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Mental Health Promotion in Children and Adolescents

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Abstract

Mental illnesses among children and adolescents are on the rise and are becoming one of the prime causes of disability across the globe. Untreated or unaddressed mental health issues can extend to adulthood. They can have severe long-term physical, social and economic adverse effects, including low employment rate, lesser wages if employed, interpersonal difficulties and more legal and criminal contacts. However, the focus on preventative and promotive mental health measures has gotten rather less emphasis than the sickness side, including treatment and research on mental illnesses. Resilience and positive well-being are protective against developing mental illnesses and improving courses for those who have developed such issues. Resilience can be enhanced by adopting a healthy lifestyle, music, and other art forms as a recreational activity, limiting screen use and having good social support. Various school-based programs are being developed and tested, targeting positive mental well-being and resilience in children and adolescents. A few of them discussed in this review are life skill education, PAX good behavior games, source of strength, Zippy's Friends, You Can Do It!, and mindfulness-based stress reduction (MBSR). The responsive advocacy for life and learning in youth (RALLY). Despite these, more investments should be directed towards the prevention of illness and promotion of mental well-being than mere treatment and rehabilitation after an illness.

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Introduction

Mental illnesses are an emerging public health concern as they are one of the prime causes of disability globally. According to the Global Burden of Disease Report (2019), depression has shifted to among the top ten causes of health loss. As per the World Health Organization (WHO), one in seven children and adolescents aged 10 to 19 experience some mental health issues, which accounts for 13% of the burden of disease in this age group globally.[1] If left unaddressed, these mental and behavioral problems extend to adulthood. They can have severe long-term physical, social and economic adverse effects, including a lower employment rate, lower wages if employed, interpersonal difficulties, and more legal and criminal contacts.[2] Few longitudinal studies have found that people who develop mental illness are more likely to have lower positive well-being. On the other hand, factors that promote resilience and positive well-being play a pivotal role in preventing mental illnesses.[3]

Children's and adolescents' mental health promotion is a significant area of concern in India, where the importance of mental health is becoming more

widely acknowledged against the backdrop of a changing social and cultural context. Interventions and initiatives that aim to foster mental well-being at a young age are cost-effective in preventing or reducing morbidity related to mental illness both at the individual and societal levels.[4] Preventative and promotive mental health measures are less emphasized than physical health. Instead, more focus has been placed on the sickness side, including treatment and research on mental illnesses.[5,6] Psychiatrists and doctors frequently lack familiarity with the range of ideas, methods, and treatments aimed at mental health promotion and prevention.[3,7]

In India, increased public awareness and advocacy initiatives have fueled a conversation around the promotion of mental health in children and adolescents in recent years. Although health promotion and illness prevention are well-acknowledged principles in public health, it can be difficult to strategically use them for the promotion and prevention of mental health issues. Childhood and adolescence are the developmentally critical periods that lay the foundation for physical growth and mental well-being.[8] Therefore, there is an urgent need for interventions that promote positive psychology and, in turn, empower youth with the life skills to evaluate and seize opportunities, reach their full potential, and cope with adversities and challenges in life.

Well-being and resilience are suggested to be the most critical factors in preventing and reducing the severity of mental health problems. Resilience is an ability or skill set that permits an individual to "prevent, minimize or overcome the damaging effects of adversity".[9] According to resilience theory, all children, irrespective of their mental health status, can benefit from developing effective resilience skills.[10]

Zolkoski and Bullock (2012) have described five characteristics of resilience in children: (a) Social competence, which involves communication skills, caring, empathy, flexibility, and a sense of humor; (b) Problem-solving skills, including creativity and planning; (c) Critical consciousness, involves the cognizance of adverse and abusive situations and the ability to cope with such situations; (d) Autonomy; and (e) Sense of purpose, involves having aspirations, educational ambitions, and a positive attitude towards future.[11]

Individuals with resilience also develop confidence in their abilities to manage difficulties.[12] Emotional resilience is an individual's ability to control violent, offensive, and avoidant behaviours and remain calm while experiencing adversity or distressing events.[13] Particularly, when exposed to adversity, children with resilience can: (1) Control their severity of anger and anxiety; (2) Control their physical responses to distressing events, such as avoiding a fight or avoiding escaping from the distressing situation; (3) Restore composure within a reasonable amount of time; and (4) Return to their studies and recreational activities.[14]

