

# Prevalence of Depression and Anxiety among 10<sup>th</sup> Standard Exam Going Children in Rural Area of Kancheepuram District

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## Abstract

Depression is a common illness worldwide, with an estimate of about 350 million as on 2016. Anxiety is a feeling of worry, nervousness, or unease about something with an uncertain outcome. The annual years of healthy life lost per 100,000 people from anxiety disorders in India has increased by 7.2% since 1990, an average of 0.3% a year. The purpose of this study is to know whether the students are depressed and anxious during exam times and if so, in what grade of depression and anxiety the majority of students comes under. And with the results, to make general awareness and pacify the school student regarding their exams. Materials and Methods: A cross sectional study will be conducted among the school students studying 9<sup>th</sup> and 10<sup>th</sup> standard in the field practice areas of the Department of Community Medicine Pondicherry institute of Medical Sciences, Duration of the study is one month (February 2017). Considering the prevalence of Anxiety and Depression as 25%, with 20% absolute precision the sample size calculated was 312. Results: Most of the 9<sup>th</sup> and 10<sup>th</sup> standard students are having mild depression, ie 119 students (n) which constitutes about 38.1%. Also on comparing 9<sup>th</sup> and 10<sup>th</sup> standard students, 9<sup>th</sup> standard students are having minimal depression ie 65 students which constitutes about 60.2 %, whereas 10<sup>th</sup> standard students are having mild depression ie 70 students which constitutes about 51.8%.. Providing counselling for students, the teacher of a class should know the different difficulties of each student of their class and try to solve them in a smooth manner by doing these activities we can reduce the percentage of depression and anxiety among school children's for an extent.

## 1. Introduction

Adolescence is a transitional stage from childhood to adulthood and is a time of major changes in all areas of functioning. It is a crucial phase in life course of a human, and the presence of psychiatric disorders such as depression, anxiety, and stress at this stage of life is a matter of concern. The symptoms of these three disorders can lead to poor academic performance, lack of communication with friends and family members, substance abuse, feeling of abandonment, homicidal ideation, and suicidal tendency(1).

Distress can include a huge range of negative feelings. Everyone's experience is unique and personal to them. If the main problem is feeling down and miserable, or that there is no interest or pleasure in things, we call it depression. If the main problem is having times of panic, or always being on edge and worrying, we call it anxiety. It's quite common to experience a bit of both. Whether you call it distress, depression, or anxiety, it doesn't matter. What a matter is that you understand what's happening, and know what you can do to feel better. (2).

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings, and sense of well-being. A depressed mood is a normal temporary reaction to life events such as loss of a loved one. It is also a symptom of some physical diseases and a side effect of some drugs and medical treatments. Depressed mood is also a symptom of some mood disorders such as major depressive disorder and dysthymia (3).

Depression is a common illness worldwide, with an estimate of about 350 million as on 2016. The lifetime prevalence of depression, anxiety, and stress among adolescents and young adults around the world is currently estimated to range from 5% to 70%. Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings, and sense of well-being. Depressed mood is a feature of some psychiatric syndromes such as major depressive disorder. Causes: Bereavement, neglect, mental abuse, physical and sexual abuse, unequal parental care Symptoms: Irritability, Loss of interest in activities once enjoyed, Withdrawal from social activities, Inability to concentrate, Disrupted sleep, Fatigue or loss of energy, Appetite changes, Thoughts of suicide, Sadness. Treatment: Psychotherapy (talk therapy).

Anxiety disorders are a group of mental disorders characterized by feelings of anxiety and fear. Anxiety is a worry about future events and fear is a reaction to current events. These feelings may cause physical symptoms, such as a fast heart rate and shakiness. Anxiety is a feeling of worry, nervousness, or unease about something with an uncertain outcome. The annual years of healthy life lost per 100,000 people from anxiety disorders in India has increased by 7.2% since 1990, an average of 0.3% a year. Causes: Stress, Environmental factors, Medical factors, Genetics, Brain chemistry, Substance abuse.

Symptoms: Feeling nervous, restless or tense, Having a sense of impending danger, panic, Breathing rapidly (hyperventilation), Sweating, Trembling, Feeling weak or tired, Trouble concentrating, Having trouble sleeping, Experiencing gastrointestinal (GI) problems, Having difficulty controlling worry. Treatment: It is also known as talk therapy or psychological counselling. Psychotherapy involves working with a therapist to reduce our anxiety symptoms. It can be an effective treatment for generalized anxiety disorder. Several studies are done among school students to know about their depression and anxiety levels especially during exams.

