

Depression, Anxiety and Stress among High School students in Manipur.

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Abstract:

Background: Most high school students are adolescents, at a stage that involves many physiological and psychological changes. They are particularly vulnerable to academic and psychological stress, as profound transitional changes occur both at the individual and social levels. Hence, the present study was carried out to determine the prevalence of depression, anxiety, and stress among high school students of Manipur, India.

Materials and Methods: A cross-sectional study was conducted among class IX-X students in a sub-urban school in Manipur using Depression, Anxiety and Stress Scale (DASS) questionnaire-42. Data collected was analyzed using SPSS version 21.

Results: A total of 86 students in class X and 24 in class IX responded to the study. Almost all participants were around 14 years of age on an average in both classes. Students in Class IX as compared to Class X reported higher scores for all three but more for depression and stress ($p < 0.05$), though statistically insignificant for anxiety. Of 110 respondents, 80% reported at least one of the studied disorders and 28.2% had all the three disorders. Overall, prevalence of depression, anxiety, and stress among the high school students were found to be 47.3%, 72.7%, and 49.1% respectively.

Conclusion: Depression, anxiety, and stress are highly prevalent in high school students, more so in those who have just transit from lower grades to high school levels. This calls for institution of proper guidance at the start to reduce the impending stress of higher classes on the students and evade school drop-outs and disastrous incidents and to promote the students' psychosocial and academic wellbeing.

Key Words: Anxiety; DASS-42; Depression; Stress; High school students, sub urban.

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I. Introduction

Most high school students are at the stage of adolescence that forms a very important period in life, involving many physiological and psychological changes. This age group includes 10-19 years¹ and profound transitions occur both at the individual and social levels which makes them particularly vulnerable to academic and psychological stress.

Students with high stress levels in academia were seen to exhibit signs of depression, anxiety, phobia, school refusals, increased irritability, and complaints and reduced interest in schoolwork². In India particularly, students are put under pressure to perform well in examinations which is taken as the marker of the academic status and hence a qualification to make their way into further studies or profession. India has the world's largest national population of adolescents (243 million) that accounts for a quarter of the country's population¹. Worldwide upto 20% of the adolescents in any given period experience a mental health problem most commonly depression or anxiety. In many settings, they even resort to suicide, a leading cause of death³.

However, scant literature is available regarding the prevalence of depression, anxiety, and stress in this age group as most of the studies have been conducted on adults. Hence, the present study was carried out to determine the prevalence of depression, anxiety, and stress among high school students of Manipur, India.

II. Material and Methods

A cross-sectional study was conducted from September 2019 to October 2019 among class IX-X students in a sub-urban school in Manipur using Depression, Anxiety and Stress scale (DASS) questionnaire-42. A written consent was taken from the school Principal prior to conduct of the study. Informed consent from the students was taken after being explained about the purpose of the study and that their responses would be kept

confidential. Those who were absent and could not be contacted even after three attempts were excluded from the study.

The DASS⁴ is a 42-item Questionnaire which includes three self-reporting scales designed to measure the levels of depression, anxiety, and stress. Each of the three scales contains 14 items. It employs the 4-point severity/frequency scales to rate the extent to which they have experienced each state over the past week. The scores for each emotional trait are calculated and interpreted to several grades (Normal, mild, moderate, severe and very severe). These Questionnaires were distributed and each statement explained to the students in the class as to how to rank each statement depending on the severity of the symptoms.

Data thus obtained were entered and analysis were done using SPSS version-21. Descriptive statistics such as mean and percentage were used. Data analysis performed using the independent sample test and a P-value of < 0.05 was considered statistically significant.

III. Results

A total of 110 students, out of which 86 were in class X and 24 in Class IX participated in the study. Table 1 shows the mean age of the participants with males around 13.38±1.12 years in class IX and 14.00±0.25 years in Class X while females in both classes were 14 years of age on an average. 80% of the respondents reported at least one of the studied disorders and 28.2% had all the three disorders.

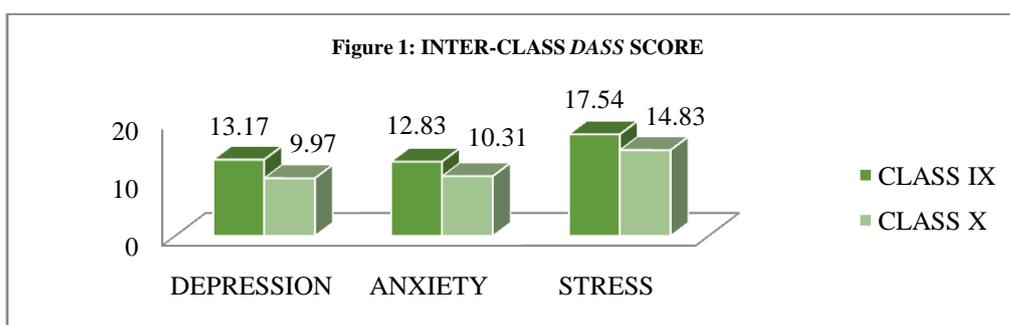
TABLE 1: Mean age (in years) of students in class IX and X under study.

