

Prevalence of Depression in Adolescent Children and their Approach towards It-An Observational Study

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Abstract: ***Introduction:** All over the globe 10-20% of children and adolescents experience some form of mental disorders. Depression is ranked by WHO as the single largest contributor to global disability and suicide deaths amongst 15-29 year old. **Aims & Objective:** To find out the prevalence of depression amongst adolescents and their approach towards it. **Material and methods:** Total 1160, 9th-12th grade students participated in this study. Beck's Depression Inventory II (1) and a detail questionnaire was used for assessment of prevalence of depression and their approach towards it. **Results:** The prevalence of mild depression was found to be 52.6%, more common in 12th graders and girls (56%). 71% of the students reported that studies, peer pressure, relationships, social groups and quarrels at home were the main reason of depression. 44% reported they had suicidal thoughts and 49% said they looked up to their friends for help and 39.7% did not seek help. **Conclusions:** Schools and social platform can offer unique opportunities for effective implementation of interventions aimed at early recognition and prevention of depression.*

Keywords: Depression, adolescent, mental health, suicidal thoughts, peer pressure.

1. Introduction

Adolescent age reminds us of happy, bubbly, chirpy individuals who have lived their childhood to the fullest and are ready to welcome adulthood. But this is far from reality. It has been proven time and again that adolescents are at much higher risk of depression.

To understand this completely one must know what is adolescence. Adolescence is a stage of growth comprising of not only physical but psychological changes in the age group of 13 to 19 years(1) Everybody appreciates the physical growth but fails to understand the psychological turmoil going in the minds of an adolescent child. Reason can be very easily explained because biological maturity precedes the psychological maturity and this also puts them in a danger zone because desire to explore and experiment is at its peak without thinking about the consequences. Environment, society, peers, family and nutrition play a very important role in deciding the mental health of adolescent. Recent studies have also confirmed the prevalence of depression (10%–60%) in adolescents.(2),(3)

Symptoms for depression include depressed moods, psychomotor agitation or retardation, diminished interest or pleasure, insomnia, fatigue or loss of energy, diminished ability to concentrate, significant weight loss, feelings of worthlessness or excessive guilt, and recurrent thoughts of death. Individuals exhibiting five or more of those symptoms meet the criteria for major depressive disorders.(4) No single screening tool can be ideal to screen the adolescents but combinations of optimal diagnostic tools followed by interactive sessions are commonly used modalities diagnosis and treatment of depression.[5] WHO very well realized the impending burden of mental health and declared "Depression: let's talk" as the theme of 2017. Present observational study was conducted amongst school-going adoles-

cent students in Bhilai (Chhattisgarh) to find the prevalence of depression, cause of depression and the type of help sought by the adolescents.

2. Materials and Methods

An observational study was undertaken in April 2016 in Durg district of Chhattisgarh (India). Adolescent children studying in 9–12th standard from random schools situated in the city of Bhilai were included in the study

Study tool

The Beck's Depression Inventory II (BDI) was utilized for collecting the data for prevalence of depression. A second set of questionnaire was handed over simultaneously to find out the reason for their depression and their approach. Self-administered questionnaire comprised 21 items with multiple choice answers, and each answer was scored on a scale of values 0–3 with the maximum possible score being 63. A score of 0–13 was considered as normal, 14–19 as mild/borderline depression, 20–28 as moderate depression, and 29–63 as severe depression. The other chart had varied options and students had to choose as per their choice. Counsellor and students representative were available to answer any of their questions.

