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Editorial

Suicide prevention strategies for adolescents and youth: Where are we missing?

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As per World health organization (WHO), suicide is a priority condition globally and it is among the top 20 leading causes of death globally for people of all ages. It is responsible for over 800,000 deaths and around three-fourth of all global suicides occur in low- and middle-income countries (LMICs). For every suicide, 25 people make a suicide attempt and many more have serious thoughts of suicide. For each suicide, approximately 135 people are affected with intense grief or other emotional problems [1].

If suicide in adults is rattling for those closely attached to them, this emotion is much more intense in the case of a child or adolescent. This stage of life is often framed as a phase wherein one begins to imbibe the concepts of independence and career development along with embarking into new enterprising adventures. Adolescents are more vulnerable to emotional turmoil due to multitude of stressors like academic pressure, unrealistic expectations from the self and parents, relationship issues with peers, concerns towards sexuality, marriage, and employment [2].

It is therefore difficult, for health professionals, educators and families to digest the phenomenon of suicide in this age group, and often puts a question mark into what the world and medical fraternity in particular, can offer to these individuals for a brighter future [3].

Suicide has consistently ranked as one of the foremost causes of death among the adolescent and youth age group. WHO report on global suicide showed that in 2012, youth suicide accounted for 8.5% of all deaths in those aged 15–29 years, and was the second highest cause of death in this age group. [4] In India students' suicide has risen from 5.5% of all cases in 2010 to 6.7% in 2015 and two-fifth (39%) of suicide has been reported among below 30 years age group [5].

In 1996, the UN published a document titled "Prevention of Suicide: Guidelines for the formulation and implementation of national strategies" [6]. Building upon the same, a framework was formulated in 2012 by the WHO [7]. In 2014, a comprehensive and elaborate report was released by the WHO talking about the problem statement and then giving out guidelines for policy makers to formulate strategies at the national level [4]. India, being one of the largest contributors to the global suicide burden, still misses out on having a suicide prevention strategy at the national level.

Suicide in the adolescent and youth (age group of 10-24 years) is a complex interplay of multiple building blocks, involving a dynamic balance between protective and risk factors. In a systematic review Li et al synthesized data from 11557 college students (29 studies) on suicide risk among college students and reported significant association of their self-reported depression and sleep problems, stressful life events, sense of hopelessness and disconnect from others with the increased suicide risk. They also emphasized for cognitive behavioral interventions to build on protective factors like reasons to live and hope [8].

This review, in particular reference to the adolescent and youth, shall first talk in brief about the risk and protective factors related to suicide. It is important to have a good understanding about them to be able to ponder upon the preventive strategies. This shall be followed by a discussion and review of the suicide preventative strategies/programmes and lastly, the missing links and

way forward. Unless specified, the word younger/young age group implies the age group of 10-24 years.

Developmental aspects, risk and protective factors

Waldgovel et al importantly talked about the developmental aspects of adolescent suicide. They stated that the overall rates of adolescent suicidal ideation appear to follow a developmental path, increasing during early adolescence to a peak at about age 14 to 16 and declining thereafter [9].

Risk factors

Risk factors for suicide in the younger age group can be classified according to various domains:

Psychiatric and psychosocial

- Psychiatric: History of previous suicide attempt, depression, other psychiatric illness, and substance use disorders.
- Psychosocial: History of abuse, or violence, isolation, poor social support, family conflict, discrimination etc. [4,10].

Individual, family, socio-demographic, and others

- Individual: Genetics, feelings of hopelessness, substance use, poor interpersonal problem-solving skills, impulsive or emotionally unstable personality.
- Family: Family history of suicidal behaviour, parental psychopathology (depression, anxiety, psychosis), poor parent-child interaction including neglectful parenting style, parental discord, broken family.
- Socio-demographic: poverty, lack of family, poor educational attainment, unemployment [4,10]

- Others: Cultural factors, belonging to indigenous or migrant population, living in a war affected area, minority groups. [4,10]

Protective factors

- *Family and community level:* Strong family cohesion (anchorage), good interpersonal relationships, social integration, social connectedness, healthy religious and cultural beliefs, access to support from relevant others and ready access to comprehensive health care, and less stigma in the community regarding mental health.
- *Individual level:* Stoicism (individual's ability to bear misfortune/ adversity), abhorrence (individual's intrinsic resistance to suicide/ self-harm behavior), anchorage (connectedness with caring and harmonious family, friends and social groups), resilience (one's ability to bounce back to normal), assertiveness, problem-solving skills, emotional stability and regulation, optimistic outlook, developed self-identity, good self-esteem, self-efficacy, willingness to seek help, and healthy lifestyle with maintenance of good diet and sleep habits, regular physical activity, abstinence from drug use. [4,10-12]

