

Study of Prevalence of Depression in Adolescent Girls Studying in a School at Rudrapur



Medical Science

KEYWORDS : DEPRESSION, ADOLESCENCE, PREVALENCE.

DR ROHIT KANT SRIVASTAVA

ASSOCIATE PROFESSOR, DEPARTMENT OF PSYCHIATRY, RMCH MEDICAL COLLEGE

ABSTRACT

Depression is very common among adolescents and it causes lot of impairment. It affects school performance as such children have impaired attention and concentration. This adolescent period is very crucial for academic, social and personal development so it is very important to detect depression which is mostly ignored. This present study was done in adolescent girls studying in a school and it showed that depression is highly prevalent. 17.85% of adolescent girls studying in class 7th to 10th scored more than 12 on BDI (Beck Depression Inventory), which clearly indicating that this problem should be seriously addressed. We should have provision of regular psychiatrist or psychologist visit to school so that this disorder should be diagnosed and such adolescents should be helped.

INTRODUCTION-

Depressive disorder in childhood and adolescence are characterized by core persistent and pervasive sadness, anhedonia, boredom or irritability that is impairing. It affects academic and school performance. They have impaired concentration and which affect their studies and school or college performance. The single most important distinction between depression as an illness and the normal ups and downs of childhood and adolescence is that depression is associated with functional impairment mediated through the intensity, duration, and lack of responsiveness of depressed mood and associated symptoms. Depression in adolescence is very potential cause which makes them prone to substance abuse. Alcohol, drug, and tobacco abuse are associated with depression, and longitudinal studies suggest bidirectional causality, with substance abuse both leading to, and occurring as consequences of, depression (1-3). The point prevalence of depressive disorder is 1-2% of prepubertal children and 3-8% of adolescence, with the life time prevalence by the end of adolescence of around 20% (5-7). The 3:1 female predominance in mood disorder first emerges in adolescence (7). Adolescent onset depression is more likely to result in recurrent episodes in adult life (8, 9). Depressed youths are at increased risk for conduct disorder, personality disorder, alcohol, tobacco, and drug abuse, and suicidal behaviour, as well as obesity, social adaptation, such as interpersonal problems, unfulfilling social relationships, and educational and occupational underachievement (1-3, 4, 5, 12, 13). In one meticulously conducted study of the course of depressive disorder in children age 8-13 years old, the risk of recurrence was 40% in two years, and 72% in five years (10, 11). Despite the high prevalence and substantial impact of depression, detection and treatment in the primary care setting have been suboptimal. Studies have shown that usual care by primary care physicians fails to recognize 30-50% of depressed patients (Simon and Vonkorff, 1995) (15). Because patients in whom depression goes unrecognized cannot be appropriately treated, systematic screening has been advocated as a means of improving detection, treatment, and outcomes of depression. Adolescent depression may affect the teen's socialization, family relations, and performance at school, often with potentially serious long-term consequences. Adolescents with depression are at risk for increased hospitalizations, recurrent depressions, psychosocial impairment, alcohol abuse, and antisocial behaviours as they grow up. Of course, the most devastating outcome of concern for adolescent depression is suicide, the third leading cause of death among older adolescents (Centre for Diseases Control, WISQARS) (14). No perfect depression screening assessment tool exists, but a number of adolescent depression assessment instruments do possess adequate psychometric properties to commend their use in depression detection and assessment. Optimal diagnostic procedures

should combine the use of depression-specific screening tools as diagnostic aids buttressed by follow-up clinical interviews in which one obtains information from other informants (e.g., parents) and reconciles discrepant information to arrive at an accurate diagnosis and impairment assessment before treatment (Laasa et al. 2000) (16).