Mental health promotion programs that promote resilience focus on the evolution of- mindfulness, coping skills, empathetic relationships, self-awareness and self-efficacy, emotion recognition and management, and help-seeking behaviour. Various programs are being developed and tested, targeting positive mental well-being and resilience in children and adolescents. As documented from systemic reviews, when executed efficiently, school-based mental health promotion intervention can bring long-term advantages for students, including improved social and emotional functioning and academic achievement.[15]

Also, childhood and adolescence are crucial periods for developing social and emotional habits important for mental well-being. These habits include healthy sleep patterns, exercising regularly, problem-solving, developing coping and interpersonal skills, and managing emotions.[1] When implemented daily, these habits have been shown to influence resilience positively.

General Measures

A healthy lifestyle is a significant predictor of physical and mental well-being. Modifiable health behaviors such as sleep, physical activity and a healthy diet, the "big three", have been shown to benefit mental health, for instance, by reducing the risk of depression and anxiety and improving overall psychological well-being.[16] Adolescence is a time of developmental and ecological changes, such as new roles, increased responsibilities and changing circumstances, which can lead to the adaptation to an unhealthy lifestyle.[17] Evidence suggests that

following sleep hygiene and taking good quality 7 to 9 hours of sleep for children and adolescents improves mental health. Conversely, disturbed and inadequate sleep negatively influences mental health and is a potent risk factor for depression and anxiety[18,19] Also, sleep quality strongly predicts mental well-being among the young population.[20] Similarly, indulging in physical activity causes the release of endorphins in the body, which enhances the feeling of euphoria, elevates mood and energy and promotes well-being.[21] In contrast, sedentary behavior is associated with poor mental health among adolescents.[22] Research has also linked adherence to a healthy diet to improved mood and reduced risk of depression, especially consuming fruits and vegetables, which are associated with greater happiness.[23] On the other hand, regular consumption of diet including refined grains, high sugar, fried and processed food is associated with poorer mental health outcomes.[24]

The emerging influence of screens in the form of smartphones, gaming consoles, tablets, laptops, and televisions among children and adolescents has raised many concerns about the effect of screen time on their mental health. This excessive screen use has been shown to harm sleep quality, affect brain development, and consequently lead to poor mental well-being. There are several studies linking excessive screen use to autism spectrum disorders, specific developmental delays and attention deficit hyperactivity disorder.[25] Screen time in excess is also associated with poor physical health, such as obesity, which in turn affects mental health. A study evaluating the effect of screen time and psychosocial well-being on children and adolescents highlighted that the more screen time, the less mental well-being. Also, higher screen use was associated with less self-control, curiosity and emotional stability and twofold more diagnosis of anxiety and depression than low screen users.[26] Thus, limiting screen use in children at early stages seems prudent. The Indian Academy of Paediatrics has laid guidelines for screen time in infants, children and adolescents that suggest no screen exposure to children below two years of age, a maximum of 1-hour of supervised screen exposure per day to children between 2 to 5 years, less than 2 hours per day for children between 5 to 10 years age.[27]

Many researchers reported a positive relationship between mental health and music and other art forms, such as that engaging in musical activities could prove to be protective against mental illnesses. Listening to soothing music or singing or playing musical instruments is suggested to have a positive impact on various subjective mental health outcomes, especially on anxiety and depression.[28]

Another important factor that enhances resilience in children is social support. The presence of a caring person at home, a teacher at school or a peer who provides support and affinity can promote a child's resiliency and improve problem-solving skills, motivation, academic performance and socio-economic opportunities later in life. The perceived social support and presence of an emotional and substantial social relationship have been shown to promote mental well-being in children and adolescents. A collaborative and supportive relationship with others strengthens a child's ability to gauge support and attach positively to others, further strengthening the child's ability to resist risky behaviors such as substance use, delinquency, and other anti-social behaviors. Moreover, the family and peers are the first to notice the change in the child's behavior and can provide early support and intervention.[29]