STANDARD	NO. OF STUDENTS	MALES	FEMALES
CLASS IX	24	13.38±1.121	14.00 ±0
CLASS X	86	14.00±0.25	14.00±0

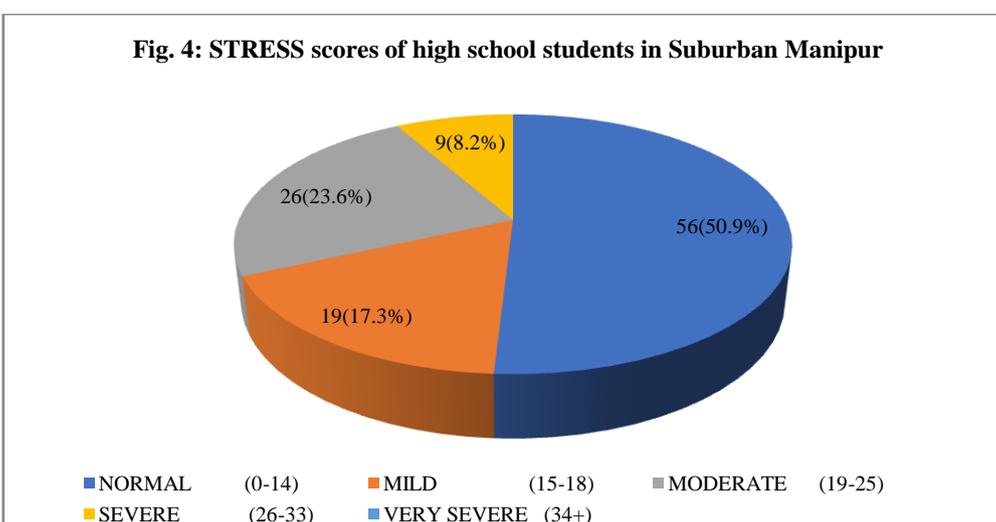
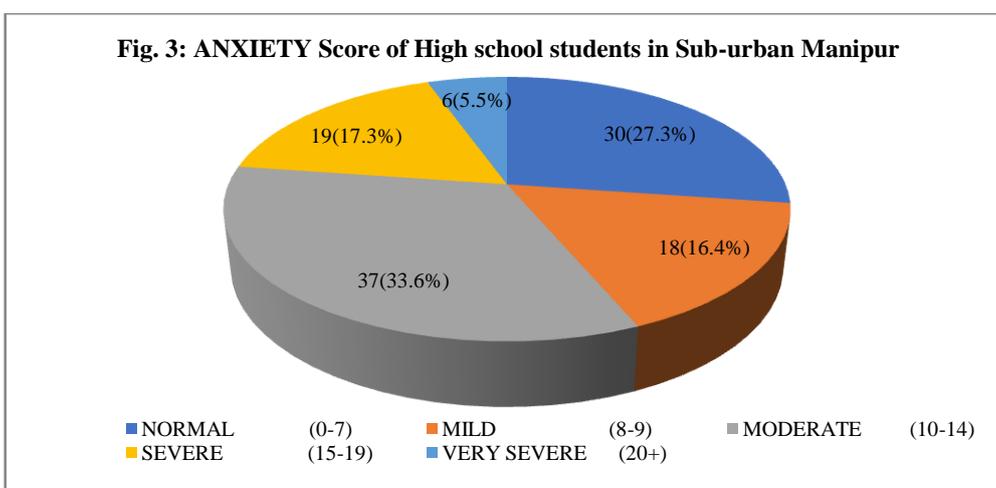
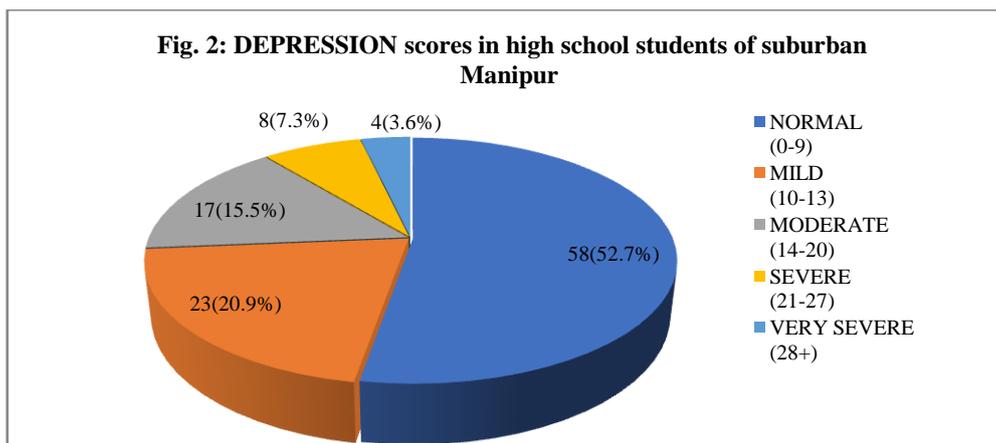
As shown in Table 2 and figure 1, Students in Class IX scored 13.17±5.82 for depression and 17.54±7.88 for stress while those in class X scored much lower at 9.97±6.92 and 14.83±5.83 respectively which is statistically significant (p<0.05). Considering Anxiety scorings, Class IX students again scored higher at 12.83±5.5 though statistically insignificant as compared to Class X with just 10.31±5.3.

