

Stressors in adolescence: An analytical cross-sectional study

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ABSTRACT

Objective: To understand the importance of stress in adolescence well-being, to categorize the stressors in them, and to understand the validity of their solutions. **Materials and Methods:** A prospective study was conducted in 804 students in the age group of 15-17 years from four schools in the city. Study was conducted with the help of “adolescent stress questionnaire” which consisted of 31 questions. An analysis of these answers was done to understand the stressors and other factors. **Results:** Out of 804 participants, 43% (n=342) were females and 57% (n=462) were males. 52% (n=421) were 15-year-old, 32% (n=251) 16 years, and 16% (n=132) were 17-year-old. Academic stress is seen in 74%. No significant differences with gender are seen with the stress. Severe stress is less in children who are 17-year-old than those who are 15-year-old. Mild stress increases with age. Among the study participants, 50.9% (409) children mentioned that they did not get enough time to spend with their friends. Majority of the children were stressed due to studies ($p=0.03$) more than peer and parent relationship. At the time of break down, they preferred to watch television, listen to music and to use social media (WhatsApp or Facebook) rather than to speak out the matters that stressed them. 33.3% (268) of the adolescents felt that they need help in coping up with their stress. They enjoy what they are doing; though, grades in the school affect them and they feel more time to be spent for studies. **Conclusion:** Their main stressor was studied; though, a few of them stated that peer/parent/teacher relationships also affect them. Most of the adolescents are able to cope up with stressors in their own way but some of them feel that they need help.

Key words: Academic stress, Adolescence, Coping with stress, Stressors

Adolescence is conceptualized as a transitional period, which begins with the onset of puberty and ends with the acceptance of adult roles and responsibilities. Adolescence has been considered, almost by definition, a period of heightened stress due to the many changes experienced concomitantly, including physical maturation, drive for independence, increased salience of social and peer interactions, and brain development [1]. Adolescence is characterized by physical maturation of the brain and body, giving rise to intense psychological and physical change. One primary class of psychological change typical of adolescents is an intensification of emotional experiences. These heightened emotional experiences have been argued to be the basis of psychopathology and suicidal behavior. Adolescence is the most common time of life for psychiatric illness to emerge, with reported anxiety reaching its lifetime peak [2].

Although new-found independence can be stimulating, it may also lead to feelings of being overwhelmed by change, which has historically led some researchers to characterize adolescence as ridden with “storm and stress” [3]. Adolescent depression is a captivating topic for several reasons. Rates of youth depression are the highest of all psychological disorders in this age group; The disorder affects millions of youngsters and their families. Depression is impairing and is associated with many problems,

such as school difficulties and drop out, unwanted pregnancies, health problems, drug and alcohol abuse and smoking, intimate partner violence, and problematic peer and family relationships, as well as anxiety, eating, and disruptive behavior disorders. Tragically, it can also be fatal due to its association with suicide [4].

Adolescence is a transitional phase during which the juvenile develops into an independent adult individual. It is a time when they are exposed to multiple stresses. We planned this study to identify the importance of stress in adolescent age group, to categorize and grade them, and to understand their coping strategies.

MATERIALS AND METHODS

An analytic cross-sectional study was conducted in children in the age group of 15-17 years from four private schools in the Mangalore city. The study was conducted with the help of adolescent stress questionnaire which was validated by an adolescent specialist and a child psychologist in our hospital and is consisted of 31 questions. Study approved by the ethical committee of the institution.

A total of 900 students had been approached for the study after getting permission from principals of the respective schools. An introductory class for taken to tell them about the purpose

and methodology of the study. After which questionnaire were circulated among students to fill it. All students in the age group 15-17 years who gave the informed consent to participate in the study and who had completely filled the questionnaire were included in the study. 96 students were excluded from the study due to incomplete questionnaire or non-willingness to participate in the study.

About 11 questions were taken as direct markers of the stress and grading of stress done according to their scores (1-11) as follows: (a) No stress - 0-5, (b) mild stress - 6-7, (c) moderate stress - 8-9, and (d) severe stress - ≥ 10 . Chi-square test was used for statistical analysis.

