Original article

Proportion of mental health problems in adolescents in Bangladesh

Anupam Das,[1] Mohammad Waliul Hasnat Sajib[2]

[1]Professor, Department of Psychiatry, Khwaja Yunus Ali Medical College, Sirajganj, Bangladesh; [2]Assistant Professor, Department of Psychiatry, Shaheed M Monsur Ali Medical College, Sirajganj, Bangladesh.

Article info

Received	:	12 Oct 2021
Accepted	:	18 Jan 2022
Number of tabs	:	07
Number of figs	:	00
Number of refs	:	20

Correspondence
Anupam Das
Mobile: +8801711074360
E-mail: adanup@yahoo.com

Summary

Adolescence is a crucial period for developing social and emotional habits important for mental well-being. Despite their relevance as a leading cause of disability in this age group, the mental health needs of adolescents are neglected. The aim of this study was to find out the proportion of adolescent mental health problems. It was a cross-sectional study which was conducted from October 2019 to September 2020 in Khwaja Yunus Ali Medical College, Sirajganj. Total 129 adolescents of both sexes aged between 13 to 19 years were evaluated through face to face interview using a semi structured questionnaire and Depression Anxiety Stress Scale 21 (DASS 21). The results showed that, 55.8% were male and 44.2% were female. It was found that, 42.6%, 55.8% and 44.2% had depression, anxiety and stress respectively. It was also found statistically significant of parent child relationship in mental health problems ($P<0.05$). This study indicated that, mental health was a potential factor that could have an impact on the mental health status of adolescents. Further multi-centered prospective and population-based studies should be designed to find out the exact situation.

Bang J Psychiatry 2022;36(1):1-5

Introduction

Adolescence is a progression from appearance of sexual characteristics to sexual and reproductive maturity; development of adult mental processes and adult identity and a period of transition from total socioeconomic dependence to relative independence. One in every five people in the world is an adolescent. Adolescence, defined as the period between 10–19 years of age, is characterized by rapid social, physical, and emotional changes.[1] Mental health is the emotional and spiritual resilience that allows one to enjoy life and to survive pain, suffering and disappointment. It is a positive sense of wellbeing and an underlying belief in one's own and others' dignity and worth.[2] According to World Health Organization, one in six people are aged 10–19 years. Mental health conditions account for 16% of the global burden of disease and injury in people aged 10–19 years. Half of all mental health conditions start by 14 years of age but most cases are undetected and untreated. Globally, depression is one of the leading causes of illness and disability among adolescents. Suicide is the third leading cause of death in 15–19 year olds. The consequences of not addressing adolescent mental health conditions extend to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults.[3] Mental disorders and mental health problems seem to have increased considerably among adolescents in the past 20–30 years. Adolescents are at elevated risk for exposure to multiple stressors, indicating high rates of crime, victimization, family poverty, family conflict, increased prevalence of deviant peers and school with inadequate resources. Basic factors which facilitate emotional disturbance among adolescents are biological disorders and diseases, pathological family relationships and undesirable experience in school.[4]

To ignore adolescent, means ignoring the future of our nation. Studies on mental health and behavior problems among the adolescent remain limited, so there is need for assessment and comparison of the adolescent mental health problems in rural and urban settings. So the study was aimed to find out the proportion of adolescent mental health problems.

Materials and methods

This was a cross-sectional study was conducted from October 2019 to September 2020 in Khwaja Yunus Ali Medical College, Sirajganj. Total 129 adolescents of both sexes aged between 13-19 years were evaluated using purposive sampling technique. Data were collected from face to face interview using semi-structured questionnaire and Depression, Anxiety and Stress Scale 21 (DASS 21). All participants who gave assent and consent taken from parents and willing to comply with the study procedure was included. After collection, all data were checked thoroughly for consistency and completeness. Data were cleaned, edited and verified daily to exclude any error or inconsistency before coding and entering them into a database. Statistical analysis was performed using SPSS version 24. The analyzed data were presented in tables. All data were expressed as the frequency, percentage. The association between the variables was measured using the appropriate statistical techniques such as Chi square. A significance

level of 0.05 was considered as proper, and thus p values of less than 0.05 was considered statistically significant.

Results

The results showed that among the participants 72 (55.8%) were male and 57 (44.2%) were female (Table 1).

Table 1: Sex distribution of the study subjects (n=129)

Gender	Frequency	Percentage
Male	72	55.8
Female	57	44.2

It was found that, 55 (42.6%) had depression, 72 (55.8%) had anxiety and 57 (44.2%) had stress (Table 2).

Table 2: Proportion of adolescent mental health problems (n=129)

Mental health problems	Frequency	Percentage
Depression	55	42.6
Anxiety	72	55.8
Stress	57	44.2

Among the depressed adolescents it was found that, 55.4% parents were not friendly where in among the anxious and stressed adolescents it was 45.6% and 34.7% respectively. More than half of the parents dominated (54.1%) their children and behaved in a disrespectful manner (57.7%). In anxious and stressed adolescents, dominated parents were found 64.6% and 54.1% respectively and it was also found that, 75.5% parents of anxious adolescents and 67.7% parents of stressed adolescents behaved in a disrespectful manner. Only 34.4%, 46.8% and 35.4% parents were soft enough at the time of providing something to their depressed, anxious and stressed adolescents respectively. Among the depressed adolescents, only one third (34.9%) of the parents gave their child more than 2 hours. Almost same finding was found among the parents of stressed adolescents (36.7%) but it was higher (51.1%) among the parents of anxious adolescents. It was also showed that parent-child relationship with these mental health problems was statistically significant in almost every sectors (P<0.05) (Table 3, Table 4 and Table 5).

