Research Paper

Prevalence of Depression among Teenage Population on Emotional Quality of Life

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ABSTRACT

Objective: The aim is to study the prevalence of depression among teenage population on emotional quality of life. **Study setting:** Study is planned to be conducted at school premises, at convenient time of participants, with consent of school in charge at Rani seethai achi higher secondary school, Annamalai Nagar, Chidambaram, Tamilnadu, India. **Study design:** Descriptive study **Methodology:** Based on selection criteria, 198 participants were selected for this study. An informed oral consent was obtained from each participants after detailed explanation about this study .15 participants were included in this study per day. They were asked to fill the questionnaire form (Patient Health Questionnaire -9). By using this form depression is analysed in the age group of 13-14yrs of teenage population. The study was undertaken for a period of one month, data's were collected and statistically analysed. **Outcome measure: Patient Health Questionnaire -9:** To assess the prevalence of depression among teenage population. **Conclusion:** Concluded that 153 students were found to have mild to severe depression emotional quality of life.

Keywords: Depression, Emotional Quality of Life, Teenage, School and Prevalence.

Depression is characterized by persistently depressed mood /loss of interest in activities, causing significant impairment in daily life. Possible causes include a combination of biological, psychological, functional, emotional and social sources stress.

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and sense well-being. People with depressed mood can feel sad, anxious, hopeless, worthless, helpless, irritable, restless. Depressed mood is a feature of some psychiatric syndromes such as major depressive disorder but it may also be a normal reaction to life events.

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Depression is the most common psychiatric disorder among adolescents. A meta-analysis estimated the prevalence of major depressive disorder among adolescents aged 13-15 years to be 5.6 percent (Manmohan Singh et.al., 2017). One prospective study of community-based sample reported on annual incidence rate of depression to be 1.61/1000 children aged 10-17 years.

Risk factors for depression
Risk of depression may be related to the combination of genetic, physical, psychological, and environmental factors. These included family history of mental illness, physical, major life changes and stress include serious loss a difficult relationship, little or no social support, psychological factors include low esteem, sensitivity to loss of rejection, low, socioeconomic status, cultural factors, stressful environments, social isolation and greater daily stress, age, insomnia, medication etc.

Patient health questionnarie-9
In this study depression among teenage population was assessed. Easy to use, patient questionnaire is a self-administrated version of the PRIME-MD Diagnostic instrument for common mental disorders. The PHQ-9 is the depression module, which scores each of the nine DSM -4 Criteria "0" (not at all) "1" (several days) "2" (more than half the days) "3" (nearly every day) "4" (from not a different at all to extremely difficult). It has been validated for use in primary care.

It is not screening tool for depression but is used for monitor the severity of depression response to treatment. So, the aim of this study was to find out the prevalence of depression among teenage population on emotional quality of life.

Emotional quality with depression
Emotional disorders commonly emerge during adolescence. In addition to depression or anxiety, adolescents with emotional disorders can also experience excessive irritability, frustration or anger. Symptoms can overlap across more than one emotional disorder with rapid and unexpected changes in mood and emotional outbursts. Younger adolescents may additionally develop emotional- related physical symptoms such as stomach ache, head ache or nausea.

Globally, depression is the fourth leading cause of illness and disability among adolescents aged 15 – 19 years and fifteenth for those aged 10 – 14 years. Emotional disorders can profoundly affect areas like schoolwork and school attendance and day to day activities of life. Social withdrawal can exacerbate isolation and loneliness. It worse, depression can lead to suicide.

Objective
The aim was to study the prevalence of depression among teenage population on emotional quality of life.

REVIEW OF LITERATURE
The study reviews for prevalence of depression among teenage population and Patient health questionnarie-9.

Surabhi Chauhan et. al (2014), the author studied to estimate the prevalence of depression among adolescents studying in public schools in Noida in order to find out a relationship if

any with different socioeconomic and demographic factors. Cross sectional study using simple screening instruments along with anthropometric measurements for detecting symptoms of depression in 800 adolescents, two psychological instruments i.e., PRIME PHQ-9 and perceived stress scale were used. Statistical analysis was done with chi-square test using SPPS 17. Prevalence of depression was observed be 38%among the study subject of 16 and 18 years. Male (35%) were found less depressed as compared to the females (41.8%). Association of frequency going for outing, extracurricular activities and type of activities and depression were statistically significant. Highest prevalence of depression seen in obese (48.7%) study subjects. A statistically significant association was found between BMI and depression (P<0.003). Majority of study subjects (36.6%)has consulted their parents and 33% of friends. 64.4% are listen to music to relieve depression which was statistically significant. The study highlights the common but ignored problem of depression in adolescents. The author concluded that high level of depressive symptoms in a school sample of adolescents in Noida, up to 38%adolescents are experienced reported depression.

