



## Screening for Depression among Adolescents using Child Adolescent Psychiatric Screening (CAPS) Tool

Authors

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### Abstract

*Depression is one of the most important mental health problems among adolescents. A cross sectional study was conducted in a government school of Pathanamthitta district. The study population was adolescent students studying in this school belonging to the age group of 12 -18 years. Children, whose parents were given consent and present in the day of data collection were included in this study. Total 273 children and parents were screened. Screening was done using Child Adolescent Psychiatric Screening (CAPS) tool. Out of the total 273 subjects, 72 % of students were in the age group of 15-18years. The prevalence of symptoms suggestive of depression according to the study subjects was 97 % .Among this, 26 % had mild, 61.2 % had moderate and 9.8 % had severe form of depression. According to the parents, the prevalence of symptom wise depression was 37.36 % (None 62.64 %, mild 11.36 %, moderate 24.17 %and severe 1.83%) (Fig 2). The difference between the prevalence reported by study subjects and parents was found to be statistically significant. ( $p = 0.002$ , significant at 0.01). Gender wise difference also found to be statistically significant. Students with symptoms suggestive of depression were referred to psychiatrist/ psychologist.*

**Key words:** Adolescents ,CAPS, mental health and depression.

### Introduction

Many problems in adolescent period are unidentified, leading to increase in the burden of mental health problems in adult period. Experiences from Child Adolescent Psychiatric Clinic of Govt. Medical College, Thiruvananthapuram reported various mental health problems among adolescents. Common problems among boys were Conduct disorders (20 %) and ADHD (16.9 %) while in girls, depression (15.1%) and conversion disorders (12.4 %) were common<sup>1</sup>.

Depression is one of the most important mental health problems among adolescents. According to the latest estimates from WHO, more than 300 million people are now living with depression, an increase of more than 18% between 2005 and 2015<sup>2</sup>. Depression can be long-lasting or recurrent, substantially impairing people's ability to function at work or school and to cope with daily life. A prevalence of 12.5 % is reported in a study in India<sup>3</sup>. Mental problems like depression in an important risk factors for substance abuse and

suicide. In Kerala also suicide is an important issue among adolescent. Psychiatric assessment of a child includes identifying the reasons for the problems, assessing the nature and extend of child's psychological and behavioral difficulties and to find the family, school, social, & developmental factors that influencing the child's emotional wellbeing<sup>4</sup>. A comprehensive, evaluation is very essential which includes parents, family members, school teachers etc. The child & adolescent mental health problems to be seen in the wider social context. As there is stigma and discrimination related to mental health problems, the children and adolescents having these problems and their parents need special attention. Early intervention focusing family, school and community level are very cost effective now. Empowering the children & adolescents, their parents, teachers, and other stakeholders is necessary to promote positive mental health. Emphasis to be given on parenting, parent-child intervention, capacity building of children through programmes like life skill education, strengthening communities and systems like school system health system etc<sup>5</sup>. A multi disciplinary team work approach is suggested for adolescent psychiatric disorders. This should include elements such as treatment, education, care and control.

Most of the mental health problems can be easily picked up by their parents themselves. This will be the most effective screening method. It will end up with early diagnosis and effective treatment by utilizing available services at the earliest. This study aims to know the prevalence symptom complex group (mild, moderate & severe) suggestive of depression among adolescents as well as to study the awareness of parents regarding this symptom complex group.

### Methodology

A cross sectional study was conducted in a government school of Pathanamthitta district. The district is a true representative of Kerala with a mixing of urban, rural and hilly areas. Study

duration was one year (from 2013 and 2014). The study population was adolescent students studying in this school belonging to the age group of 12 -18 years. Children, whose parents were given consent and present in the day of data collection were included in this study. Total 273 children were screened. Initial information given to the district level officials and the permission obtained. The school was informed in detail the procedure. Consent was obtained from the school authorities. Information sent through the school authorities to all parents through the children regarding the procedures including the date and time. Screening was done using Child Adolescent Psychiatric Screening (CAPS) tool<sup>6</sup>. Its a validated tool used for screening of the children regarding possible mental health. There are 18 symptom complex groups, having 85 questions. In this, questions from 39 to 46 deals with depression .The responses are none, mild, moderate and severe. Same questionnaire was applied for the parents who were attended the programme, along with the children to assess the knowledge of the parents regarding their children's mental health. Total 273 parents were included in this study after getting their consent.

