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Mental Health Challenges and Suicide Attempts Among Adolescent Females in the Kashmir Valley: A Tertiary Healthcare Review

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ABSTRACT

Adolescent mental health concerns in the Kashmir Valley have become increasingly visible in hospital records and community reports, with a notable rise in deliberate self-harm and poisoning-related suicide attempts among young females. The prolonged conflict, recurring political instability, and limited psychosocial support systems have created a landscape where emotional distress often goes unrecognized until it culminates in crisis. Regional studies consistently report high rates of depression, anxiety, and PTSD in young people, yet the majority do not seek professional help.

This review brings together available hospital data, findings from the 2015 Kashmir Mental Health Survey, and published research from all ten districts to examine the clinical, cultural, and contextual factors contributing to self-harm attempts among adolescent girls. Special attention is given to the dominant use of organophosphate (OP) and rodenticide ingestion—substances that are easily accessible in many rural households. The paper highlights the multifaceted pressures faced by young girls, including academic stress, family expectations, trauma exposure, and restrictive gender norms. The findings emphasize the urgent need for integrated pediatric-psychiatric services, school-based emotional support systems, community awareness, and stricter regulation of toxic agents

Keywords*: Adolescent mental health; Kashmir Valley; deliberate self-harm; suicide attempts*

INTRODUCTION

Adolescence is universally recognized as a period of profound change, vulnerability, and identity formation. In the Kashmir Valley, these developmental challenges unfold within an environment shaped by decades of political unrest, frequent shutdowns, and exposure to traumatic events. The cumulative psychological burden of living in a conflict zone is evident: mental health consultations in Kashmir increased from roughly 1,700 in 1989 to nearly 100,000 in 2017, reflecting rising distress across age groups[1].

Among those most affected are adolescent girls, who frequently present to tertiary hospitals following deliberate self-harm, especially through ingestion of agricultural poisons. Pediatricians and emergency physicians across the Valley note that many of these attempts occur in moments of acute emotional distress, often without prior psychiatric diagnosis[2].

Despite scattered studies and numerous clinical observations, there remains a lack of consolidated literature focusing specifically on adolescent females—their mental health patterns, their unique sociocultural challenges, and the alarming rise in suicide attempts seen in tertiary care centers. This review attempts to fill that gap by synthesizing available data and analyzing the interconnected factors influencing these trends.

Methods

This review synthesized data from hospital records, published studies from the Kashmir Valley region (2015–2025), and clinical observations from tertiary healthcare centers. A pediatric unit audit spanning April 2024 to April 2025 identified 200 cases of self-harm attempts, with detailed analysis of demographic, clinical, and psychosocial variables. Data were

organized according to age group, psychiatric morbidity, methods used, immediate triggers, complications, and hospital presentation delays.

Results

Age-wise Distribution

The study identified 200 cases of adolescent self-harm, with age distribution as follows:

Age Group	Number of Cases	Percentage
10–12	18	9%
13–14	45	22.5%
15–16	78	39%
17–18	59	29.5%

Figure 1: Age-wise Distribution of Suicide Attempts

The 15–16 year group forms the largest cluster, coinciding with board examinations, identity conflicts, peer pressure, and increased family expectations. This age period represents a critical window for intervention.

Demographic and Socio-demographic Profile

Parameter	Subcategory
Residence	Rural (68%), Urban (32%)
Schooling	Government 55%, Private 45%
Socioeconomic Status	Low 48%, Middle 44%, High 8%
Family Type	Nuclear 63%, Joint 37%

Table 2: Socio-demographic Profile

These characteristics are consistent with global trends where female adolescents in conservative settings face amplified emotional burdens. The predominance of rural residence and government school enrollment reflects the broader population distribution in Kashmir.

Methods Used in Suicide Attempts

Method Used	Number	Percentage
Organophosphate Poison	130	52%
Rodenticide Compounds	75	30%
Benzodiazepines/Medicines	28	11%
Household Chemicals	12	5%
Others	5	2%

Table 3: Methods Used in Suicide Attempts

Organophosphate poisoning dominates, often associated with rapid symptom progression, cholinergic crises, and higher medical complexity. This reflects the easy availability of agricultural pesticides in rural households, where storage practices remain unsafe[3].

Psychiatric Morbidity Among Suicide Attempters

Psychiatric Diagnosis	Number	Percentage
Major Depressive Disorder	88	44%
Anxiety Disorders	39	19.5%
PTSD / Trauma Stress	26	13%

Adjustment Disorder	32	16%
No Formal Psychiatric Label	14	7.5%

Table 4: Figure 3: Psychiatric Morbidity Among Attempters
Major Depressive Disorder accounts for nearly half of all cases, reflecting the pervasive emotional distress among adolescent females in the region. Many cases had no prior formal diagnosis, indicating significant gaps in early detection and mental healthcare access[4].

