adolescents), being a female, having a mental illness, impulsivity, lower-socio economic status, belonging to particular castes, engaging in online gaming (that promotes self-injury/death by suicide) and poor academic performance. Societal factors identified were academic pressure from institutions (medical entrance exams, coaching centers) and lack of employment opportunities. The most prevalent methods for attempts/death were hanging and jumping from high rise locations.

Unfortunately, most adolescent suicides appear to be regarded as impulsive or sudden, often preventing further inquiry and adding to challenges to be addressed at various levels in addition to the public health level. The IMV model provides a lens in identifying risk factors across the interconnected phases or steps leading to suicide. A way forward via recommendations is presented below.

#### / Recommendations

#### **Identifying Research Gaps**

Overall, there is a need for more robust evidence and necessity to include, adolescent children from vulnerable communities (such as refugees, migrants, street children, those living in children's shelters); and suicides that may be classified as accidental deaths are understudied. Individual risk factors anecdotally portrayed by popular media and news reports, such as relationship issues, internet/gaming-related addictive behaviours and impulsivity need further scientific exploration. The sociocultural and political risk factors in local contexts such as poverty, caste-based discrimination and violence also need further research.

#### **Refining Research Tools**

Validation and utilisation of ideation-to-action, theoretical frameworks to conceptualise suicide and understand factors along the pathway to suicide is required. Exploring designs such as ecological momentary assessments with context analysis for collecting suicide-related data will be beneficiary. A comprehensive analysis of all risk factors is required to understand the ones that need to be prioritised, and at which stage.

#### **Implementation**

Relevant stakeholders need to be sensitised and trained on the potential risk factors based on the IMV model (students as peers, teachers, parents, community leaders, volunteers across rural and urban areas) and also trained as first responders in identifying risk factors. The stakeholder network can also work towards strengthening family and peer support, identify ways to reduce pressure on academic performance, along with redressal mechanisms for abuse and harassment. Furthermore, given the emergence of technology innovations that are becoming accessible, solutions provided by AI such as chatbots seem promising and relatable as efficient cost-effective tools found to de-escalate distress, provide empathic connections, life skills and support (e.g. through kiosks that offer free wifi). It is also important to ensure that recommendations in the national suicide prevention strategy have implementation plans.

### / Limitations of the Study

The study focuses on understanding risk factors associated with suicide among the Indian adolescent population, and the screened data contained prevalence studies, not specifically pertaining to this population. While screening news reports, only national English daily news reports were considered due to resource limitations. Due to the lack of a standard definition of suicidal behaviours and ideation across articles and news reports, there were limitations in building consensus. The results may not be generalisable due to limited data representation.