Research Article

Prevalence of Depression among School Going Adolescents in South India

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ABSTRACT

Depression among adolescents has emerged as a major mental health problem. Psychiatric morbidity among school samples of adolescents was found in about 29% of girls and 23% of boys with depression being the most common disorder. To estimate the prevalence of depression among school going adolescents. A school based cross sectional survey was carried out at higher secondary schools in South India. A total of 2432 school going adolescents were screened and 25% (612) students with depression were confirmed by the Psychiatrist. Adolescent depression has to be identified at the earliest and providing prompt interventions will prevent future psychiatric illnesses.

Keywords: Prevalence, depression, adolescents.

INTRODUCTION

Depression among adolescents has emerged as a major mental health problem in the last two decades. Many prevalence studies document a substantial number of adolescents in the general population to suffer from depression with rates ranging from 8% to 20% [1,2] and associated with suicide, other psychiatric co-morbidity, academic failure, poor peer relationships, substance abuse and severe depression during adulthood [3]. Of course, the most devastating outcome of concern for adolescent depression is suicide, the third leading cause of death among adolescents.

In India, adolescent depression is an under researched area. Psychiatric morbidity among school samples of adolescents was found in about 29% of girls and 23% of boys with depression being the most common disorder[4] .While rates of depression increase from childhood to adolescence for all, a consistent finding is that adolescent girls are between 1.5 to 3 times more likely to develop depression than adolescent boys[5].

One way of addressing the issue of depression among adolescents in India is conducting studies that give an estimate of proportion of adolescents who experience depression at a given time. Such studies will reflect the mental health status of adolescents and can play an important part in determining and planning the kinds of services mental health interventions required. This study aimed to estimate the prevalence of depression among school going adolescents in South India.

MATERIALS AND METHODS

A school based cross sectional survey was carried out at higher secondary schools in South India, between July 2013 and January 2014. Ethical approval was obtained from the Institutional Ethics Review Board. Formal permission was obtained from the Chief Education Officer (CEO), Thiruvallur District and the Principal of private schools.

The sample was recruited from three private and one government higher secondary schools. A total of 2432 school going adolescents studying from 9th to 12th grade were screened using MINI-Kid [6,7], which is a screening tool for depression. 640 students who scored highly in Mini-kid were subjected to further assessment by the Psychiatrist, who confirmed their depressive status. 612 students from this high scoring group were enrolled for the study. Prior to data collection informed consent form was handed over to the 612 students and 598 parents gave their written informed consent. Finally 560 adolescents were confirmed as the study samples based on their availability, willingness and incomplete questionnaire.

Beck Depression Inventory (BDI)[8], which has been proved to be a psychometrically sound measure for screening depression among adolescents[9], was administered to the adolescents. BDI was used specifically to classify the case group adolescents into minimal, mild, moderate and severe depression. This inventory generally has high reliability and in the present study reliability score was 0.85.

Statistical analysis: Statistical analysis was performed using the Statistical Package for Social Sciences Programme (SPSS) version 17.0. Descriptive statistics was used to describe the demographic variables. Chi square test was used to find the association between the level of depression and the demographic variables.
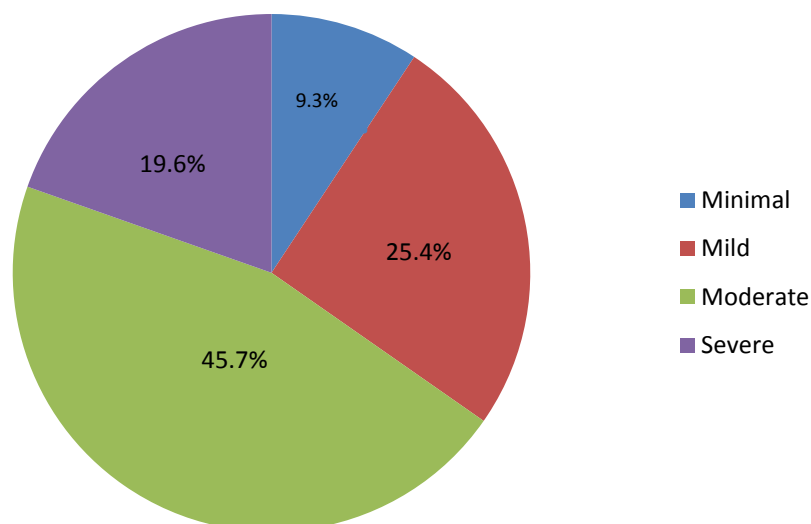
RESULTS