Immediate Triggers for Suicide Attempts

Trigger Category	Number	Percentage
Academic Failure / Pressure	61	30.5%
Family Conflict	48	24%
Relationship or Peer Conflict	54	27%
Social Media–Related Stress	22	11%
Economic Hardship	10	5%
No Identifiable Acute Trigger	5	2.5%

Table 5: Immediate Triggers
The interplay between academic expectations and interpersonal dynamics forms a recurring pattern in interviews with survivors. Academic failure or perceived underperformance emerges as the single largest trigger, affecting nearly one-third of cases[5].

Delay in Reaching Hospital

Delay in Hours	Number	Percentage
< 1 Hour	37	18.5%
1–3 Hours	89	44.5%
3–6 Hours	50	25%
> 6 Hours	24	12%

Table 6: Delay in Reaching Hospital
Nearly half of the cases reached hospital within 1–3 hours, often because families initially attempt home remedies or seek local chemists before escalating to tertiary care[6]. Delays beyond 6 hours were associated with poorer clinical outcomes in OP poisoning cases.

Complication Profile

Complication	Number	Percentage
Respiratory Failure	22	11%
Seizures	9	4.5%
Shock	6	3%
Arrhythmias	3	1.5%
No Major Complications	160	80%

Table 7: Complication Profile
The majority (80%) experienced no major medical complications, attributed to early hospital access and prompt intensive care management. Respiratory failure, the most serious complication at 11%, predominantly occurred in OP ingestion cases, underscoring the medical severity of this poison[7].

Prevalence of Psychiatric Disorders Among Adolescents
Research across Kashmir indicates that psychiatric disorders are widespread among young people, with adolescents showing particularly high levels of internalizing symptoms. Depression is consistently the most common diagnosis, with reported rates ranging from 30% to as high as 66% in the 15–25 age group, depending on the district and study methodology[8]. Persistent sadness, loss of interest in daily activities, fatigue, and feelings of hopelessness are frequently reported by clinicians working in schools and hospitals.

Anxiety disorders are the next most prominent category. Social anxiety, academic-related stress, and generalized worry are common among girls navigating restrictive social norms and high educational expectations[9]. PTSD rates remain elevated due to repeated exposure to violent incidents, family separation, or community unrest. Estimates of PTSD range from 19% to 41%, underscoring how pervasive trauma has become in daily life[10].

Somatoform symptoms—particularly headaches, chest tightness, abdominal pain, and limb weakness—often serve as the first indicators of psychological distress in young girls[11]. Many present to pediatric units multiple times with unexplained physical symptoms, only for clinicians to later uncover underlying emotional stress.

Interestingly, studies show that urban–rural differences in prevalence are relatively small, suggesting that the Valley's collective trauma and disruptions affect households across economic and geographic divides[12].

Gender-Specific Risk Factors
While both boys and girls experience stress in a conflict zone, adolescent girls in Kashmir face an additional set of vulnerabilities shaped by cultural norms, family expectations, and social limitations.

Restricted Autonomy and Limited Freedom of Expression
Girls often have fewer recreational outlets and restricted mobility, leaving them with limited opportunities to relieve stress or seek emotional support outside the home[13]. This social restriction creates a pressure cooker effect where emotions accumulate without healthy outlets.

Academic Pressure Without Structured Guidance
The ongoing emphasis on academic excellence, competitive entrance examinations, and inconsistent school schedules due to political disruptions create sustained stress[14]. Unlike private schools elsewhere in India, most institutions in Kashmir lack trained counselors or mental health support staff[15].

Domestic Responsibilities and Evolving Gender Expectations
Many adolescents are burdened with significant household work. Discussions around early marriage, gender roles, and "behavior expectations" add further emotional weight[16]. The sociocultural emphasis on virginity, modesty, and family honor particularly affects girls' psychological development.

Exposure to Conflict and Community-Level Trauma
Children raised during years of unrest often internalize fear, uncertainty, and helplessness[17]. Such chronic stress is known to heighten susceptibility to both depression and impulsive behavior.

Stigma Surrounding Mental Health
Seeking psychological help carries significant stigma in conservative communities[18]. Emotional distress is often dismissed as immaturity or dramatization, which prevents early intervention and perpetuates suffering.

Economic Vulnerability
In lower-income households, academic and social opportunities are limited, while expectations may remain high[19]. Poverty, unemployment, and inaccessible healthcare further contribute to emotional strain.

Multifactorial Contributors
Trauma and Its Psychological Impact
The 2015 Mental Health Survey reported that nearly every young person had encountered at least one traumatic event[20]. Adolescents often describe intrusive memories, avoidance behaviors, irritability, and chronic restlessness. Repeated exposure to trauma has been shown to significantly elevate the risk of suicidal thinking[21].

Barriers to Accessing Mental Healthcare
Only about 12% of individuals experiencing symptoms seek treatment[22]. Common obstacles include stigma, long distances to hospitals, lack of trained professionals, and fear of societal labeling. Although the WHO mhGAP initiative is present, it remains underutilized due to workforce shortages and limited awareness[23].

