Research Article

Prevalence and Correlates of Depressive Symptoms in Young Adolescents of Nepal

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Abstract

Objectives: This research was conducted to find out the prevalence of depressive symptoms and assess the symptomatology in adolescent students of Nepal.

Background: Depressive symptoms are prevalent among school going adolescents and there is a significant relationship between prevalence of depression and socio-demographic characteristics of adolescent students. The objective was to study the socio-demographic correlates of depression in adolescent students.

Materials and methods: A descriptive study was conducted among the 3000 adolescent school going population to assess the prevalence of depression and depressive symptoms. Reynolds Adolescent Depression Scale-2 was used for identifying those adolescents, who were depressed and having symptoms of depression.

Results: The mean age of the study participants was 15.73 ± 1.22. In the present study 11.1% (334) of the school-going adolescents were found depressed. Out of 334 (11.1%) school-going depressed adolescents, 189 (6.3%) were having mild level of depression, 113 (3.8%) were having moderate level of depression and 32 (1.1%) were having severe level of depression. The depressive symptoms, assessed among the adolescence by using the Reynolds Adolescent Depression Scale-2, were dysphoric mood, anhedonia/negative effect, negative self evaluation, and somatic complaints. The findings of the present study suggest that all the depressive symptoms such as dysphoric mood, anhedonia/negative effect, negative self evaluation, and somatic complaints were found significantly correlated with depression. Highest percentage of severely depressed adolescent students was found among the 12th standard students (19.5%).

Conclusions: Depressive symptoms were prevalent among the adolescent students without any difference in the socio-demographic correlates studied. The academic performance of the depressed adolescents was found significantly impaired. Depressed adolescents were found with increased suicidal ideation, thoughts and plan for suicide, poor in psychological well-being and general health, high level of anxiety and poor in global adjustment. Psychological intervention programme is found to be very effective in managing depressive symptoms, suicidal ideation, and thoughts and plan for suicide, and thus helped to improve psychological well-being, general health, anxiety level, global adjustment and academic performance of the school going adolescents.

Keywords: Depression; Dysphoric mood; Reynolds adolescent depression scale-2; Adolescence; Anxiety

Introduction

Depressive symptoms are prevalent among the adolescent students. The academic performances of the depressed adolescents are significantly impaired. Depressed adolescents are found with increased suicidal ideation, thoughts and plan for suicide, poor in psychological well-being and general health, high level of anxiety and poor in global adjustment [1-4].

Materials and Methods

The study was carried out between February 2018 and March 2019. A list of high schools and some schools having intermediate courses in Nepal were made and approached each school authorities personally and discussed about the proposed study for assuring cooperation. A second list of the schools was prepared including all the schools, which offered full cooperation from the part of the school authority for the proposed study and from this list 10 schools were selected randomly through lottery method for the data collection for the prevalence study. The principals of the each selected schools were approached again for getting a date for screening the adolescents for identifying those adolescents, who were depressed and having symptoms of depression. According to the date given by the school authorities the particular schools were visited and the screening tools, such as socio-demographic and personal data Sheet for collecting socio-demographic and personal information and Reynolds Adolescent Depression Scale-2 questionnaires for identifying those depressed adolescents and having depressive symptoms, were distributed among the students in each class under personal supervision and collected it back after the completion of the questionnaires.

All the students, who fulfilled inclusion and exclusion criteria, studying in 9th, 10th, 11th and 12th standard of those schools, were included in the study and a total of 3064 students were screened. The collected data were examined again for any incomplete answers or information. Finally 3000 adolescents were included in the study after excluding all the questionnaires, which had incomplete answers and information. The collected data were statistically analyzed for calculating the prevalence of depression and depressive symptoms among school going adolescents and to know the relationship between prevalence of depression and socio-demographic characteristics of adolescent students.

Results

The mean age of the study participants was 15.73 ± 1.22. In the present study 11.1% (334) of the school-going adolescents were found depressed. Out of 334 (11.1%) school-going depressed adolescents, 189 (6.3%) were having mild level of depression, 113 (3.8%) were having moderate level of depression and 32 (1.1%) were having severe level of depression. The depressive symptoms, assessed among the adolescence by using the Reynolds Adolescent Depression Scale-2, were dysphoric mood, anhedonia/negative effect, negative self evaluation, and somatic complaints. The prevalence of loneliness was 10.7%, the prevalence of social withdrawal was 6.6%, the prevalence of self-injurious behavior was 26.5%, the prevalence of self-reproach was 7.1%, the prevalence of self-depreciation was 6.3%, and the prevalence of helplessness was 8.5%. The most reported critical item of depression among the adolescent students was found self-injurious behavior (26.5%) and least reported critical item of depression was self-depreciation (6.3%) and social withdrawal (6.6%). The findings of the present study suggest that all the depressive symptoms such as dysphoric mood, anhedonia/negative effect, negative self evaluation, and somatic complaints were found significantly correlated with depression. In the present study negative self evaluation was present among the 8.6% of the non-depressed adolescents and 85.9% of the depressed adolescents. The findings from the present study suggest that 39.8% of the depressed and 2.1% of the non depressed adolescents reported that they are having somatic symptoms. Highest percentage of severely depressed adolescent students was found among the 12th standard students (19.5%), highest percentage of moderate level of depressed was found among the 11th standard (40.4%), and highest percentage of mild level of depressed was also found among the 12th standard students (61%). Lowest percentage of severely depressed, that is 4.7%, was found among the 9th standard students and most of the students from the 9th standard were come under mildly depressed range (59.4%).