Preventive strategies

Recommendation

World health organization strongly recommends establishing a response strategy at the national level for suicide prevention. The creation of a national response provides a rallying point for bringing together a diversity of stakeholders in suicide prevention and for building on their expertise through a participatory approach. The result is a convergence of stakeholders from government, NGOs, and health and non-health sectors that can contribute to country-specific, national long-term strategies that follow a public health model [4].

Levels of prevention

Prevention strategies, mainly in relation to adolescents, can also be conceptualized along the continuum of primary prevention (suicide awareness, skill based enhancement, restriction of lethal means), secondary prevention (screening, gatekeeper training, media education), and tertiary prevention (crisis intervention, crisis centers, hotlines), within the context of the family, school, community, and/or health care system [9]

School based prevention strategies

Several school-based suicide prevention programs have been developed over the past 10-15 years, and Katz and colleagues recently reviewed 16 of the most commonly used prevention programs.[13,14] Most of these programs focus on increasing students' and school staffs' knowledge about, and attitudes toward, depression and suicide. The investigators found that few of these programs were rigorously evaluated for their effectiveness in actually reducing suicide attempts. However, most were able to show a reduction in suicidal ideation overall. Broad categories covered by these programmes include: awareness/education curricula, screening, gatekeepers training, skills training, and peer leadership [11,12]

As per the review, most programmes have been effective in increasing the knowledge of students about the signs and symptoms of suicidal behaviour in self and others, helping in early identification. Also, these programmes have partially been effective in facilitating self-disclosure, especially to other peers. However, most programmes have failed at being efficacious in screening of high risk individuals, gatekeeper and skill training of school staff, uplifting the help seeking behaviour among school going children and finally, the various aspects of self-harm behaviour.

Barriers to help seeking

Joshi et al identified following barriers to help seeking amongst adolescents: concerns about confidentiality and privacy, stigma, negative perceptions of adult helpers, problem avoidance and denial, fears of hospitalization and forced treatment, self-reliance for solving their problem etc [13].

Missing links and the way forward

Despite the range of suicide prevention strategies in action, the suicide burden amongst youngsters still remains eloquent. It is implicit, that a suicide prevention strategy at the national level is imperative to minimize the burden ensuing from suicide, suicide attempts and the underlying conditions. Whether and how much the strategy is effective is a question later to be pondered upon. Any effective strategy shall require frequent assessments, rectifications and modifications. Now that the problem statement of suicidal behaviour amongst youngsters is globally profound, it is time for strategies, wherever in place, to incorporate specific elements catering to the special needs of this tender age group. Specific strategies for various population groups, such as the school going children and the adolescent group seem to be the growing need of the hour. These elements need to address to the specific risk factors discussed above, make use of the protective factors and look at ways to by-pass the barriers aforementioned. Till date, only 28 countries have a national level suicide prevention strategy in place. India is a noticeable absentee, especially given its high contribution to the global suicide burden and child and adolescent population.

The WHO mentions 3 types of prevention strategies: Universal (targeting the population), selective (targeting select groups) and individual. The concept of levels of prevention has already

been discussed. Along with these, any comprehensive suicide prevention plan should include the 4 components of health promotion, prevention/education, intervention, and postvention.

Another theoretical model from where lead can be taken for school based suicide prevention strategies is the Bostic and Rauch's 3R's of school consultation mode. It includes the relationships that need to be cultivated and fostered, the recognition of human motivation during an important or sensitive time, and the responses to challenges.

Thus, at the national level, prevention strategies will require strong commitment from the government health sector towards reducing the suicide burden along with effective multisectoral collaboration among various concerned departments. Alongside other elements and components required in any suicide prevention policy, effective liaison at the ground level is of supreme need. Often missed, effective communication and coordination among school/college teachers and administration, family, and health professionals is of paramount importance towards providing effective care to individuals with risk of self-harm.

