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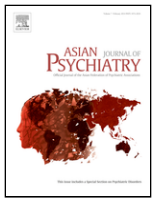

Letter to the Editor

Adolescent suicide in India: Significance of public health prevention plan

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Dear Sir/Madam,

This write-up is based on our on-going systematic review of existing literature on 'Suicide Research in India: over the past four decades'. In India, suicide is the primary cause of death in the 15-29 years- age group; this accounts for 71.2% of the suicidal deaths in females and 57.7% in males across all ages (Dandona et al., 2018). Despite such shocking statistics, and its impact on potential years of life lost and national Gross Domestic Product (Poduri, 2016), the national response to adolescent suicide has been deplorable. National Suicide Prevention Strategies have been adopted by many countries based on the WHO Mental Health Action Plan 2013-2020 ("WHO | National suicide prevention strategies", 2018); however, India lacks one.

Many of the social and cultural risk factors contributing to the suicidal behaviour among adolescents seems to be shared among Asian countries (Kwak and Ickovics, 2019; Otsuka et al., 2020; Wang et al., 2020). In India these risk factors namely, competitive and parental pressures, relationship problems, inter-generational conflicts, mental and or physical abuse, stigma and fear of failure, have been found to contribute to the suicidal behaviour and thoughts among adolescents (National Crime Records Bureau (NCRB), 2015). Hence, suicide needs to be considered as a public health issue that requires a multisectoral approach beyond an isolated mental health framework (Jacob, 2017; Kwak and Ickovics, 2019; Vijayakumar, 2017). Decriminalization of suicide (Mental Health Act 2017) needs to be followed by the development of a comprehensive national suicide prevention plan with a public health approach.

This should begin with national surveillance and maintenance of a registry of suicide attempts and self-harm cases across the country (Armstrong and Vijayakumar, 2018). In adolescents, educational institutions (Patel et al., 2012) provide the opportunity for surveillance and periodic screening.

Parallelly, mental health professionals should empower potential gatekeepers (Sagar and Pattanayak, 2016) and key persons in the family to identify significant depressive symptoms, expressed death wishes, and self-harm behaviours, and assist adolescents in locating and accessing resources for appropriate management of these. There is strong evidence from other countries that school-based suicide prevention strategies involving teachers and peers improve alertness to warning signs of suicide. In combination with life skills training, this promotes greater self-efficacy, problem-solving skills, and self-reporting of vulnerability to suicide (Miller et al., 2009). Adolescents with greater family support have significantly higher levels of self-esteem, which is protective against suicide (Sharaf et al., 2009) through reducing the feeling of social isolation and loneliness. Various other public health interventions recommended in suicide prevention among adolescents include limiting access to lethal means of suicide, sensible media reporting of suicides to avoid 'copy-cat' phenomena, strict alcohol laws, increased public understanding of mental illness and suicide, and increased access to psychiatric and psychological support (Abraham and Sher, 2019).

Suicide preventions and crisis interventions need to be acceptable to the target age group. Mere replication of interventions originally designed for adults without adaptions yield high attrition rates (Robinson et al., 2018). Multi-modal interventions 'co-designed' by adolescents (Thabrew et al., 2018) could prove fruitful in the development of suicide prevention materials, as peer help is often more sought than professional help (Zachariah et al., 2018). India currently has several comprehensive policy instruments on adolescent mental health. However, the lack of engagement of young people in the development and implementation of these policies limit their effectiveness (Roy et al., 2019).

In developed countries, technology-based (mobile applications) suicide prevention strategies are gaining acceptance among adolescents (Witt et al., 2017). Using these existing evidence-based models from developed countries, researchers and clinical practitioners in conjunction could develop internet and mobile phone app-based delivery of crisis services at educational-institutions and work towards creating awareness regarding the same. The use of app-based platforms like edumerge, pupilpod, and moodle for interactions between students, parents, teachers, and management in urban Indian schools is gain-

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ing popularity. These platforms could be used by parents, teachers, or students to anonymously contact in-house counsellors for crisis services.

To summarize, the government, policy makers, and health-sector need to urgently develop adolescent suicide prevention strategies. National level surveillance and screening that involves collaboration of mental health professionals, adolescents, and other potential gatekeepers (family members and educators) followed by development of multi-faceted suicide prevention materials and strategies in the community and educational institutions through utilization of internet and mobile phone technology. The WHO 'Preventing suicide: a community engagement toolkit' (WHO, 2018) along with adolescent involvement in co-designing interventions forms an ideal starting point. Enhanced community awareness could reduce stigma and improve suicide outcomes.

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Appendix A. Supplementary data

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