

Editorial

Integrated Screening for Physical Health and Psychosocial Health of Adolescents: Small Investment, Big Returns

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How to cite this article:

Kukreti P. Integrated Screening for Physical Health and Psychosocial Health of Adolescents: Small Investment, Big Returns. Postgrad J Pediatr Adol Med. 2022;1(1):3-5.

Adolescence is a dynamic phase of transitions happening hormonally, socially, biologically, and cognitively. The brain and body are continuously evolving and trying to keep pace with the changing societal roles and expectations. A developing brain of an adolescent is going through the roller coaster ride of impulsivity, reward-seeking, low-risk perception, and search of a new identity in an accelerated phase, but with the break-applying region of the brain, i.e., prefrontal cortex, yet in development. Adding to this are social challenges like relationships with peers, academic pressure, interpersonal and emotional interactions, easy access to drugs, and unfiltered overload of information easily available from media. It is a crucial period and the behavioural patterns formed in it lay building blocks for personality development and future health. Early identification and screening of risk behaviours and health indicators in this phase can give an opportunity to intervene early and shift the fulcrum towards positive trajectories of health, academic, and professional success. With such vital things at stake, adolescent health should be seen by policy makers as a golden investment rather than an expense.

Adolescents constitute nearly one-fifth of our population and we are home to the maximum number of adolescents worldwide.¹ The most common health issues affecting this precious human resource of the country are substance use disorders, injuries, suicide, high-risk sexual behaviour, obesity, malnutrition, common mental disorders, and violence.² Many of these problems are also determinants of the burden posed by non-communicable diseases in adulthood.

As per the 2019 data, unintentional injuries including death by suicide as well as road traffic injuries were the leading causes of death in adolescents.³ Many of these are attributed to undiagnosed mental health conditions and behavioural problems. The other leading cause of mortality for this group is interpersonal violence including sexual violence and bullying.³ These traumatic events of childhood and adolescence are also important risk factors for developing mental health problems, HIV, and other sexually transmitted infections. Biological age and increasing challenges make adolescents more prone to developing mental disorders. As per the National mental health survey 2015-16,

they affect nearly 7% of adolescents, with depression and anxiety being the most common ones.⁴ Mental disorders also lead to loss of productivity at this crucial phase and constitute one of the top ten causes of Disability Adjusted Life Years (DALY) lost.³ Easy access to drugs, impulsivity, and novelty-seeking at this phase makes adolescents vulnerable to drug abuse-related problems. A nation wide survey indicates that the average age of onset of substance use has reduced to 12 years and nearly 8.5% of adolescents are in need of substance use-related treatment services with the prevalence of nicotine use as 29% and alcohol use as 10% in adolescent boys. The use of inhalants was found to be even higher than that in the adult population.⁵ The early age of onset of substance use disorder has been associated with several non-communicable diseases including cancers, HIV, mental disorders, premature mortality, and several social and legal complications. Changing lifestyle has adversely affected dietary intake and levels of physical activity. A study on adolescents showed poor dietary patterns in 82-90% and sedentary lifestyle in nearly 40-60% of the participants.⁶ National family health survey (NFHS-3) also showed 47-58% of adolescents being underweight, 31% being overweight, and 30-56% being anaemic.⁷ Adolescents often present with problems affecting more than one domain and many of these issues are interconnected, but despite such a huge burden, healthcare-seeking remains poor.

The silver lining in the clouds is that most of these problems are either preventable or treatable if detected timely. Hence, several international bodies advocate for developing preventive services including annual screening and providing a conducive environment for self-disclosure of risk behaviour by adolescents instead of merely focusing on symptomatic treatment. It is suggested to utilise health visits by adolescents to clinics as a window of opportunity to do a comprehensive assessment of physical health, mental health, psychosocial risk factors, and strengths. Despite these guidelines, implementation at the ground level remains below satisfactory levels. Reasons most often cited are time constraints, these screening services not being part of institutional practices, absence of standardised tools for comprehensive health and risk behaviours, limited knowledge and training of healthcare providers, apprehensions of clinicians about limitations in one's own skills in ascertaining psychosocial risk factors, and inability to provide interventions themselves or lacking integrated referral services to link to. Adolescent health services exist in the country under Rashtriya Kishore Swasthya Karyakram (RKSK). The physical health parameters and health education services under its umbrella are improving but wider outreach of adolescent-friendly clinics, effective implementation of psychosocial risk factor assessment and linkage with mental health services is a road yet to be travelled.

Psychosocial assessment using the HEEADSSS approach (Home, Education, Eating, Activities, Drugs and Alcohol, Depression, Suicide, Sexuality, safety) is a very good clinician-administered interview method for face to face assessment but it is not an ideal screening tool and suffers from a lack of validation studies, demands training as well as time, taking up to 40 minutes for administration. Other brief screening instruments available for assessment of multiple domains include Previsit questionnaire (PVQ), YouthChat, Questionnaire pre-consultation checkup GP, HEADSSon Tickit Health, Rapid Assessment for Adolescent Preventive Services (RAAPS), Adolescent Health Review Behavior Evaluation for Risk-taking Adolescents (BERTA), Multidimensional Adolescent Assessment Scale (MAAS), and Indian Adolescent Health Questionnaire (IAHQ). Most of these are in English, take 3 to 20 minutes depending on the number of items, and have an electronic form available. The first three can be used in clinical as well as community settings, and only the last one has been developed in India.^{8,9}

It will be prudent to conduct implementation research on the validation and clinical utility of these existing screening tools for use in clinical settings as well as in the community, including schools. The focus should be on developing brief scales addressing multiple domains, easy to use and administer, with clear interpretations for actions to be taken following assessment. Besides screening instruments, it will also be wiser to invest in developing pre-visit versions of these tools which are accessible to adolescents in physical forms in schools or in electronic format on android devices. Such self-administered forms should be designed to help them identify their strengths and 'areas to work on' rather than illness domains. They can be filled by adolescents prior to clinical visits and can give them an opportunity to reflect on areas for dialogue with clinicians. They should be developed in multiple languages in pictorial format, divided into sections with reference information of health centre to be accessed in case any significant issue is discovered. Development of cultural adaptation of these tools should also focus on region-specific disease pattern presentations, local culture, socioeconomic and religious beliefs, local language, user-friendliness, and availability in several formats (paper as well as electronic). To achieve holistic health, the focus should be on multidimensional assessment, looking beyond physical health and nutritional assessment. It is vital to include assessment of risk behaviours, mental health, tobacco and alcohol use, violence, and sexuality in these tools.

Screening supplemented with Brief Intervention, Referral and Treatment (SBIRT) programmes have shown effectiveness in addressing alcohol use disorder and high-risk behaviour problems. Developing similar cultural adaptations of universal screening and linkage programmes deliverable through existing paraphernalia of adolescent

health services can help in giving comprehensive, yet time-efficient services. There is a compelling need to leverage this clinical and epidemiological wisdom into a strategic, actionable, and scalable investment in adolescent health for a healthy and safe future.

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