Manisha malik et. al (2015), the author studied cross sectional study by using simple screening instrument. Beck depression inventory (BDI) among school going adolescents in urban Haryana. All the students of class 9th and 10th of 3 government schools were included. The data was conducted on a predesigned, pre-tested, semi structured, schedule by interview after obtaining informed consent from the concerned adolescents\ principals of schools. Statistical analysis has been done within simple proportions and percentage using SPSS 20. The total of 374 adolescents participated in the study subjects were in age group of 13-17 years. The mean age of study subjects was 15.3 years shows the socio demographic characteristic of study subjects. Around two third of them were boys (67.9%). Fathers of almost half of adolescents were laborer by occupation (50.8%) and majority of mothers were housewives (90.6%). More than half (60.9%) of study subject belonged to nuclear family. Out of 347 study subjects 198(52.9%) were found to scores corresponding to some degree of depression. It found that adolescents (11.3%) had scores in range of moderate depression 7(1.8%) had a score corresponding to severe depression.

Manmohan Singh et. al (2017), the author studied cross sectional study among 542 randomly selected school going adolescents (13-18 years). From eight schools by multistage sampling technique. Depression was assessed by using Patient Health Questionnaire -9 and associated factors by pretested semi structured interview schedule .Significant associated factors included being in a government school ,studying in class 9th and 10th ,rural locality ,physical abuse, by family members ,alcohol use and smoking by father, lack of environment in school, spending less time in studies, lower level of participation in cultural activities and having a boy\ girlfriend .The author concluded that a significant proportion of school going adolescents suffered from depression. The presence of depression was associated with large number of modifiable risk factors. There is a need to modify the home as well a school environment to reduce the risk of depression.

Nirbal Kaur Shukla et. al (2017), the author studied cross sectional study among 336 school going adolescents girls. Multistage sampling was used to enroll the study subjects. Bio-socio parameters such as age, socioeconomic statuses etc. were assessed by direct interview of adolescent girls. Kutcher Depression scale were used in this assessment. Out of 336 adolescents girls screened 18.7% were found positive for depression. Lower socio-economic status was found as one of the independent predictors of depression. Girls belonging to lower socioeconomic groups were more susceptible for depression. However, on multiple logistic regression no statistical was observed between depression with respect to age group,

class, religion, caste, and mothers education, and type of family. The author concluded that study highlights need for timely diagnosis and treatment problem through school based periodic screening program. There is also need to of increasing awareness among teachers and parents about depression.

Kunal Kishor Jha, et. al (2017), the author studied cross sectional studied among 9th -12th class from forty schools located in urban area. The self-administrated questionnaire of Beck's Depression inventory was utilized to assess the prevalence of depression. Statistical was done with Pearson's chi - square test using SPSS. Among students, the prevalence of depression was found to be 49.2%, where in prevalence of depression was 7.7%. The overall prevalence of depression significantly higher among girls than boys. The prevalence of depression was to be higher among students belonging to minorities. Elder students were found to be more depressed than younger students. Depression was found to be statistically significant associated with gender and religion. Guilty feeling, sadness, pessimism, past failure was one the clinical factors associated with depression. The author concluded that mental health is one the most neglected aspects of society. There is need to increase awareness about depression among teachers and parents.

Rani mohanraj et. al (2016), the author studied cross sectional study among adolescents from 9th, 10th and 12th students. The data were collected through self-administrated questionnaire from adolescents. Beck Depression inventory was administrated to nine hundred and sixty-four adolescents - boys (509) Girls (455) studying in twenty-one schools spread across city. In the present sample of adolescents , among 21 depressive symptoms in the BDI, experience of emotional manifestations of depression like sadness, irritability, self-accusations and crying spells dominated over cognitive, behavioral and physical manifestations of depression .There were no significant gender differences but a higher proportions of girls 27% reported moderate to severe depression than boys 21%.There were associations between age and depression with increasing depression in older adolescents .The author concluded that individual symptoms of depression and depressed mood are common in adolescents .Depressive symptoms are an unrecognized problem among adolescents that necessitates the need for recognition .Thus , understanding the prevalence of adolescents depressive symptoms is important for developing appropriate screening strategies, treatment planning, following small proportion of adolescents could clinically depressed. Current poor understanding of the factors that the influence depressive symptoms make these efforts challenging.