RESULTS

Out of total 804 study participants, 43% (n=342) were females and 57% (n=462) were males. 52% (n=421) were 15-year-old, 32% (n=251) 16 years, and 16% (n=132) were 17-year-old. The prevalence of stress was 57.58% in our study population and 42.42% of students were not under stress. 4.7% (p=0.01) were noted to have severe stress while 15.2% had moderate stress. Gender wise categorization of the severity of stress is presented in Table 1. Both genders were stressed and no significant differences between genders were seen (p=0.064).

Table 2 shows that severe stress was less in age group of 17, but mild stresses increased with age (p=0.96). Among the study participants, 50.9% (n=409) children mentioned that they did not get enough time to spend with their friends. Most of the children (82.7%, n=665) stated that they enjoy what they do. 55.3% (445) participants felt that they have more school work and 42.9% (345) felt that homework is also burdening them. 66.9% (538) of them care too much about school grades which put them into a lot of pressure (p=0.036). 34.9% (279) children felt that there are too many tests in their school and 46.2% (372) felt that they had a lot of pressure in doing daily lessons. 42% (338) had a lot of pressure due to competitions and 46.5% (374) felt that they have disappointed their parents with their grades. 30.8% (248) felt their sleep is disturbed due to these worries.

Table 1: Severity of stress in study population

Stressors	Male n=462 (%)	Female n=342 (%)
No stress	194 (42)	147 (43)
Mild stress	180 (39)	127 (37)
Moderate stress	55 (12)	37 (11)
Severe stress	33 (7)	31 (9)

Table 2: Stress categorization according to the age

Stressors	15 years n=421 (%)	16 years n=251 (%)	17 years n=132 (%)
No stress	210	116	58
Mild stress	64	34	22
Moderate stress	56	81	42
Severe stress	90	20	10

The stressors in them are also scored to understand which among them is most stressful. Majority of the children were stressed due to studies (74%, n=594) more than due to parental (8.8%, n=71) or peer (8.2%, n=66) relationship (p=0.005). Relationship with teachers had affected 5.1% (n=41) children while 3.5% (n=28) were affected with sibling rivalry. Adolescents' methods of coping with stress were also assessed. At the time of break down, they preferred to listen to the music (26%), watch TV (20%), spent time alone (16%), cried to oneself (10%) and to use social media (WhatsApp or Facebook) (11%) rather than to speak out the matters that stressed them. 33.3% (268) of the adolescents felt that they need help in coping up with their stress (p=0.046).

DISCUSSION

The nature of stressors in adolescence, their factors, and psychometric properties to assess the adolescent stressors have been given little importance in the literature. Our study revealed that stress in adolescents seems to arise from many sources. Academic stress such as homework and examination stress was found to be the major stressor which was also found in previous studies [5,6]. Peer relations are the next common stressor in our study which is supported by the results of the previous study done by Chandra and Batada [7]. Contrary to previous studies, our study found lesser boy-girl relationship as a cause of stress. Next, common stressor was found to be the family relation similar to studies done by Anda et al. [8].

Our study showed that to deal with stress, the adolescents tend to listen to music and watch TV. The number of children who sought help from their parents was very small, and this is contrary to the study conducted by Gala et al. [8]. It is important to note that adolescents did not prefer to tackle the problem and rather they diverted their attention to other activities which they claimed reduced their stress. This is unlike what was found in Bruce et al. [9] and Gala et al. [8] where the majority of adolescents asked for help. Emotional discharge was not one of the popular coping strategies as compared to what was shown in the previous studies [10].

This study helps us to understand the adolescents who are in an age group which require greater attention. In our study, very less number of adolescents has opted for medical help for coping up with stress; however, the real problem might, in reality, be larger. Intervention and counseling program for adolescents should be encouraged [11]. Academic curriculum needs to be altered to reduce the amount of stress these children are facing. The results obtained in our study had been conveyed to the school to guide their efforts toward easing stress in adolescents.

The most important limitation of the study was that it relied only on the participants' self-report, and they have different possibilities of becoming aware of the efforts and ways of coping. The distortion of the answers is possible due to the errors in self-representation, memory errors and the difficulty of aggregating responses over time and across situations.

CONCLUSIONS

This study concludes that no significant differences with gender are seen with stress. Severe stress is less in age group of 17, but mild stresses increase with age. Academic stress is seen in 74% which forms a major component of stress while parent and peer relationships are the next. Majority of them listen to music, watch TV, and use social media to cope with the stress.

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