Fig. 1: Level Of Depression Among School Going Adolescents

Table 1: Association Betweeen Level Of Depression And Demograpic Variables n=560

Demographic variables		Level of Depression				Chi square test
		Minimal %	Mild %	Moderate %	Severe %	
Age	14 years	13.6	19.3	46.4	20.7	χ2=47.05
	15 years	7.9	21.4	39.3	31.4	p=0.001***
	16 years	13.6	35.7	37.9	12.9	
	17 years	2.1	25.0	59.3	13.6	
Education	IX Standard	13.6	19.3	46.4	20.7	χ2=47.05
	X Standard	7.9	21.4	39.3	31.4	
	XI Standard	13.6	35.7	37.9	12.9	p=0.001***
	XII Standard	2.1	25.0	59.3	13.6	
Birth Order	First	8.1	23.9	45.1	22.9	χ2=19.02
	Second	9.9	23.2	49.8	17.2	p=0.03*
	Third	12.2	34.7	40.8	12.2	
	Fourth and above	18.2	63.6	9.1	9.1	
Type of Family	Nuclear family	10.4	26.5	45.3	17.8	χ2=16.43
	Joint family	4.7	17.8	52.3	25.2	p=0.01**
	Extended family	10.5	42.1	15.8	31.6	
Father's Occupation	Profession	14.8	22.2	50.0	11.1	
	Semi profession	7.1	32.1	50.0	19.3	
	Clerical, shop-owner, farmer	6.6	27.5	47.3	12.3	χ2=28.75
	Skilled worker	5.6	21.0	51.0	25.3	p=0.05*
	Semi skilled worker	10.8	21.7	37.3	15.4	
	Unskilled worker	17.1	31.7	36.6	24.2	
	Unemployed	0	33.3	66.7	0	
Mother's Occupation	Profession	8.3	25.0	58.3	8.3	
	Semi profession	11.8	17.6	52.9	17.6	
	Clerical, shop-owner, farmer	4.8	28.6	59.5	7.1	χ2=29.95
	Skilled worker	8.0	52.0	32.0	8.0	p=0.05*
	Semi skilled worker	19.2	7.7	46.2	26.9	
	Unskilled worker	11.5	32.7	38.5	17.3	
	Unemployed	8.8	23.8	44.9	22.5	
Parenting style	Autocratic	8.5	29.1	48.1	14.3	χ2=15.53
	Democratic	9.4	21.0	45.0	24.6	p=0.01**
	Laizee faire	11.3	35.5	41.9	11.3	

*significant at p<0.05, **significant at p<0.01, ***significant at p<0.001*

50% (n=280) of adolescents were boys and 50% (n=280) were girls. The students ranged in age from 14-17 years. 25% (n=140) of adolescents from class IX, X, XI and XII grade were chosen in equal numbers. Majority of the adolescents 60.4% resides in urban region. 76.8% of adolescents belongs to Hindu religion and 77.5% of the adolescents belongs to nuclear family.

Six hundred and twelve adolescents (25%) were diagnosed to have depression during the study period. The Beck Depression Inventory scoring revealed that 45.7% of the adolescents had moderate and 9.3% had minimal depression [Figure 1].

DISCUSSION

Depressive disorders are identified by the World Health Organization as priority mental health disorder of adolescence because of its high prevalence, recurrence, ability to cause significant complications and impairment. The findings from this study give us an estimate of the proportion of adolescents experiencing depression indicating that many adolescents experience depression.

The study findings revealed that the overall mean depression score was 21.42 with standard deviation of 9.34. This findings was consistent with the study conducted by Rani Mohanraj, 2010[10] and Vivek Bansal, 2009[11].

There was a significant association between age and depression in the sample of adolescents. The present study reported that adolescents studying in 12th grade and 17 years had moderate depression which was statistically significant at p < 0.001 level, because this is the time to think about their career paths and to reach their life goals. The current study is limited because of adolescents sickness, absenteeism, unwillingness, incomplete questionnaire and matching. We recommend that teachers and parents be made aware of this problem with the help of school counselors so that the depressed adolescents can be identified and helped rather than suffer silently.

CONCLUSION

This study has shown a high level of depression (25%) in a school sample of adolescents in South India, it is understood that a considerable number of adolescents are experiencing turmoil during this phase. This finding emphasizes the need for screening for depression and identifying adolescents who need further intervention. Similar studies like the current one could pave the way for school-based interventions that may help adolescents with depression which in turn could minimize the risk for progression into other serious problems like drug abuse, violence and suicide.

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CONTRIBUTORS

JP: Conceptualisation of the study, collection, analysis of the data, writing the manuscript, finalised the manuscript and will act as the guarantor of the paper; **TM**: Conceptualisation of the study, edited, and critically evaluated the manuscript.

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