Prevalence of psychiatric disturbances among school going children in North Karnataka

Archana Basavaraj Byahatti, Azizahmed I Arbar, Rohit Rajendra Natekar, Sindhu N Reddy, Ghansham Jadhav
Department of Kaumarabhritya, KAHER's Shri B M K Ayurveda Mahavidyalaya, Belagavi, Karnataka, India

Correspondence Address:
Dr. Azizahmed I Arbar
Department of Kaumarabhritya, KAHER's Shri B M K Ayurveda Mahavidyalaya, Shahapur, Belagavi - 590 003, Karnataka
India

Abstract

Context: Psychic Disturbances are the most common problems encountered in children. **Aims:** To study the prevalence of Psychic Disturbances like anxiety and depression among high school going adolescents. **Settings and Design:** This is cross-sectional survey study conducted among 522 children (13-15 years). **Methods and Material:** Anxiety and Depression were measured using Hamilton anxiety rating scale and Kutcher adolescent depression scale respectively. Statistical analysis used: The collected data were analyzed using Statistical Package for Social Science(SPSS statistics 20 License Authorization Wizard.lnk).Results were expressed as proportions using appropriate tables. Prevalence rate was calculated using point prevalence formula. **Results:** The response rate of study being 91.7%, Among total samples of 522, 403 samples (77.2%) had only mild anxiety,14.17 % participants had possible depression another 14.17 % of participants having both anxiety and depression. **Conclusions:** Prevalence of Anxiety was higher compared to Depression among the study participants, females had higher prevalence rate of depression were as males had higher rate of anxiety.

Full Text

Sir,

Adolescence is a stage of transition from childhood to adulthood. During this stage of life, a youth undergoes rapid changes in body structure, mediated by the sex hormones. The appearance of sexual characters is coupled with change in cognition and psychology.[1] Adolescents are under immense pressure because of the rapid changes in their hormonal milieu, changing ideas and concepts about the world, having to cope up with the expectations from the society, and the need to establish their own identity. The problems faced by an adolescent in Indian are diverse and are often not addressed by the health-care system.[1]

Adjustment and anxiety disorders, depression, suicide, delinquent behavior, poor body image, and low self-esteem are major concerns. Suicide rates are increasing, with higher number of completed suicide in boys and attempted suicide in girls. Adolescents are at high risk of committing suicide because of cognitive immaturity and impulsivity. Psychological disorders such as depression or mood disorders, substance abuse, parent–child conflict, physical or sexual abuse, and family history of suicide make them prone for such attempts. Peer information is a part of adolescent social development. Pressure for conforming to norms drives many of their actions and decisions, including risk-taking behavior and initiation of substance abuse.[1] Examinations cause significant physiological and psychological stress. Apart from change in body structure, various other factors such as peer acceptances, discrimination, academic burden, parental expectations, and changing social environments cause stress among youth. Switching from vernacular to English medium schools, long hours of school, and tuitions are additional stress factors that are unaddressed. While most adolescents have adequate coping skills, some have serious adjustment problems resulting in psychological and somatic effects.[1] Hence, this is a right time for a physician to detect risk factors such as behavioral and social problems. Subtle causes like anxiety and depressed mood, Thus with this reason study was carried out to assess the prevalence of anxiety and depression among school children (13–15 years) of North Karnataka.

This cross-sectional study was conducted among the school children of four different schools of Belagavi, Karnataka. However, for the purpose of this study, adolescents aged between 13 and 15 years were included. A total of 521 samples were enrolled in this study. Approval was obtained from the Institutional Ethics Committee of KAHER's Shri B M K Ayurveda Mahavidyalaya, Belagavi, Karnataka, and necessary permission was taken from the authorities of all the four study schools. The survey sessions were arranged at a time convenient to the school schedule and were told to all participants that participation in the survey was entirely voluntary, and there were no known or anticipated risks to participate in this study. The selected students were explained about the objective of the study and each and every item of both the assessment scales so as to avoid misinterpretation in answering the questionnaires; in this way, the data collection was done. The collection tool included two scales "Hamilton Anxiety Rating Scale" (HAM-A)[2] and "Kutcher Adolescent Depression Scale" (KADS)[3] for assessing anxiety and depression, respectively; HAM-A scale contains 14 items, each item is scored on a scale of 0 (not present), 1 (mild), 2 (moderate), 3 (severe), and 4 (very severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 indicates mild-to-moderate severity, and 25–30 moderate-to-severe anxiety levels. KADS scale contains 6 items, each item is scored on a scale of 0 (hardly ever), 1 (much of the time), 2 (most of the time), and 3 (all of the time), then if the total score is above 6 suggest possible depression, if below 6 indicates probably not depressed.

The collected data were analyzed using the Statistical Package for the Social Science (SPSS statistics 20 License Authorization Wizard.lnk). Results were expressed as proportions using appropriate tables. The prevalence rate was calculated using the point prevalence formula.

Our study included 521 study participants, after approaching 569 eligible children as per the inclusion criteria of (13–15 years) children. After excluding those who refused consent and with incomplete responses, the response rate was 91.7%. The study participants' age ranged from 13 to 15 years; the mean age being 14 years among them (54.78%) were males (45.21%) were female.

[Table 1] describes the various gradings and distribution of anxiety in both genders, wherein 403 participants had only mild anxiety (77.2%), 40 participants had mild-to-moderate anxiety

(7.66%), and only (0.7%) samples had moderate-to-severe anxiety higher % was observed in females and 14.17% of participants having both anxiety and depression in which (3.8%) had mild-to-moderate anxiety with depression, (2.87%) had moderate-to-severe anxiety with depression.{Table 1}

Currently, we have the largest adolescent generation ever in the human history. Noncommunicable diseases among adolescents and mental health illness, in particular, have been documented to result in high levels of medical, social, and economic burden. Most of the adult mental health disorders have their onset during their childhood or adolescence.[4] Adolescent depression and anxiety are the two common conditions which interfere with the complete growth and development of an individual.[4] Anxiety disorders are the most common psychiatric disorders of childhood; they occur in 5%–8% of all children and adolescents, prevalence rates comparable to physical disorders such as asthma and diabetes. Anxiety disorders are often comorbid with other psychiatric disorders (including a second anxiety disorder); significant impairment in day-to-day functioning is common. High levels of fear in adolescence are also a significant risk factor for experiencing later episodes of major depression in adulthood. Anxiety and depressive disorder in adolescence predict increased risk of anxiety and depressive symptoms (including suicide attempts) in adulthood, underscoring the need to diagnose and treat these underreported, yet prevalent, conditions early.[5] Overall, our study showed 77.2% of participants having only mild anxiety were male were on the higher prevalence rate, 14.17% of participants had both anxiety and depression were again females were on the higher side. The prevalence of major depressive disorder is estimated to be approximately 2% in children and 4%–8% in adolescents, with a male-to-female ratio of 1:1 during childhood and 1:2 during adolescence. The risk of major depression increases by a factor of 2–4 after puberty, and cumulative incidence by age 18 years is approximately 20%. Our study showed that 14.17% of the participants had possible depression, female being on the higher side. Hence, it is evident that the levels of psychiatric disorders such as anxiety and depression are more prevalent in adolescents of the age group of 13–15 years in North Karnataka.

The prevalence of anxiety was higher compared to depression among the study participants, females had higher prevalence rate of depression, whereas males had higher rate of anxiety. Thus, the study data help for an early need of interventions at the institutional levels to address adolescent depression and anxiety.

Acknowledgment

Conflicts of interest

There are no conflicts of interest.

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