MATERIAL AND METHOD

Study design

It is a cross-sectional one-time observational study using simple screening instruments for detecting early symptoms of depression in school girl children studying in 7th class to 10th class. All the girl students who were present on that specified day were administered BDI. Questionnaires were given to the students. They were instructed how to fill them in English or Hindi language. Everything was explained to them by teachers and doctor before giving them questionnaires. They were also explained the purpose of this procedure. A brief lecture regarding depression was taken by psychiatrist and vice principal before this exercise so that they can understand things better. Students were instructed not to write their names to maintain confidentiality. BDI (Beck's Depression Inventory) were administered. The Beck Depression Inventory (BDI) is a series of questions developed to measure the intensity, severity, and depth of depression in patients with psychiatric diagnoses. The sum of all BDI item scores indicates the severity of depression. Score of 12 and above is taken as Depression. Predictive value of the selected cut-off point, 100% sensitivity, 99% specificity, 0.72 PPV, 1 NPV, and 98% overall diagnostic value (Laasa et al. 2000). I would like to mention here that our study sample is only constituted of female as that school wanted us to see them as they were having more problems in girls as mentioned by management of that school. Sociodemographic data were also collected.

OBSERVATION AND RESULTS-

84 girls student studying in class 7th to 10th class were administered BDI (Beck's Depression Inventory) after explaining them the questionnaires' both by doctor and teacher. 15 girls (17.85%) were having score more than 12 on BDI. As 12 is taken cut-off score for depression, so we can say that 17.85% of girls were suffering from depression.

TABLE-1

Total no of girls	84
BDI SCORE <12	69
BDI SCORE > 12	15

TABLE 2-

CLASS	TOTAL NO OF GIRL STUDENT PRESRNT ON THAT DAY	SCORE ON BDI<12	SCORE ON BDI>12
7TH	22	19	3
8TH	18	15	3
9TH	21	17	4
10TH	23	18	5

Table 2 shows that there is no significant difference found between different classes.

In the same way there were nothing found significant on other sociodemographic variables like type of family, rural or urban background and socioeconomic status.

DISCUSSION-

The present cross-sectional one-time observational study was done to study prevalence of depression in adolescent girls studying in a school. In this study we administered BDI (beck depression inventory) to measure and detect depression after fully explaining the purpose and other detail to girl's students of class 7th to 10th of a school. We have also taken help of teachers. Although this study has a limitation because it is one time cross sectional observational study and its sample size is also small but its result is very important, which shows 17.85% of prevalence of depression in adolescent girls studying in school. This finding is supported by other studies also like vivek et al , maharaj RG 1 et al, BY ramil et al and coning et al who also found prevalence of depression among adolescence 18.4%,25.3% +/- 2.37%,10.3% and14% to 17.9% respectively.(17,18,19,20) Most of the other studies has also used BDI to detect depression like we

did in our study(17,20). the present study showed that there was no difference in prevalence of depression between students of rural and urban background and it was supported by same finding in study done by Byrmali m et al ,(19). Cut-off score for BDI ranges from 10-12 depending upon different studies. We took the cut-off score for BDI as 12 thereby increasing the specificity to 99% as also done by study done by vivek et al,(20).The generalizability of the current study results may be limited because of small sample size but it serve purpose by conveying this strong message that depression is high in school and it should be addressed. In spite of the limitations, this study points towards the issue of prevalence of depression in adolescence and the purpose of the study is well served to highlight the common but ignored problem. We recommend that teachers and parents be made aware of this problem with the help of school counsellors so that the depressed adolescent can be identified and helped rather than suffer silently. One has to give importance that depression should not be ignored and such type of students should be helped by psychologist and psychiatrist. We can manage this problem only when we and other can be aware of this highly prevalent disorder. All school should have some programme regarding awareness of this problem so that students, teacher and also parents must understand the magnitude of this disorder.