Kroenke.k et. al (2001), the Patient Health Questionnaire is a self-administrated version of the PRIME-MD diagnostic instrument for common mental disorders. The PHQ-9 is the depression module, which scores each of the 9 DSM -4 criteria as "0" (not at all) "4" (from not difficult at all to extremely difficult). The PHQ-9 was completed by 6000 patients in 8 primary care. Construct validity was assessed using the 20-item short form general health survey, self-reported sick days and clinics visits, and symptom related difficulty. Criterion validity was assessed an against independent structured mental health professional (MHP) interview in a sample of 580 patients. As PHQ-9 depression severity increased, there was a substantial decrease in functional status on all 6 SF-20 subscales. Also, symptom related difficulty, sick days, health care utilization increased. A PHQ-9 score > or =10 had a sensitivity of 88% and a specificity of 88% for major depression.PHQ-9 scores of 5,10,15, and 20 represented mild, moderate, moderately severe, and severe depression respectively. It concluded in addition to making criteria-teased diagnoses of depressive disorders; the PHQ-9 is also a reliable and valid measure of depression severity.

Isobel m cameron et. al (2008), the study of aim to assess the psychometric properties of the Patient Health Questionnaire (PHQ-9) and the depression subscale of the Hospital Anxiety and Depression Scale (HADS-D) for measuring depression severity in primary care. The study design was psychometric assessment and 32 general practices in Grampian, Scotland. The author conducted consecutive patients referred to a primary care mental health worker completed the PHQ-9 and HADS at baseline (n=1063) and at the end of treatment (n=544). Data were analysed to assess reliability, robustness of factor structure, convergent /discriminant validity, convergence of severity banding, and responsiveness to change. Both scales demonstrated high internal consistency at baseline end of treatment (PHQ-9 alpha = 0.83 and 0.92; HADS – D alpha =0.84 and 0.89).The author concluded that the HADS –D and PHQ -9 demonstrated reliability, convergent/ discriminant validity, and responsiveness to change. However, they differed considerably in how they catergorized severity. Given that treatment decisions are made on the basis of severity, further work is needed to assess the validity of the scales' severity cut off bands.

Belanger et. al (2019), the aim of this studied was to assess the measurement properties of the self-reported Patient Health Questionnaire -9 (PHQ) and its 10 item observe version (PHQ – 100V) among nursing home residents. The author conducted a retrospective study of minimum data set 3.0 assessments. Statiscally analyses included examining internal reliability with McDonald's omega, structural validity with confirmatory factor analysis, and hypothesis testing for expected gender differences and criterion validity with descriptive statistics. The chronic condition warehouse depression diagnoses were used as an administrative references standard. Both PHQ-9 and PHQ – 100v good internal reliability with omega values above 0.85. The self-reported scale yielded good model fit for a one factor solution, while the PHQ-100V had slightly poorer fit and a lower standard factor loading on the additional irritability item. Both scales appear sufficiently one dimensional given that somatic items had higher factor loading on a general depression factor than a somatic sub factor. The PHQ -9 and PHQ - 100V were both highly specific but had poor sensitivity compared with an administrated reference standard. The author concluded that PHQ - 9 appears to be valid and promising measurement instrument for research about depression among NH residents, while the validity of the PHQ – 100V should be examined further with a structure psychiatric interview as a stronger criterion standard.

METHODOLOGY

This study was used to evaluate the prevalence of depression among teenage population on Emotional quality of life.

Sample design

Male =164   Female =34 out of which class 8th (90) participants and class 9th (108)

Inclusion criteria

- Aged between 13- 15 years.
- Both male and females.

Study participants

A total of 198 male (164) and female (34) subjects, who fulfilled the selection criteria, were enrolled in the study.

Study procedure

The purpose of the study was explained to subjects and an informed consent was given in their known language. Patient Health Questionnaire - 9 was used to assess the depression

among teenage population. Assessment form was filled by participants within 30 -40 minutes.