Family Dynamics

Authoritarian parenting, overprotection, interparental conflict, and communication gaps frequently emerge during clinical interviews[24]. Many girls express feeling unheard or misunderstood at home. Such family systems fail to provide secure attachment and emotional validation, key protective factors during adolescence.

Availability of Toxic Substances

Unsafe storage of pesticides within homes is a primary facilitator of impulsive self-harm[25]. Agricultural compounds are often kept in kitchens, storerooms, or open courtyards, easily reachable during emotional outbursts. The absence of child-safety regulations significantly contributes to the ease and lethality of attempts.

School Disruptions and Limited Peer Support

Political shutdowns, curfews, and extreme weather often disrupt schooling[26]. As a result, peer interaction decreases and academic pressure intensifies once schools reopen. The loss of social cohesion and peer connection during closures removes a crucial protective factor.

Clinical Observations From Tertiary Hospitals

Healthcare workers note that most adolescent females presenting after poisoning share certain characteristics[27]:

- Impulsive decision-making under acute emotional stress
- Difficulty identifying or verbalizing feelings
- Longstanding somatic complaints
- Limited problem-solving skills
- High emotional reactivity leading to black-and-white thinking
- Underlying iron deficiency or nutritional issues, especially in girls from low-income households

Furthermore, psychiatric referrals after stabilization are inconsistent due to high patient load, shortage of specialists, and lack of structured follow-up systems[28]. Many girls who survive one attempt do not receive long-term care, placing them at risk for reattempts.

School and Community Environments

Schools in Kashmir play a major role in shaping adolescent emotional health. However, significant gaps persist[29]:

- Counseling services are seldom available
- Teachers rarely receive training in identifying mental health concerns
- Academic expectations remain high despite disruptions
- Extracurricular activities are limited

Within communities, cultural expectations related to modesty, obedience, and family reputation weigh heavily on girls[30]. Simple conflicts—such as disagreements with parents or restrictions on friendships—can feel overwhelming in an environment with limited coping outlets.

Public Health Significance

The rise in adolescent female suicide attempts is not merely an isolated clinical problem; it reflects deeper social and systemic gaps[31]. The public health implications include:

- Increased burden on emergency and intensive care units
- Risk of long-term disability among survivors
- Emotional trauma within families
- Reinforcement of intergenerational cycles of distress
- Potential under-reporting due to stigma

Given the demographic size of the adolescent population, failure to address these issues risks significant future mental health burdens for the region and the nation[32].

RECOMMENDATIONS

Integrating Mental Health Into Pediatric Services

Routine screening for depression and suicidal ideation in pediatric clinics can identify at-risk individuals earlier[33]. Pediatricians should be trained to use brief validated tools and refer appropriately to specialist services.

Strengthening School-Based Mental Health Support

Introducing peer-support clubs, stress-management workshops, life-skills education, and trained counselors within schools can greatly improve early detection[34]. Schools are ideal settings for universal and selective interventions, reaching adolescents during crucial developmental periods.

Standardizing Poisoning Management Protocols

Uniform guidelines across hospitals will help reduce mortality and improve response times[35]. Dedicated liaison with psychiatry after medical stabilization should be mandatory to prevent reattempts and address underlying psychological distress.

Community Education and Awareness
Families should be engaged through mosque-based programs, community meetings, and outreach campaigns to reduce stigma and encourage help-seeking[36]. Religious and community leaders should be trained as mental health advocates to increase credibility and reach.

Regulating Access to Toxic Substances
Introducing pesticide storage regulations, restricting sales of highly toxic agents, and promoting lockable storage boxes can significantly reduce impulsive attempts[37]. Policy-level interventions targeting poison availability have proven effective in reducing suicide rates globally.

Enhancing Rural Mental Health Services
Expanding WHO mhGAP through ASHAs, community nurses, and primary care physicians can make mental health support accessible even in remote districts[38]. Task-shifting models utilizing non-specialist health workers can address the shortage of psychiatrists.

Developing Adolescent-Friendly Spaces
Safe recreational and learning spaces can offer girls opportunities to express themselves, build resilience, and enjoy social interactions[39]. Such spaces should be culturally appropriate, accessible, and supervised by trained facilitators.

CONCLUSION
Adolescent girls in the Kashmir Valley navigate a uniquely complex environment shaped by sociocultural expectations, ongoing conflict, limited emotional support systems, and widespread mental health stigma[40]. The increasing number of suicide attempts—most commonly using easily accessible agricultural poisons—highlights the urgent need for coordinated, sensitive, and sustainable interventions[41].
A holistic approach that combines healthcare reform, school-based mental health support, community awareness, and policy-level changes can significantly reduce self-harm and improve emotional wellbeing[42]. Supporting young girls through this vulnerable stage is not only a clinical imperative but also a social responsibility, with implications for the future health and stability of the region[43].
Addressing adolescent mental health in Kashmir requires commitment from healthcare providers, educators, policymakers, families, and communities. The window for intervention is narrow but available. Proactive measures now can prevent a generation from bearing the burden of untreated mental illness and repeated crisis presentations.

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