School-Based Programs

Life skill education

As defined by the WHO, life skills (LS) "are abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands, challenges, and stress of everyday life." Life skills are acquired through various ways and interaction with others during the developmentally critical periods of childhood and adolescence. WHO has also listed the core life skills techniques and strategies as (1) Critical thinking and creative thinking; (2) Decision making and problem-solving; (3) Communication skills and interpersonal relations skills; (4) Coping with emotions and stress; (5) Self-awareness and empathy.[30] Life skills also potentiate an individual to utilize the available opportunities, work out possible challenges in life, explore alternatives, and make rational decisions after weighing the pros and cons. They also enable effective communication to avoid

misinterpretations and miscommunication and, thus, strengthen interpersonal relations. One such model of life skill education is the life skill education (LSE) program (NIMHANS model). This model was initiated in secondary schools for adolescents in 1996; however, it crystallized in late 2002 and used the already available school infrastructure and the teachers to execute the program effectively as a curricular venture. It is a comprehensive model focusing on experiential learning in peer groups, thus improving adolescents' psychosocial skills. The impact of this program was studied by Bharath Srikala et al. on 605 adolescents at the end of 1-year compared to 432 adolescents not in the program and found significant improvement in self-esteem, coping, prosocial behavior and better adjustment with teachers and school. They concluded that this model of LSE integrated with school mental health programs effectually helps empower adolescents.[31]

PAX good behavior games

PAX good behavior game is a school-based prevention program. It includes nine evidence-based kernels,[32] which are the practices implemented by the teachers at the start of the game. Based on the Premack principle, these practices assist in implementing the game and build an environment that facilitates cooperation and self-regulation.

The initially developed good behavior game (GBG) was significantly found to bring down disruptive behavior in classroom students. Barrish, Saunders, and Wolfein developed it in 1969.[33] The GBG focuses on self-regulation, which improves adaptive interpersonal interactions and cognitive flexibility, enhances positive health behaviors, and better impulse control. PAX GBG is the trademark version of PAXIS Institute, where PAX stands for peace, productivity, health, and happiness. Trained teachers usually introduce the PAX GBG in the first and second grades. A randomized comparative effectiveness trial by Sheppard Kellam compared the effectiveness of GBG, mastery learning and control (not receiving GBG) in the same schools. The longitudinal finding showed the impact of the good behavior game to be that there was a 50 to 70% reduction in behavior problems and more time for teaching and learning in the first three months, better academics, less illness and vandalism, better school attendance by first year and reduced incidence of ADHD, ODD, substance use, conduct disorder, depression, less crime and violence and better education over the next 2 to 15 years.[34-36] GBG is one of the prevention interventions that has been shown to reduce suicide attempts universally[37] by improving prosocial behaviors and reducing behavior that harms peer relations.[38] Another RCT where first-grade children in 197 schools in the province of Manitoba received PAX for one year was compared with the control group. They concluded that students receiving PAX scored higher in the strengths and difficulties questionnaire at the end of one year for all five SDQ subscales: Emotional symptoms, hyperactivity, prosocial behavior, conduct problems, and peer relationship problems.

Sources of strength

Sources of strength is based on a universal school-based approach to suicide prevention, which is designed to create socioecological protective influences in the student population. The rationale behind modifying socioecological factors is derived from the well-established interrelation between suicidal behavior and the quality and density of the adolescents' social relations and norms cultivated in the relationship system to which the adolescent belongs.[39,40] With this intervention, youth opinion leaders/peer leaders belonging to diverse social groups and at-risk adolescents are trained to modify the norms and behaviors of their peers by using clearly defined messaging activities with adult mentoring. A study conducted to examine the effectiveness of this intervention among trained peer leaders and an entire high-school student population highlighted enhanced adaptive norms concerning suicide, school engagement and connectedness to adults in the peer leaders. The intervention improved perceptions of adult support and the acceptability of seeking help in suicidal youths among the total student population, thus empirically reducing suicidal behavior.[40,41] The use of peer leaders is seen to modify norms for publicly noticeable behaviors such as tobacco use[42] and has been used as the latest approach in substance use prevention.[43]