Materials used

Patient Health Questionnaire -9: Is a self-administrated version of the PRIME - MD diagnostic instrument for common mental disorders. The PHQ -9 is the depression module, which scores each of the nine DSM - 4 criteria "0" (not at all) "1" (several days) "2" (more than half the days)"3" (nearly every day) "4" (from not difficult at all to extreme difficult). It has been validated for use in primary care.

Table 1: Shows Risk factors of Depression with number of participants.

SI.no	Factors	Number of participants
1.	Loss of interest	132
2.	Feeling down, depressed or hopeless	133
3.	Trouble falling asleep, staying asleep, or sleeping too much	93
4.	Feeling tried or having little energy	109
5.	Poor appetite or over eating	124
6.	Feeling bad about yourself or that you are failure or have let yourself or your family down	118
7.	Trouble concentration on things, such as reading the newspaper or watching television	152
8.	Moving or speaking slowly or restlessness	85
9.	Thoughts that you would be better off dead or of hurting yourself in some way	99
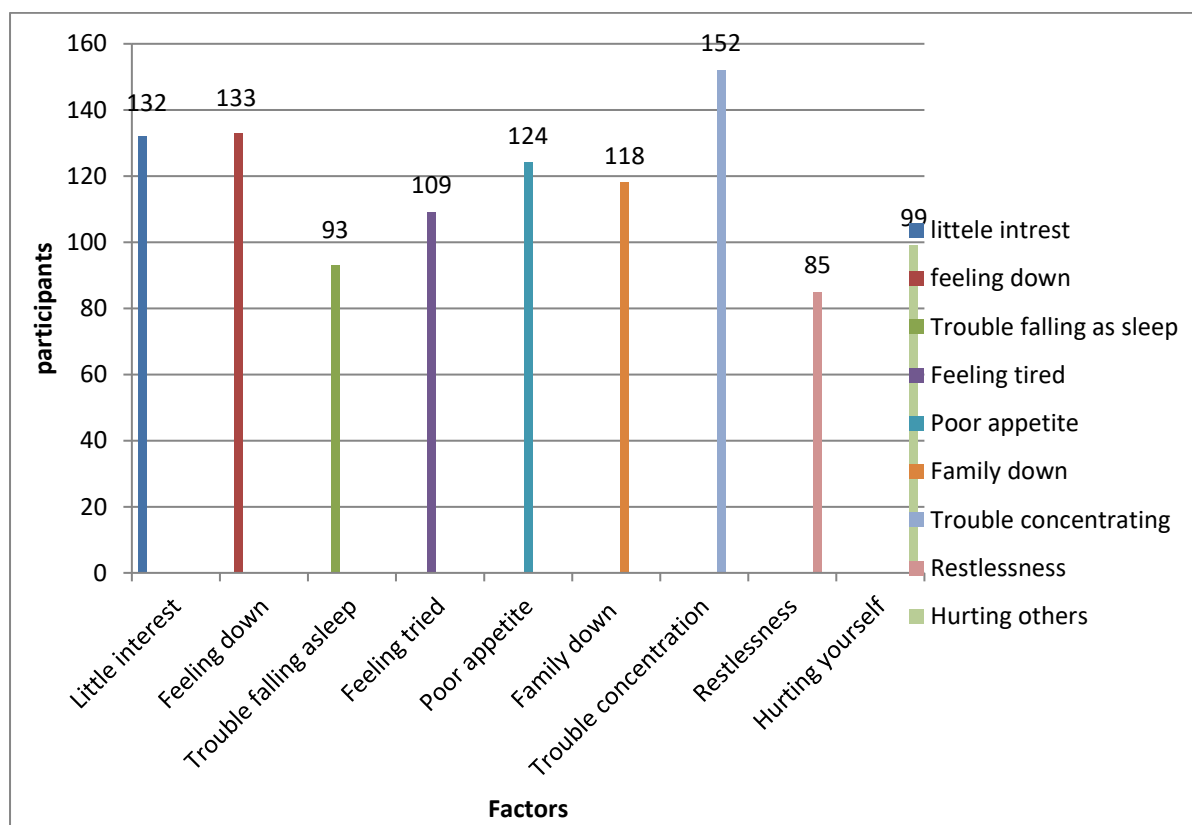
Table 2: Shows percentage of Depression (Risk Factors)

| SI.no	Factors	Percentage
1.	Little interest or pleasure in doing things	86%
2.	Feeling down, depressed or hopeless	96%
3.	Trouble falling asleep, staying asleep or sleeping too much	76%
4.	Feeling tried or having little energy	73%
5.	Poor appetite or over eating	1%
6.	Feeling bad about yourself or that your failure or your family down	85%
7.	Trouble concentrating on things	1%
8.	Moving or speaking so slowly or restlessness	58%
9.	Thoughts that would be better of dead or hurting yourself in someway	80%