REFERENCE

1.Rohde P , Lewinsohn P M , Brown R A, Gau JM, Kahler CW: Psychiatric disorders, Familial factors and cigarette smoking: I. Associations with smoking initiation. *Nicotine Tobacco Research*.2003; 5:85 -98. | 2.Rohde P ,Kahler CW, Lewinsohn PM, Brown RA: Psychiatric disorders, familial factors, and cigarette smoking: I. Association with progression to daily smoking, *Nicotine Tobacco Research*.2004; 6:119-132. | 3.Rohde P, Kahler CW,Lewinsohn PM ,Brown RA: Psychiatric disorders ,familial factors, and cigarette smoking : III. Associations with cessation by young adulthood among daily smokers. *Nicotine Tobacco Research*.2004; 6:509-522. | 4.Fergusson DM, Woodward LJ: Mental health, educational, and social role outcomes of adolescents with depression. *Arch Gen Psychiatry*.2002;59:225-231. | 5.Lewinsohn PM, Rohde P, Seeley JR:Major depressive disorder in older adolescents: Prevalence, risk factors ,and clinical implication. *Clinical Psychology Review*.1998; 18:765-794. | 6.Costello EJ, Mustillo S, Erkanli A , Keeler G , Angold A : Prevalence and development of psychiatric disorders in childhood and adolescence. *Arch Genl Psychiatry*.2003; 60:837-844. | 7.Reinherz HZ , Giaconia RM , Pakiz B , Silverman AB , Frost AK , Lefkowitz ES: Psychological risk for major depression in late adolescence : A longitudinal community study. *J Am Acad Child Psychiatry*.1993; 32:1155 – 1163. | 8.Harrington R , Rutter M, Weissman M , Fudge H, Groothues C , Bredenkamp D et al :Psychiatric disorders in the relatives of depressed probands I. Comparison of prepubertal, adolescent and early adult onset cases. *J Affect Disord* .1997;42:9 -22. | 9.Weissman MM, Wolk S , Goldstein RB , Moreau D , Adam P ,Greenwald S et al: Depressed adolescents grown up . *J Am Med Assoc*.1999; 281 : 1707-1713 . | 10.Kovacs M, Feinberg TL, Crouse-novak M A, Paulauskas SL, Finkelstein R: Depressive disorders in childhood : I . A longitudinal study of characteristics and recovery . *Arch Gen Psychiatry*.1984; 41:229-237 . | 11.Kovacs M , Feinberg T ,Crouse- Novak M , Paulauskas S , Pollock M , Finelstein R : Depressive disorders in childhood: II. A longitudinal study of the risk for a subsequent major depression. *Arch Gen Psychiatry*.1984; 41:643-649 . | 12.Resnick MD ,Bearman PS, Blum RW ,Bauman KE , Harris KM Jones J et al: Protecting adolescents from harm :Findings from the National Longitudinal Study on Adolescent Health. *J Am Med Assoc*.1997; 278: 823-832. | 13.Pine DS , Goldstein RB , Wolk S , Weissman MM : The association between childhood depression and adolescent body mass index. *Pediatrics* .2001;107:1049-1056. | 14. Centers for Disease Control and Prevention National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) | 15 . Simon G.E, VonKorff M. Recognition, management, and outcomes of depression in primary care. *Arch Fam Med* . 1995;4:99105. [PubMed] | 16 . Lasaa L, Ayuso-Mateos J.L, Vazquez-Barqueroa J.L, Diez-Manriquea E.J, Dowrick C.E. The use of the Beck Depression Inventory to screen for depression in the general population: a preliminary analysis. *Journal of Affective Disorders*. 2000;57(1-3):261-265. [PubMed] | 17.Maharaj RG1, Alli F, Cumberbatch K, Laloo P, Mohammed S, Ramesar A, Rampersad N, Roopnarinesingh N, Ramtahal I. Depression among adolescents, aged 13-19 years, attending secondary schools in Trinidad: prevalence and associated factors. *West Indian Med J*. 2008 Sep;57(4):352-9. | 18. Maharaj HD1, Ali A, Konings M. Adolescent depression in Trinidad and Tobago. *Eur Child Adolesc Psychiatry*. 2006 Feb;15(1):30-7. | 19. By Ramli, M.; Adlina, S.; Suthahar, A.; Edariah, A. B.; Ariff, F. Mohd; Narimah, A. H. H.; Nuraliza, A. S.; Fauzi, I.; Karuthan, C. Depression among Secondary School Students: A Comparison between Urban and Rural Populations in a Malaysian Community *Hong Kong Journal of Psychiatry* , Vol. 18, No. 2 | 20. Bansal vivek, Goyal S, Srivastava kalpana. Study of prevalence of depression in adolescent students of a public school. | *Ind Psychiatry J* . 2009 Jan;18(1):43-6. |