Of good interest would be a mention about mindfulness based stress reduction techniques. Inclusion of such techniques in regular school curricula as preventive measure can go a long way in not only for reducing the underpinnings of suicidal behaviour, but also in promotion of a healthier and fruitful living for all. Various mindfulness based techniques have been found to reduce stress and suicidal behaviour among various population groups. [15,16] Anapana and Vipassana are one of the few techniques for which scientific evidence is available on their effectiveness in stress reduction. The Govt. of Maharashtra (a state of India), for instance, has initiated teaching Anapana meditation to various school going children under the programme named MITRA and has found the measure to be of good use in cultivating interest among students for their curricula, improving their overall performance and reducing undesired

behaviour. Further research in this area would be a welcome and required step. Similarly, the AICTE (All India Council of technical education) has launched a unique 3-week induction programme for its graduates, which is based on universal moral values and aims for stress reduction amongst the youth. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature. The time during the Induction Program is also used to rectify some critical lacunas, for example, English background, for those students who have deficiency in it. The following are the activities under the induction program in which the student would be fully engaged throughout the day for the entire duration of the program: physical activity, creative arts, universal human values, literary, proficiency modules, lectures by eminent people, visit to local areas, familiarization to department/branch and innovations.

As is known, ineffective parenting styles and interaction patterns are also a contributor to the suicide burden amongst youngsters. Therefore, incorporating mindfulness based programmes for parents is also a potential target area [17].

With the proactive approach by the International Association for Suicide Prevention (IASP), World Suicide Prevention Day (WSPD) is being observed on 10th September every year since 2003. For raising awareness and reducing stigma around the world, from 2018 to 2020 WSPD theme is on “working together to prevent suicide” [1].

Sixty-third World Health Assembly adopted the WHO mental health action plan 2013–2020, in which suicide prevention is an integral part with the goal of reducing the rate of suicide in countries by 10% by 2020 [4]. Suicide prevention multisite intervention study on suicidal

behaviors (SUPRE-MISS) by WHO has demonstrated effectiveness of brief, low-cost intervention in reducing suicide mortality in developing countries.

There is an urgent need to develop a national plan for effective suicide prevention in India with addressing following objectives as laid down by WHO: to promote environmental and individual protective factors; to increase awareness through public education; to improve societal attitudes and beliefs and eliminate stigma towards people with mental disorders or who exhibit suicidal behaviors; to identify and target vulnerable groups; to improve the assessment and management of suicidal behaviour; to reduce access to means of suicide; to support individuals bereaved by suicide; to encourage the media to adopt better policies and practices toward reporting suicide; and to enhance surveillance and research [2].

Evidence based strategies have been elaborated by the WHO in their report on the needs and content for national level suicide prevention strategies. Key elements for framing a national strategy include: making suicide prevention a multisectoral priority, regardless of resources; goals, objectives and interventions need to be specifically tailored to the needs of the nation; developing, implementing and evaluating pilot projects, targeted programmes and action steps is an essential basis for developing a suicide prevention strategy; and effective planning and collaboration between various stakeholders is of utmost importance

Looking at the way ahead, the steps a country should take next will depend on where the country is on the way towards suicide prevention. WHO report on suicide prevention lists examples of strategic actions that countries can take to advance suicide prevention on the basis of the best available evidence described throughout the report [4].

In countries where suicide prevention activities have not yet taken place, the WHO recommends emphasis on action. In countries that have some existing suicide prevention activities, it may be productive to focus first on consolidation by conducting a situation analysis [4].

India as a country lies somewhere between the above 2 scenarios. It is thus imperative to take forward the current actions and move towards formulating a national level prevention strategy to ultimately reach the goal of reducing the suicide burden. Looking at the rich culture of our country, finding ways to complement scientific evidence based strategies with timeless spiritualism based mindfulness techniques (implemented in their essence) can provide an indispensable extra dimension to our efforts.

As mentioned three-fourth of global suicide burden is from LMIC, but most studies have been conducted in developed nations. Despite the burgeoning research on risk factors and epidemiology of suicide, the information on protective factors and effectiveness of suicide prevention strategies is really limited. Future research should specifically focus on nurturing protective factors and comprehensive suicide prevention strategies [18].

Suicide is a multifaceted problem with complex interaction of biological, social, psychological and environmental risk and protective factors [19]. Suicide prevention program should be comprehensive, multisectoral, with sincere commitment, collaboration, coordination, and cooperation of all the stakeholders- individuals, family, school, colleges, community, religious and spiritual organizations, health sector, media, government and non-government organizations. Suicide prevention is everyone's responsibility, so let's join hands and help others with humane care and kind compassion.

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