Percentage of depression
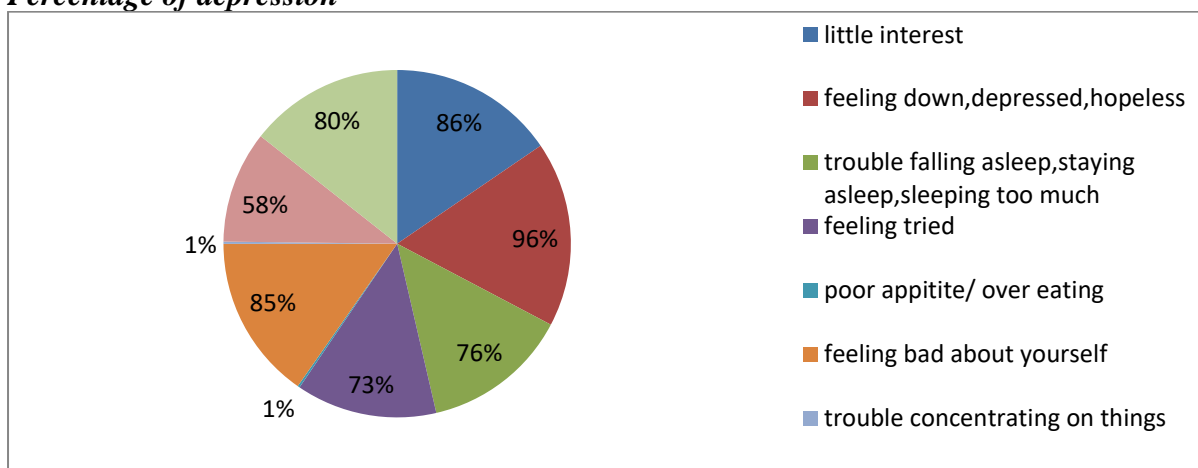
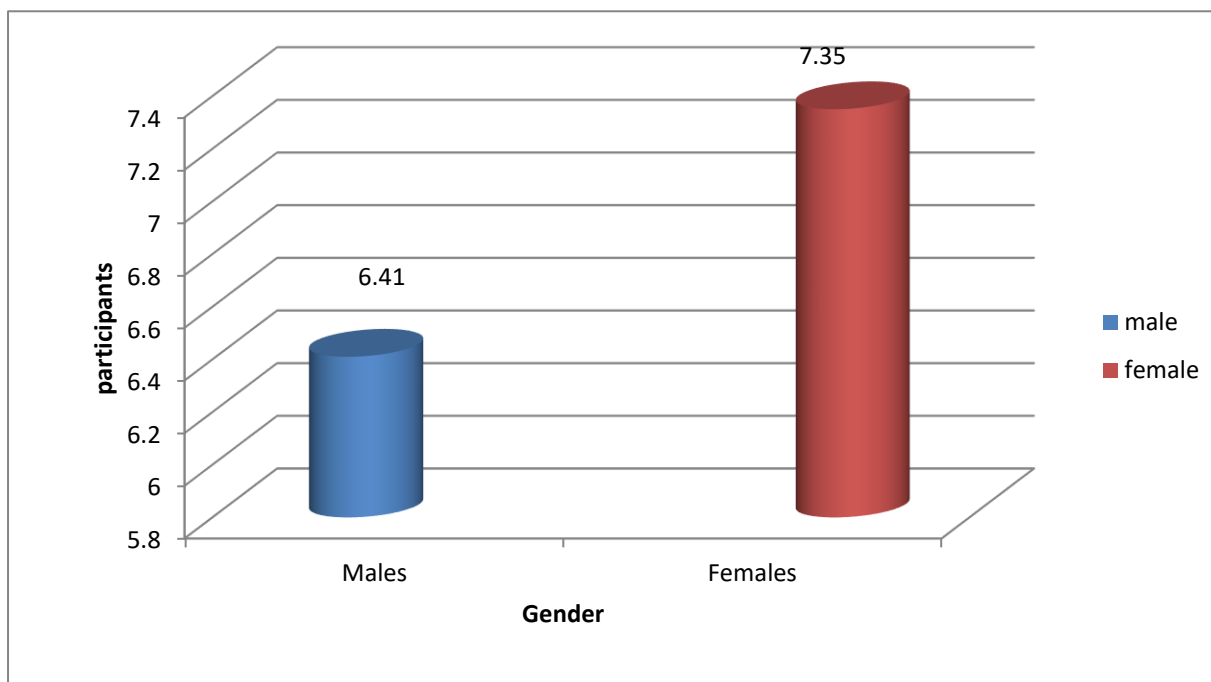*Table 3: Severity of Depression for no of Participants*