Discussion

The age of the adolescents in the present study sample ranges from 13 to 19. A total of 3000 adolescents were studied, consisting of both males and females. The mean age of the study participants was 15.73 ± 1.22. The mean age of the male group was 15.68 ± 1.23, and the female group was 15.79 ± 1.20. In the present study 11.1% (334) of the school-going adolescents were found depressed. In a study conducted by Khan [5], among the 2273 students in Mumbai reported 21% as the prevalence rate of depression.

Result from the different studies on prevalence of depression among the school-going adolescents from abroad also gives a varying prevalence rate of depression and it ranges from 4.7% to 58%. These variations in the prevalence rate of depression among adolescents suggest that the prevalence of depression varies according to the specific countries or states or specific environment in which they are living.

Prevalence of severity of depression

In the present study, out of 334 (11.1%) school-going depressed adolescents, 189 (6.3%) were having mild level of depression, 113 (3.8%) were having moderate level of depression and 32 (1.1%) were having severe level of depression. Most of the depressed adolescents were within the mild level of depressed range. Not many studies were found that assess the prevalence of the severity of depression as mild, moderate and severe level among the school-going adolescents.

Study conducted by Nair et al. [6], reported 3% of school going adolescents had severe and extreme grades of depression. Bhatia and Bhatia reported that major depression affects 3% to 5% of children and adolescents [7]. Thus published research from abroad on the prevalence of the severity of depression among the school-going adolescents also varies in their findings and no study result was found consistent with the present findings.

Prevalence of depressive symptoms

The depressive symptoms, assessed among the adolescence by using the Reynolds Adolescent Depression Scale-2, were dysphoric mood, anhedonia/negative effect, negative self evaluation, and somatic complaints. In the present study the prevalence of dysphoric mood among the school going adolescents was 15%. The present study suggests a prevalence rate of 18.8% for anhedonia/negative affect among the school going adolescents.

In the present study the prevalence rate of negative self evaluation among the school going adolescents was found 17.2%. Krishna kumar and Geeta observed that clinical features of depressive disorder in children included diminished interest in play and activities, excessive tiredness, low self- esteem, problems with concentration, multiple somatic complaints, behavior symptoms like anger and aggression, recent deterioration in school performance and suicidal behavior [8]. Sahoo and Khess have reported that ranging from mild to extremely severe depressive symptoms present in 18.5% of the young adults in Ranchi city of India [9].

Few studies from abroad also reported the prevalence of depressive symptoms among the adolescent students. Rushton et al. [10] described the range of depressive symptoms among the adolescents in a nationally representative US sample and reported that over 9% of adolescents were having moderate/severe depressive symptoms at baseline.

Prevalence of critical symptoms of depression

Critical items of depression assessed in this study were loneliness, social withdrawal, self-injurious behavior, self-reproach, self-depreciation, and helplessness. In the present study among the school-going adolescent population, the prevalence of loneliness was 10.7%, the prevalence of social withdrawal was 6.6%, the prevalence of self-injurious behavior was 26.5%, the prevalence of self-reproach was 7.1%, the prevalence of self-depreciation was 6.3%, and the prevalence of helplessness was 8.5%. The most reported critical item of depression among the adolescent students was found self-injurious behavior (26.5%) and least reported critical item of depression was self-depreciation (6.3%) and social withdrawal (6.6%).

Rudatsikira et al. [11] estimated the prevalence and associated factors of suicidal ideation among school-going adolescents and reported 18.4% reported having seriously considered committing suicide. Self-criticalness, agitation, and loss of energy had the highest scores in a secondary school sample of Saudi Arabia adolescents [12]. There was a significant correlation between depressive symptoms and suicidal behavior.

Depressive symptoms profile of school going adolescents

The findings of the present study suggest that all the depressive symptoms such as dysphoric mood, anhedonia/negative effect, negative self evaluation, and somatic complaints were found significantly correlated with depression.

Dysphoric mood: Dysphoric mood was found in 6.5% of the non-depressed and 82.6% of the depressed adolescent students. Highest percentage that is 29.6% of the depressed adolescents showed severe level dysphoric mood, and 28.7% of the depressed showed moderate level. This explains that most of the depressed school going adolescents experience sadness, crying spells, loneliness, irritability, worry, and self pity, and they were having disturbed mood with the feelings of subjective misery and distress.