The purpose of this study is to know whether the students are depressed and anxious during exam times and if so, in what grade of depression and anxiety the majority of students comes under. And with the results, to make general awareness and pacify the school student regarding their exams.

## 2. Objectives

1. To study the prevalence of depression and anxiety among 10<sup>th</sup> standard and 9<sup>th</sup> standards school going children.
2. To compare the status of depression among 10<sup>th</sup> standard and 9<sup>th</sup> standard school going children.

## 3. Materials and Methods

A cross sectional study will be conducted among the school students studying 9<sup>th</sup> and 10<sup>th</sup> standard in the field practice areas of the Department of Community Medicine. Duration of the study period is One month (February 2017). Considering the prevalence of Anxiety and Depression as 25%, with 20% absolute precision the sample size calculated was 312. A structured validated questionnaire (GAD 7 anxiety and PHQ9 – depression) was developed and it was used in our project titled “Prevalence of Depression and Anxiety among 10th Standard Exam Going Children in Rural Area of Kanchipuram District”. The study was carried out in Chunampet Panchayet Inclusion Criteria: Students studying 9<sup>th</sup> and 10<sup>th</sup> standards in the following schools, Government Higher Secondary School –Chunampet, Government Highs school – Puthirankottai and DR.R.Arulappa HR. Sec School – Neerpair. Exclusion Criteria: Student studying in classes other than 9<sup>th</sup> and 10<sup>th</sup> standard. Data Analysis: The data was entered in Microsoft excel and analysed using SPSS version 20 software.

## 4. Results

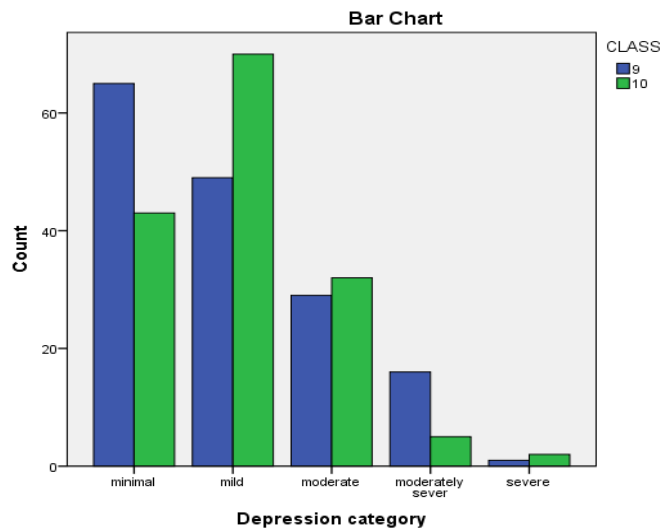
Gender	9 <sup>th</sup> standard n (%)	10 <sup>th</sup> standard n (%)	Total	p value
Male	71 (46.1)	83 (53.9)	154	.071
Female	89 (56.3)	69 (43.7)	158	

Table 1: Distribution of Gender Participants

Totally 158 boys (50.64%) and 154 girls (49.35%) have participated in this study.

Depression Category	9 <sup>th</sup> Standard n(%)	10 <sup>th</sup> Standard n (%)	Total	P Value
Minimal	65 (60.2%)	43 (39.8%)	108	0.07
Mild	49 (41.2%)	70 (51.8%)	119	
Moderate	29 (47.5%)	32 (52.7%)	61	
Moderately severe	16 (76.2%)	5 (23.8%)	21	
Severe	1 (33.3%)	2 (66.7%)	3	