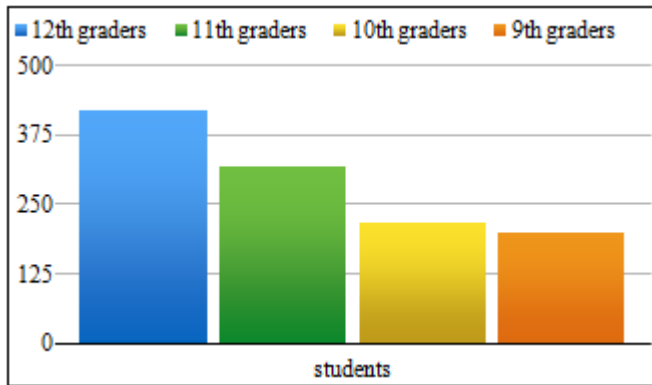
Ethical consideration

An informed consent from the students was obtained after being explained about the purpose of the study and that their responses would be kept confidential.

3. Results

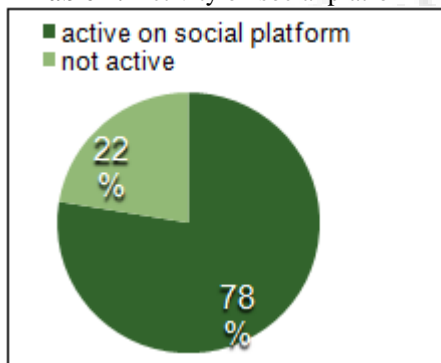
A total of 1160 students of Class 9 to Class 12 took part in the study. The mean age of selected students was 16.4 years (range: 14–18 years). Out of all participating students, 660(56.8%) were male and 500 (43.2%) were female. Ma-

majority of the students 420 (36.2%) were 12th graders, followed by 320(27.5%) 11th graders, 220(18.9%)10th graders and 200 (17.2%) 9th graders. TABLE 1-Grades



Majority of the students 900(77.58%) were active on any one of the social platform (Facebook, WhatsApp, Instagram,). Average time spent daily on social media was 2.31hours. Majority of the students 680(75%) were active between 8pm to 12am and least active 80(8.8%) between 6am to 12 pm.

Table 2: Activity on social platform



Majority of the students 680 (58.62%) had single working parent .
 386(33.27%) had one meal together with the family.
 521(44.91%) had their meals in their room
 253(21.8%) had two meals with their family most of the time
 294(25.3%) of the students shared their school activities after coming home with atleast one parent.
 692(59.6%) students prefer talking to their friends on phone after coming from school.

Table 3: Meals with family

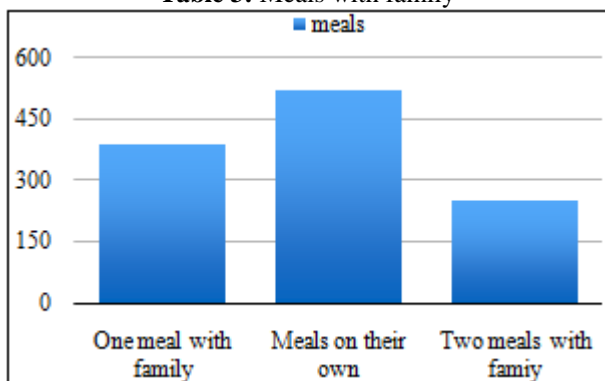
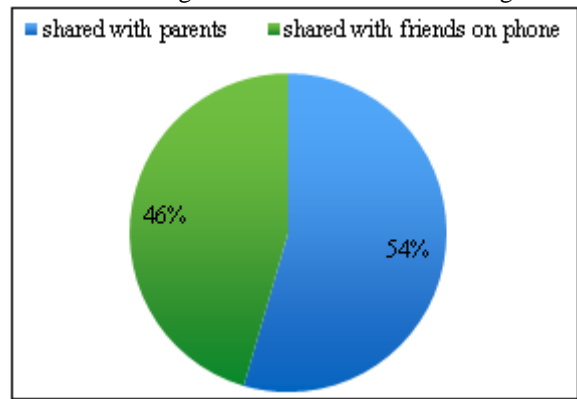