The data obtained is entered in the excel sheet and analyzed using SPSS software 16. For the purpose of analysis, each symptom complex response was scored as 0,1,2,3 with maximum score of 24. Based on this total score, each subject was classified as, without depression (0 score), with mild depression (score between 1-8), with moderate depression (score between 9-16) and with severe form of depression (score between 17-24). Chi square /Fisher's exact test was done to find out the statistically significant association.

### Results

Total 273 study subjects were studied .Out of this, 72 % of students were in the age group of 15-18years (table 1). Among the study subjects 57.9 % were boys and 42.1 % were girls (fig 1). The prevalence of symptoms suggestive of depression according to the study subjects was 97 %. Among

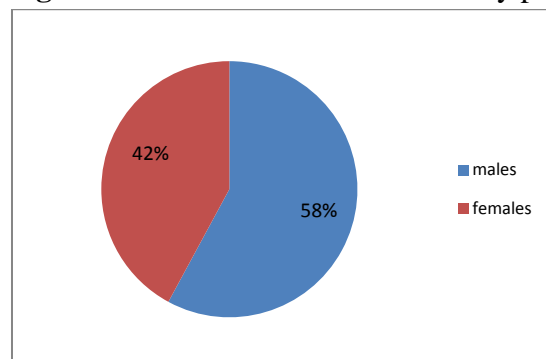
this, 26 % had mild, 61.2 % had moderate and 9.8 % had severe form of depression. (Fig 2). In the symptom complex, 94 % reported depressed or irritable mood most of the day /most days for at least 1 week. Among this 3.5 % were reported severe form. Loss of interest in previously enjoyable activities, Notable change in appetite (not when dieting or trying to gain weight), Difficulty falling or staying asleep, or sleeping excessively through the day, Others notice child is sluggish or agitated most of the time , Loss of energy nearly every day were reported by 92 %, 93.7 %, 90 %, 91.5 % and 91 % of the study subjects respectively .91.5 % reported feelings of worthlessness or inappropriate guilt nearly every day and 93 % were thought about dying or wouldn't care if died (Tab 2 ).

Total 273 parents participated in this study. According to them, the prevalence of symptom wise depression was 37.36 % (None 62.64 %, mild 11.36 %, moderate 24.17 %and severe 1.83%) (Fig 2). Tab 3 shows the symptom wise report of the parents. The difference between the prevalence reported by study subjects and parents was found to be statistically significant. ( $p = 0.002$ , significant at 0.0). Gender wise difference also found to be statistically significant. (For girls,  $p$  value 0.000,significant at 0.01 level.) Students with symptoms suggestive of depression were referred to psychiatrist/psychologist.

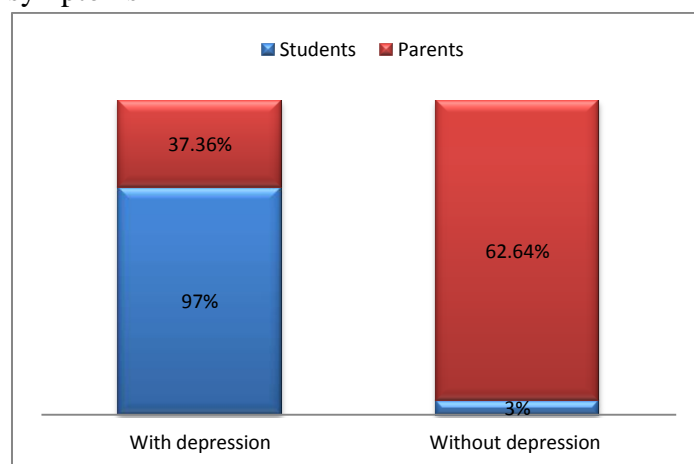
**Tab .1** Age wise distribution of study population