SI.no	Depression severity	Participants
1.	Normal	45
2.	Mild	93
3.	Moderate	46
4.	Moderately – severe	13
5.	Severe	1
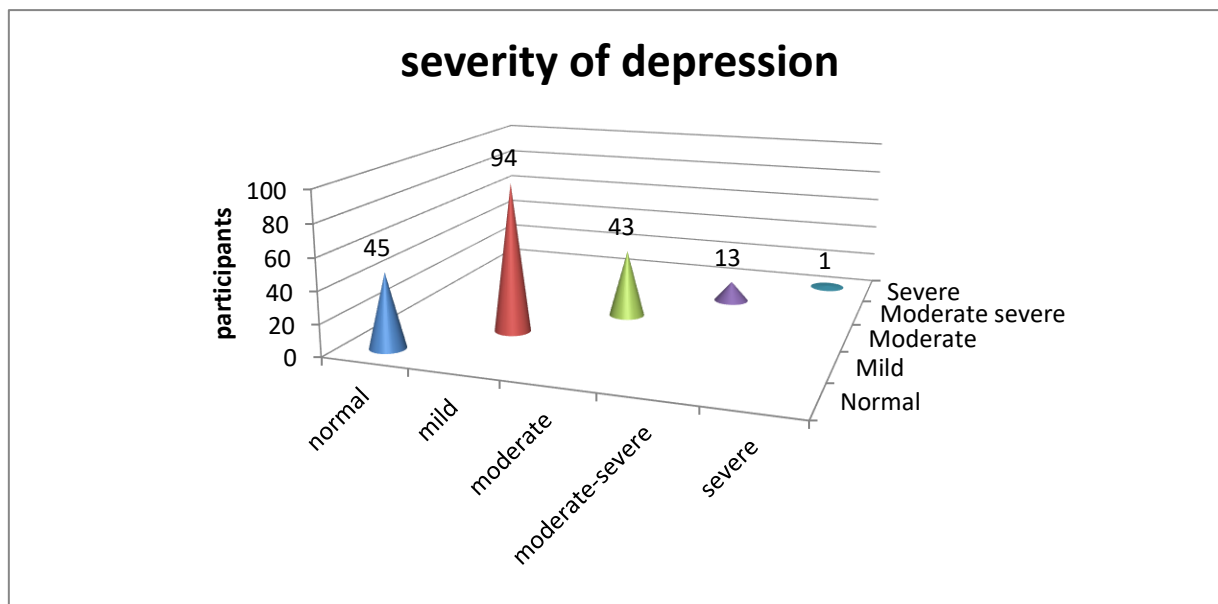
Table 3: Mean Value of scores of PHQ with Gender

SI.no	Gender	
1.	Male	6.41
2.	Female	7.35

DISCUSSION

For this study 198 participants were selected with age group of 13 – 15 years. They were assessed using the PHQ – 9 for period of 6 month. It showed that the percentage of depression which are Normal (45) Mild (93) Moderate (46) Moderately Severe (13) Severe (1).

Result

Among the 198 participants, Major port**ion** of students (153) by PHQ -9 assessment, were found to have mild to moderately severe depression girls (25) Boys (128).

CONCLUSION

Prevalence of depression among 198 participants, It was concluded that 153 student were found to have mild to severe depression emotional quality of life.

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Conflict of Interest
The author(s) declared no conflict of interest.

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