Mindfulness-based stress reduction

Mindfulness-based stress reduction is a standardized meditation program developed by Jon Kabat-Zinn in 1979. It integrates contemporary practical and clinical practice with Buddhist mindfulness meditation.[44] This mindfulness program is being integrated into school as a part of a social and emotional learning program (SEL). Mindfulness-based SEL programs are directed toward developing a range of self-regulatory, interpersonal, and emotional competencies in students. Evidence from various types of research shows an improvement in executive function, academic performance, self-regulation, stress reduction, and prosocial and externalizing behaviors.[45] An RCT conducted at two schools in Baltimore drew the finding that post the MSRB program, there was a significant reduction in the severity of depression, negative coping, negative affect, somatization, self-hostility, rumination and posttraumatic symptoms.[46]

Zippy's friends

It is a universal school-based intervention for children between the ages of 5 and 8 years. Like other school-based programs, it aims to promote young children's mental health and overall well-being by enhancing their reserve of coping skills and exposing diverse and flexible ways of dealing with daily life stressors. Zippy's friends contains 24 sessions (divided into six modules with four lessons each), executed over one academic year, once a week for one hour by the class teacher. Each module has different stories centered on a group of children and an imaginary stick insect called Zippy. Each module is based on a theme: (i) Communication, (ii) Making and breaking relationships, (iii) Feelings, (iv) General coping skills, (v) Dealing with change and loss and (vi) Conflict resolution. An intervention study in North America evaluated the short-term effects of Zippy's friends. It concluded reduced internalization and improved cooperation, perceived social support and autonomy in first and second-grade primary school children.[47] Another cluster randomized controlled trial of Zippy's friends at 12-month follow-up found a significant effect of the program in self-awareness, motivation, self-regulation, and social skills post-intervention. It inferred an overall improvement in emotional literacy skills.[48]

The responsive advocacy for life and learning in youth

The prevention program responsive advocacy for life and learning in youth is a theoretical and researched intervention aiming towards both social and emotional well-being and academic success and, thus, overall mental health in school adolescents. It is built on the theory of normative development and developmental psychopathology, emphasizing a risk and resilience framework. At the center of this program are RALLY prevention practitioners who integrate mental health and academic focus and provide non-stigmatizing support to students in classroom or after-school settings. Developmental specialists establish relationships with adolescents, teachers and families in high-risk environments.[49,50] The pilot study, which was conducted for one year on urban middle students to investigate the effect of the RALLY program on resilience and learning potential, reported an increase in empathy, emotional regulation, and reliance on others in the post-program evaluation. Moreover, more than 80% of students reported better social relationships at school and academic performances.[50]

The You Can Do It! (YCDI!)

A crucial universal factor contributing to mental health issues in adolescents is the absence of socio-emotional competence. This socioemotional learning is considered to have five core components: (1) Learning to think positively (2) Learning persistence (3) Learning collaboration (4) Learning organization and (5) Learning resilience. The You Can Do It! education program improves child's ability to control their emotions positively. It is a preventive program based on cognitive behavioral theory (CBT) developed in Australia to encourage resilience in children. This program is potent in improving self-esteem, coping with adversities, healthy interpersonal relationships, and academic ability in many countries across the globe. A Japanese study at an elementary school concluded that the intervention group showed significantly improved resilience and social support.[51]

Conclusion

Mental health promotion and prevention in children and adolescents is the need of the hour. Targeting

children is important because a large number of disorders start at this age and continue in adults. In the future, we will not have enough manpower to address the mental health problems of a large population. Therefore, prevention becomes more important. All the general measures and programs have strong evidence in increasing coping strategies and resilience and improving interpersonal relationships, which lay persons can deliver. Most of these programs are running successfully in Western countries and other parts of the world. Thus, our country also needs to step forward by making adaptations of these programs and incorporating them in our schools. However, to make this program efficient, the teachers should be well trained in such tested methods and thus, it should be made a mandatory part of teachers' training programs. Overall, more investments should be directed towards the prevention of illness and promotion of mental well-being rather than mere treatment and rehabilitation after illness.

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