Age (years)	No	%
12 – 14	76	27.8
15 -18	197	72.2
Total	273	100

**Fig 1** Gender wise distribution of study population



**Fig 2.**Prevalence of depression according to the symptoms



**Table 2.** Symptoms of Depression reported by the students

CAPS symptoms of Depression	Students n(%)			
	<i>None</i>	<i>Mild</i>	<i>Moderate</i>	<i>Severe</i>
Depressed or irritable mood most of the day, most days for at least 1 week	16 (5.9)	184 (67.4)	64 (23.4)	9 (3.3)
Loss of interest in previously enjoyable activities	21 (7.7)	165 (60.4)	70 (25.6)	17 (6.2)
Notable change in appetite (not when dieting or trying to gain weight)	17 (6.2)	174 (63.7)	66 (24.2)	16 (5.9)
Difficulty falling or staying asleep, or sleeping excessively through the day	27 (9.9)	202 (74)	35 (12.8)	9 (3.3)
Others notice child is sluggish or agitated most of the time	23 (8.4)	202 (74)	39 (14.3)	9 (3.3)
Loss of energy nearly every day	24 (8.8)	167 (61.2)	70 (25.6)	12 (4.4)
Feelings of worthlessness or inappropriate guilt nearly every day	23 (8.4)	182 (66.7)	54 (19.8)	14 (5.1)
Thinks about dying or wouldn't care if died	22 (8.1)	200 (73.5)	38 (14)	12 (4.4)

**Table 3.** Symptoms of Depression reported by the parents

CAPS symptoms of Depression	Parents n(%)			
	<i>None</i>	<i>Mild</i>	<i>Moderate</i>	<i>Severe</i>
Depressed or irritable mood most of the day, most days for at least 1 week	53 (34.6)	77 (50.3)	19 (12.4)	4 (2.6)
Loss of interest in previously enjoyable activities	57 (37.3)	70 (45.8)	22 (14.4)	4 (2.6)
Notable change in appetite (not when dieting or trying to gain weight)	56 (36.6)	77 (50.3)	16 (10.5)	4 (2.6)
Difficulty falling or staying asleep, or sleeping excessively through the day	53 (34.6)	84 (54.9)	15 (9.8)	1 (0.7)
Others notice child is sluggish or agitated most of the time	55 (35.9)	85 (55.6)	12 (7.8)	1 (0.7)
Loss of energy nearly every day	57 (37.3)	72 (47.14)	20 (13.1)	4 (2.6)
Feelings of worthlessness or inappropriate guilt nearly every day	58 (40))	70 (45.8)	20 (13.1)	5 (3.3)
Thinks about dying or wouldn't care if died	50 (33.3)	72 (48)	22 (14.7)	6 (4)

## Discussion

Early detection and proper intervention of adolescent depression can prevent future psychiatric illnesses. It is estimated that around 20 per cent of the world's adolescents have a mental health or behavioral problem. The present study included the adolescents aged 12 -18 years based on the fact that depression is the single largest contributor to the global burden of disease for people aged 15–19, and suicide is one of the three leading causes of mortality among people aged 15–35. The prevalence of mental disorders among adolescents has increased in the past 20–30 years<sup>2</sup>; In the present study the prevalence of the symptom complex suggestive of depression was 97 %. This was higher than the other studies such as a study done by Chautian et al (38%) and by Jayanthi P et al (25%). In the present study moderate depression was more rather than mild and severe, which is similar to the study finding of Jayanthi P et al. The prevalence was more in girls than boys .Similar finding was obtained in a study by Chautian et al. The prevalence according to the students was more than that reported by the parents. This signifies that there are many children with mental health problems were unnoticed even by the parents, which leads to delay in diagnosis and prompt management. The study has following limitations. Only 273 students were studied. Other

students of the school and other schools should also be included in the study for generalization of data.

## Conclusion

The present study emphasis that, the prevalence of mental disorders like depression among adolescents was high. Prime importance should be given to deal this problem via early screening, diagnosis and proper intervention. Parents have a great role in managing this situation. So they should be made aware, how to identify the possible mental health problems of adolescents at the earliest.

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