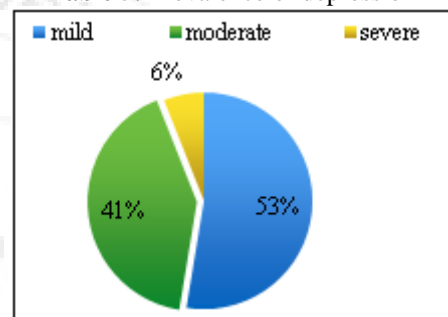
Table 4: Sharing school activities after coming home



Prevalence of depression as per severity

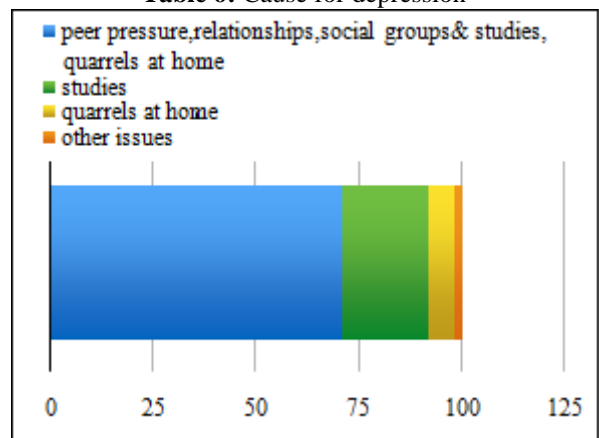
The prevalence of depression was found to be higher in girls 603(52%) than in boys 557(48%). Mild depression was most commonly reported 52.6% followed by moderate depression in 41.4 % and 6 % reported severe depression. Guilty feeling (61%) was one of the most prominent clinical factors responsible for depression followed by sadness (54%), pessimism 552%), and past failure (48%)

Table 5: Prevalence of depression



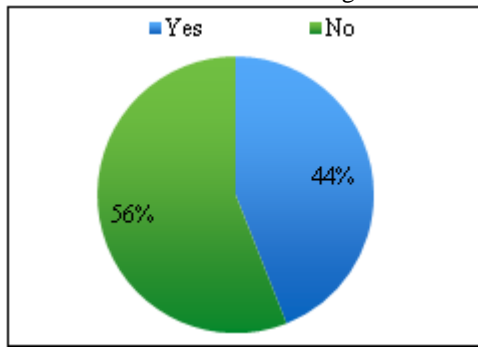
71% of the students agreed that no single reason was responsible for depression, rather it was combination of peer pressure, relationships, studies, social groups and quarrels at home that caused depression. Only 21% attributed studies as the sole cause of depression and 6% were depressed solely due to quarrels at home. Rest of the 2% had other minor reasons

Table 6: Cause for depression



44% reported they had frequent suicidal thoughts during immense stress.

Table 7: Suicidal thoughts



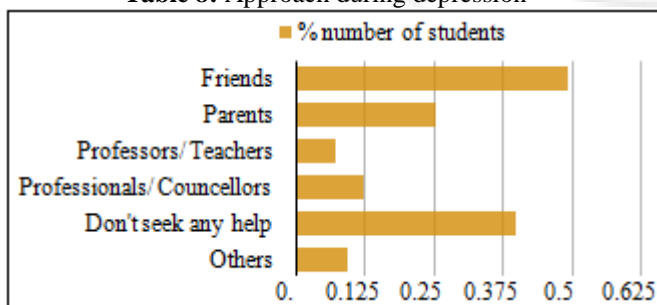
49 % said they looked upto their friends for help whereas 39.7% did not seek help from anyone and kept their problems to themselves.

73% of the students reporting depression due to peer pressure, social groups, relationship issues and quarrels were very active on social platform and spent more than 2 hours daily.

75.8% of the students who felt moderate to severe depression had meals on their own and did not have any meal with family.

81% of the students who reported suicidal thoughts preferred sharing their problems with friends rather than parents.