In the present study, among the mild level of depressed adolescents 29.1% reported mild level of dysphoric mood, 27.5% reported moderate level of depressed mood and 16.9% reported that they were having severe level of dysphoric mood, and 26.5% were found normal in dysphoric mood. Poongothai et al. [13] have reported that in the depressed urban south Indian population, depressed mood was found as the most common symptom (30.8%). In another study Sagar et al. [14] have also reported that mood was depressed in 51.9% and irritable in 33.3% among the depressed children of ≤ 16 years from the National Capital Region and from neighboring states of Uttar Pradesh, Bihar and Haryana with a diagnosis of Mood disorders. Gajendra et al. [15] have reported that most frequent symptom in depressed children was irritability (72%) followed by depressed mood (64%).

Anhedonia/Negative affect: The findings of the present study indicate that anhedonia/negative affect was present among the 56.3% of the depressed adolescents, and 14.1% of the non depressed adolescents. Among the depressed adolescents 43.7% reported normal, 48.5% reported mild level, 7.5% reported moderate level, and 0.3% reported severe level in anhedonia/negative effect, The findings suggest that the depressed adolescents were disinterested in pleasurable activities and having negative affect as disinterest in having fun, engaging in pleasant activities with other students, in talking with others, or in eating meals, etc.

Chaturvedi and Sarmukaddam assessed negative symptoms in 34 cases of major depression and reported common negative symptoms were inability to enjoy recreational interests and activities (76%), and feelings of anhedonia (64.7%) [16]. Krishnakumar and Geeta observed that clinical features of depressive disorder in children included diminished interest in play and activities, and excessive tiredness [8]. Gajendra et al. [15] have reported that 44% of the depressed adolescents reported anhedonia. But none of the findings were found consistent with the findings of the present study.

Negative self evaluation: In the present study negative self evaluation was present among the 8.6% of the non-depressed adolescents and 85.9% of the depressed adolescents. This explains that most of the depressed adolescents used to evaluate them negatively, and experienced negative feeling about oneself. They may have low self worth, self-denigration, thought of self harm, a belief that parents and others do not like or care about them, and thoughts of running away.

Somatic complaints: The findings from the present study suggest that most of the non-depressed adolescents (97.9%) and most of the depressed adolescents (60.2%) reported absence of somatic complaints, that is, 39.8% of the depressed and 2.1% of the non depressed adolescents reported that they are having somatic symptoms. Among the depressive symptoms considered in the present study, the lowest percentage of the depressed adolescents reported symptom was somatic complaints.

Critical symptom profile of school going adolescents

In the present study depressed adolescents were seen more often reporting critical symptoms, such as loneliness, social withdrawal, self-injurious behavior, self-reproach, self-depreciation, and helplessness, and they were found highly correlated with depression.

Socio-demographic correlates of depression among the school going adolescents

In this study the age range of the adolescents were divided into early (13-14), middle (15-17) and late (18-19) adolescent period for making interpretation simple. Though, in the present study there was no statistically significant correlation between age of the adolescent students and prevalence rate of depression, there was a trend for increased rate of depression as the age of the adolescents goes up. Among the 13-14 age groups the prevalence rate of depression was 9.1% and it was 11.4% among the age group of 15-17, whereas among the 18-19 age group the prevalence rate of depression was 13.5%.

In the present study, no correlation was found between gender and the prevalence of depression, 11.2% of the boys and 11.1% of the girls were found depressed i.e., the prevalence rate of depression was almost equal among both the genders. This finding is contradictory to the findings of the many studies.

No relationship was found between the standard in which the adolescents were studying and the prevalence rate of depression among them. One study reported that depression, anxiety and stress were all significantly higher among the 'board classes' i.e., 10th and 12th as compared to the classes 9th and 11th [17,18].

Academic performance and the prevalence rate of depression were found significantly correlated in the present study, as the prevalence rate of depression was found increased among those who were poor in academic performance. Whereas 0.6% of the adolescent students were found depressed among the excellent academic performers, 1.6% was found depressed among the very good, 6.8% was found among the good, 28.9% among the satisfactory and 49.1% among the poor academic performers were found depressed. There were many studies that report the relation between poor academic outcome/ performance and increased rate of depression among the school going adolescent population [2,19,20,22-24].

Socio-demographic profile of adolescent having mild, moderate and severe depression

Highest percentage of severely depressed adolescent was found among the 12th standard students (19.5%), highest percentage of moderate level of depressed was found among the 11th standard (40.4%), and highest percentage of mild level of depressed was also found among the 12th standard students (61%). Lowest percentage of severely depressed, that is 4.7%, was found among the 9th standard students and most of the depressed from the 9th standard were come mildly depressed (59.4%).

Conclusion

The overall prevalence rate of depression among the school going adolescent population was 11.1% and the study could be concluded that depression and depressive symptoms were prevalent among the adolescent students without any difference in the socio-demographic correlates studied. The academic performance of the depressed adolescents was found significantly impaired. Depressed adolescents were found with increased suicidal ideation, thoughts and

plan for suicide (critical items), poor in psychological well-being and general health, high level of anxiety and poor in global adjustment. Psychological intervention programme is found to be very effective in managing depressive symptoms, suicidal ideation, and thoughts and plan for suicide, and thus helped to improve psychological well-being, general health, anxiety level, global adjustment and academic performance of the school going adolescents.

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