Table 2: Depression Category

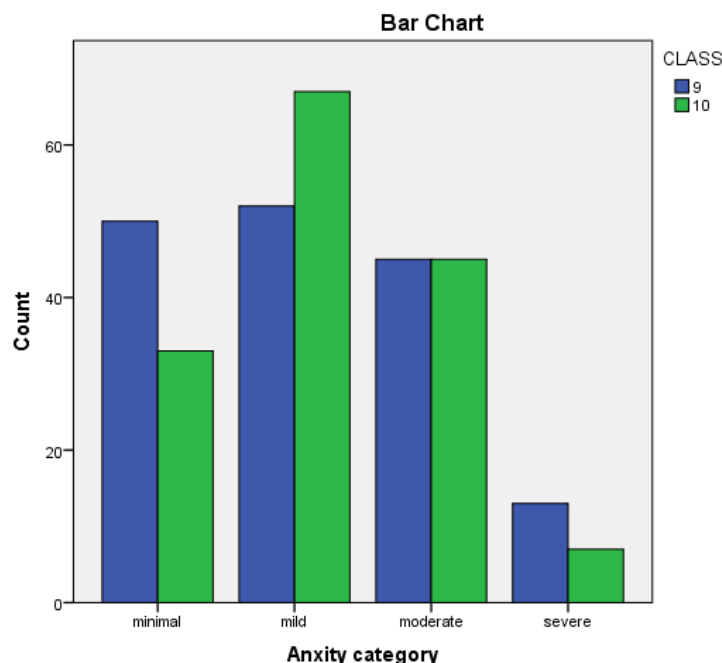


Graph 1: Depression Category

Most of the 9<sup>th</sup> and 10<sup>th</sup> standard students are having Mild Depression, i.e 119 students (38.1%). Also on comparing 9<sup>th</sup> and 10<sup>th</sup> standard students, 9<sup>th</sup> standard students are having Minimal Depression i.e 65 students which constitutes about 60.2 %, whereas 10<sup>th</sup> standard students are having Mild Depression i.e 70 students which constitutes about 51.8%.

Anxiety Category	9 <sup>th</sup> Standard –N (%)	10 <sup>th</sup> Standard – N (%)	Total	P Value
Minimal	50 (60.2%)	33 (39.2%)	83	0.73
Mild	52 (43.7%)	67 (56.3%)	119	
Moderate	45 (50%)	45 (50%)	90	
Severe	13 (65%)	7 (35%)	20	

Table 3: Anxiety Category



Most of the 9<sup>th</sup> and 10<sup>th</sup> standard students are having Mild Anxiety, i.e 119 students (38.1%).

**5. Discussion**

In Current study there are totally 158 boys (n) which constitutes 50.64%, and totally 154 girls (n) which constitutes about 49.3% participated in this study. In a similar study conducted by Pengpid s et al (4) shows that students were 541 (67.6%) males and 259 (32.4%) females. It was found that both studies having high

percentage of male participants respectively.

In the present study Most of the 9<sup>th</sup> and 10<sup>th</sup> standard students are having Mild Anxiety, ie 119 students which constitute about 38%. In similar study Singh K et al (5) showed that Depression and Anxiety increases from 1% of the population under age 12 years to ~17%-25% of the population by the end of adolescence. The greatest increase in new cases occurs between 15-18 years.

In this study most of the 9<sup>th</sup> and 10<sup>th</sup> standard students are having Mild Depression ie 119 students (n) which constitutes about 38%. Also on comparing 9<sup>th</sup> and 10<sup>th</sup> standard students, 9<sup>th</sup> standard students are having Minimal Depression ie 65 students which constitutes about 60.2 %, whereas 10<sup>th</sup> standard students are having Mild Depression. in a study conducted by Nair MK, et al(6) shows that 11.2% of school dropouts had severe and extreme grades of Depression as against 3% among school going and nil among college going adolescents.

## 6. Conclusion

This study highlights that majority of the 10<sup>th</sup> and 9<sup>th</sup> standard exam going students are having Mild Depression ie .about 38% of students are having mild depression. also on comparing the degree of Depression among 9<sup>th</sup> and 10<sup>th</sup> standard students , 9<sup>th</sup> standard students are having Minimal Depression which constitutes about 60.2 % , whereas 10<sup>th</sup> standard students are having Mild Depression which constitutes about 51.8%.

Having come to the conclusion, it shows that almost half of the 9<sup>th</sup> and 10<sup>th</sup> standard students are having considerable amount of depression, because of unavoidable reasons. This statistics should be sent for the notice of education department .They should try to reduce the burden of the students. The school management should go in hand with the education department in those activities. They can provide counselling for students, the teacher of a class should know the different difficulties of each student of their class and try to solve them in a smooth manner. Crisply, teachers should be student friendly. By doing these activities we can reduce the percentage of depression and anxiety among school children's for an extent.

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