Table 8: Approach during depression



4. Discussion

Depression is the leading cause of mental health problems in young people in all regions. If untreated, these conditions can severely influence children's normal development, their educational attainments and their capability to live fulfilling and productive lives. There is growing consensus that healthy development during childhood and adolescence contributes to good mental health and can prevent mental health problems. Many adolescents who participated in the WHO global consultation consider mental health the most important health problem faced by adolescents today, and they would like more access to mental health. Adolescents who are depressed are at much higher risk of attempting suicide than non-depressed youth—although not all youth who attempt suicide are depressed. These young people exhibit more aggressive and antisocial behavior. Suicide attempts by adolescents can predict suicides but sadly they are hardly monitored. Even developed countries do not ask about suicide attempts during global school based health surveys(GSHS).High income countries report about 5-15%

prevalence of suicide attempts in age group 12-18 with incidence being little more than 15% in low income countries. In some countries one in every three adolescent has attempted suicide with ratio of girls being little higher than boys. In this era of modernization and advancement ,social media can play a very important role in knowing what is troubling the young minds without disclosing their identity .Depression among children and adolescents, if left unattended, can lead to protracted health and mental health problems in later life.

Of all the 1160 participants, 52.6% showed signs of depression. Our results are comparable to previously published study results. In studies conducted by **Nagendra et al. and Malik et al.**, the prevalence of depression was found to be around 50% and the study conducted by Jha et al reported 49.2% (1),(2),(4).

The most common severity of depression observed in our study was mild depression (52.6%) followed by moderate depression (41.4%) and severe depression (6%). **Naushad et al(3)** reported 39.8% which is little less than our observation but **Malik et al(4)** reported 41.2% and **Jha et al(1)** reported 49.2% prevalence of depression which is closer to our observation . In a study conducted by **Malik et al(4)** the prevalence of severe depression was (11.4%) and (7.7%) in the study conducted by **Jha et al (1)** which is similar to our observations (6%). On the other hand, the prevalence of severe depression in a study conducted by **Naushad et al(3)** was 1.8% which was much lesser than our observations as well as observations by **Malik et al.(4)**

Prevalence of depression was found to be slightly higher among females (52%) than males(48%) which are consistent with the results of earlier studies.**Angold et al.(5)**also attributed the increased prevalence of depression in adolescent females to hormonal changes in puberty.

Our findings of increase in the prevalence with age (17 years) is comparable with the results of previously reported studies by **Nagendra et al** and **Naushad et al(2,3)**.However **Ekundayo et al** did not find an increase in prevalence of depression with age.(6) Higher prevalence of depression in elder students may be attributed to the physical, emotional, and lifestyle changes occurring at that age.

There was increase in the prevalence of depression in 12th graders according to our study. **Bhasin et al.** also reported a higher prevalence of depression in 10th and 12th division students due to the pressure of academic performance in the board examinations.[7].But **Jha et al(1)**did not find any difference between the grades.

We tried to identify factors responsible for the prevalence of depression.71% of the students agreed that it was not one reason rather it was combination of many factors like peer pressure, studies,relationships,social groups and quarrels at home responsible depression. Only 21% attributed studies as the sole cause of depression and 6% were depressed due to quarrels at home. Rest of the 2% had other minor reasons.

73% of the students reporting depression due to peer pressure, socialgroups, relationship issues and quarrels were

very active on social platform and spent more than 2 hours daily. These results in our study are similar to the study done by **Labrague et al(8)** on 76 students in Philippines. They concluded that time spent on Facebooking increases depression and anxiety scores. This result is in keeping with a more recent study conducted by **Pantic et al(9)** among high school students. The authors noted that depression score was directly proportional to time spent on social networks. Our study also reports that majority of adolescents (73%) reporting depression were active on social media. This may be due to negative comments, less likes received, rumours spread on platform, comparison between the same age group peer etc. which may trigger the development of emotional states.

Gabre & Kumar (10) reported that student who used Facebook while studying reported higher levels of stress and were less in control of things.