TABLE 2: Mean + SD score of depression, anxiety and stress in high school students

STANDARD	DEPRESSION	ANXIETY	STRESS
CLASS IX	13.17±5.821	12.83±5.498	17.54±7.879
CLASS X	9.97±6.917	10.31±5.321	14.83±5.833



Figures 2,3 and 4 depict the categories of Depression, Anxiety and Stress respectively based on the DASS scoring of the students. 52.7% for depression, 27.3% for anxiety and 50.9% for stress scored within normal while the remaining falls within mild to very severe grades of the above three. It is observed that out of the respondents, 3.6% for depression and 5.5% for anxiety falls within the very severe grades. Thus, considering all grades ranging from mild to the most severe, prevalence of depression, anxiety, and stress among the high school students in a sub urban setting in Manipur is found to be 47.3%, 72.7%, and 49.1% respectively.



IV. Discussion

In the current fast lifestyles and high competition in every field, education at a proper time of life becomes essential for future survival and a good quality of life. It is of utmost importance that our children, as they grow and mature be mentally and emotionally fit to face the challenges of life in future. As they evolve from childhood to adulthood, it is imperative that they are exposed to changing academic environment from the playful junior schools to more serious senior grades. However, at this transitional period where the human child also copes with the changing anatomy and emotional turmoil, the emergence of mental disturbances must be carefully watched for.

In a study conducted among higher secondary school students in Manipur⁵ in an urban setting using the DASS, the same tool, the prevalence of depression, anxiety and stress were found to be high at 19.5%, 24.4% and 21.1% respectively. Our present study done in a suburban school among high school children observed a still higher rate at 47.3%, 72.7% and 39% for depression, anxiety and stress respectively. This is relatively similar to those found in Saudi Arabia but in secondary school students⁶ who reported a prevalence of depression, anxiety and stress of 41.5%, 66.2% and 52.2% respectively.

Another study conducted on school children of affluent families⁷, reported significantly higher grades of depression, anxiety and stress among 'board classes' ie., 10th and 12th as compared to 9th and 11th standards. This, however is in contrast to our finding that students in 9th reported more of the three as compared to those in 10th standard. The differences probably may be accounted by the difference in the socio-economic conditions of the students and the setting and timing of the present study which was conducted at mid-term as well as the small sample size studied. Another possible reason may be that, those in 10th standard have already developed their coping skills and can handle stress better whereas the new entrants to high school level at 9th standard are now subjected to more stringent academic atmosphere than lower standards. This might be one of the reasons why most children in the past in rural and suburban areas tend to drop out of school once they completed the 8th standard.

Another point of concern is that a small percentage of 10-25% of the high school students studied scored within the severe to very severe categories of depression, anxiety and stress in the present study. This vulnerable section needs to be carefully monitored and provided with appropriate remedial measures and handled with empathy to evade disastrous academic as well as the development of psycho-social disorders in their future.

V. Conclusion

Depression, Anxiety and stress are highly prevalent among sub-urban high school children. Early detection, timely intervention and prompt appropriate measures are warranted to promote and maintain academic, emotional and psychosocial wellbeing of these students.

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