In our study 44% adolescents reported that they had suicidal thoughts. A 2006 survey of a representative sample of 4447 public school students in Washington State found that 11% of eighth graders had considered attempting suicide in the prior twelve months (**Washington State Department of Health [DOH], 2007**).

Plotnik and Kouyoumdjian (11) have stated that depression presents itself as profound sadness in all age groups and it is the most important factor associated with adolescent suicide which is the third leading cause of death in 10-19 years old. **Harter et al(12)** in their paper at New Orleans asserted that hopelessness, low self-esteem and high self blame are associated with adolescent suicide.

In a study taken by **Ka Wai Lai et al (13)** on suicidal ideation, parenting style, and family climate among Hong Kong adolescents, 52% reported suicide ideation which is similar to our result of 44% students reporting suicidal thoughts.

In our study 75.8% of the students who felt moderate to severe depression did not spend time with family and had meals all by themselves in their room. There are studies where suicide ideation was found to be significantly associated with perceived authoritarian parenting, low parental warmth, high maternal over control, negative child-rearing practices, and a negative family climate. A positive family climate may act as a buffer against developing suicide ideation in adolescents(13).

In our study 49 % said they looked up to their friends for help. This is because adolescents find emotional support from friends as superior compared to other types of support.(14). Also adolescents feel free to talk about their problems with peers rather than with parents(15)

In our study 39% adolescents reported that they do not seek support from any one when depressed. **Rask et al (16)** observed that adolescents in their study group felt they received no support when needed. Sometimes despite the availability of resources such as family or counsellor they are unable to confide in them because of lack of trust and past disappointments from the providers(17).

It is reported that more than 70% of the children with depression do not receive appropriate diagnosis or treatment for depression (17). It is necessary to create awareness about factors associated with depression among students, parents as well as in their teachers with the help of counsellors. Our present study throws light on the magnitude of the problem among students and its associated factors which can be further evaluated by qualitative and quantitative methods.

5. Conclusion

Depression in teens is a serious issue with long term serious implications. There has to be a three tier approach to it. First of all teenagers should practice coping up skills so that they choose constructive approach towards the problem. Secondly communication skills are important. Teens should talk openly to their parents and counsellors more frequently. Although friends sympathize more, it takes an adult to find the right solution. Thirdly adolescents need to learn problem solving skills. We recommend active steps to increase awareness about depression among teachers and parents, with the help of school counsellors, to identify and help depressed adolescents in the school. Active, early intervention can help prevent worsening of depression and its impact on life.

6. Recommendations

Every school should form a common platform like HOLD ON; with members like school counsellor, selected student representatives with good listening skills, motivational speakers, selected parents, psychiatrist and government nodal officer for collecting the state data.

Frequent analysis of mental health using standardized questionnaire at school level by school counsellor to identify students at risk.

Counselling of students at risk by counsellors, motivational speakers, members of the team who listen to the problem patiently to identify and rectify the cause of stress.

Those students who fail to respond should be referred to psychiatrist for proper management after consulting the parents. We at HOLD ON; follow and promote these principles for improving the mental health of adolescents

7. Financial Support and Sponsorship

Nil

8. Conflicts of interest

There are no conflicts of interest.

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Author Profile



Ratnani Purvi is a 12th grader and started her own nonprofit organisation called 'Hold on;' after she read about many students committing suicide. Under this platform she arranges many seminars in various schools along with her team to understand the magnitude of depression in adolescents. She is the founder and editor in chief of her global newsletter 'INKtellect.' She is an alumni of Yale Young Global Scholars Program Singapore 2016. She works as summer intern at Central India Institute of Mental Health and Neurosciences under the chief psychiatrist Pramod Gupta and conducts her research under his guidance.



Gupta Pramod is the chief psychiatrist and director at Central India Institute of Mental Health and Neurosciences, Dewada. He is president elect of IPS Chhattisgarh chapter, motivational speaker and eminent psychiatrist of central India. He has written many chapters in the book and has delivered many lectures in state, zonal and national conferences.