Table 3: Correlation of parent and child relationship with depression (n=129)

Parent child relationship	Total (n=129) No (%)	Normal (n=74) No (%)	Mild to extremely severe (n=55) No (%)	p value
Friendly relationship with parents				
Yes	46(35.7)	37(80.5%)	9(19.5%)	0.001
No	83(64.3)	37(44.6%)	46(55.4%)	
Parents dominate regarding any decision				
Yes	85(65.9)	39(45.9%)	46(54.1%)	0.007
No	44(34.1)	33(75%)	11(25%)	
Parents behave in a disrespectful manner				
Yes	45(34.9)	19(42.3%)	26(57.7%)	0.018
No	84(65.1)	50(59.5%)	34(40.5%)	
Parents very soft to like whatever ask for they provide?				
Yes	96(74.4)	63(65.7%)	33(34.3%)	0.003
No	33(25.6)	11(33.3%)	22(66.7%)	
How much time parents give their child everyday				
<1 -2 hours	31(24.0)	14(45.1%)	17(54.9%)	0.072
>2 hours	98(76.0)	60(61.2%)	38(38.8)	

Table 4: Correlation of parent child relationship with anxiety (n=129)

Parent child relationship	Total (n=129) No (%)	Normal (n=74) No (%)	Mild to extremely severe (n=55) No (%)	p value
Friendly relationship with parents				
Yes	46(35.7%)	25(54.4%)	21(45.6%)	0.006
No	83(64.3%)	32(38.6%)	51(61.4%)	
Parents dominate regarding any decision				
Yes	85(65.9%)	31(36.4%)	54(64.6%)	0.003
No	44(34.1%)	27(61.4%)	17(38.6%)	
Parents behave in a disrespectful manner				
Yes	45(34.9%)	11(24.5%)	34(75.5%)	0.001
No	84(65.1%)	47(55.9%)	37(44.1%)	
Parents very soft to like whatever ask for they provide?				
Yes	96(74.4%)	51(53.2%)	45(46.8%)	0.001
No	33(25.6%)	6(39.5%)	27(81.8%)	
How much time parents give their child everyday				
<1 -2 hours	31(24.0%)	7(22.5%)	24(77.5%)	0.001
>2 hours	98(76.0%)	48(48.9%)	50(51.1)	

Table 5: Correlation of parent child relationship with stress (n=129)

Parent child relationship	Total (n=129) No (%)	Normal (n=74) No (%)	Mild to extremely severe (n=55) No (%)	p value
Friendly relationship with parents				
Yes	46(35.7%)	30(65.3%)	16(34.7%)	0.029
No	83(64.3%)	42(50.7%)	41(49.3%)	
Parents dominate regarding any decision				
Yes	85(65.9%)	39(45.9%)	46(54.1%)	0.001
No	44(34.1%)	33(75%)	11(25%)	
Parents behave in a disrespectful manner				
Yes	45(34.9%)	15(32.3%)	30(67.7%)	0.002
No	84(65.1%)	57(67.9%)	27(32.1%)	
Parents very soft to like whatever ask for they provide?				
Yes	96(74.4%)	62(64.6%)	34(35.4%)	0.004
No	33(25.6%)	11(33.3%)	22(66.7%)	
How much time parents give to their child everyday				
<1 -2 hours	31(24.0%)	10(32.3%)	21(67.7%)	0.013
>2 hours	98(76.0%)	62(63.3%)	36(36.7%)	

Discussion

In this study, 42.6% depressions in adolescents were found. Therefore, the findings of the study were in well agreement with the findings of the other research works, they found depression (53.9%).[5] This was also similar to the findings of previous studies.[6,7] However, a study in India found the prevalence of depression to be about 40% among adolescents.[8] This was important because, the adolescents having high rate

of depression would find it difficult to cope up with future life. This might also be associated with adverse outcomes, in addition to decreased educational and work place outputs. In current study, 55.8% had anxiety. Therefore, the findings of the study were in well agreement with the findings of the other research works, they found 59.7% had anxiety.[5] In another study of Prabha et al.[9] reported anxiety were 55.4%. Study by Kathleen et al.[10] from the United States of America reported that 31.9% had anxiety disorder. Another study from India by Srinivasa et al.[11] reported 37.0% of anxiety among students of pre-graduation colleges.

In this study stress was 44.2%. This findings were consistent with Satyanarayana et al.[12] A study in India among adolescents found the overall prevalence of stress to be 42.8%.[13] Among them, 27.7% had mild stress, 12.2% moderate stress and 2.9% severe stress. Stress, anxiety and depression were correlated with each other. Anxiety was the reactive expression of stress whereas depression is manifestation of long standing stress.[3] Therefore, the findings of the study were in well agreement with the findings of the other research works they found depression (53.9%), anxiety (59.7%) and stress (43.8%).[14] These rates were similar to few past studies carried out using DASS tool; depression (18.5%-51.3%), anxiety (24.4%-66.9%), and stress (20%-53%).[12,15,16] Most of the studies were having lower rates than the present study, but some studies noticed higher rates than the present study due to using different instruments such as the Beck Depression Inventory Scale for depression (71.25%) stress (87.6%) using Perceived Stress Scale. [17,18]

In this study, mild to extremely severe depression, anxiety and stress were more common in bad relationship with parents and child. The difference was statistically significant (P<0.05). Previous study reported both father-child and mother-child relationship were found to have significant relationship with adolescent depression, anxiety and stress. The results indicated that, adolescent who had stronger bonding with both father and mother experienced in lesser depression, anxiety and stress symptoms.[19] It was about the supportive from parents for the adolescents to pass through challenging transition life stage.[20] It was a single center based study. Sample size was relatively small. So, the result might not be reflected the overall adolescents mental health status in Bangladesh.

Conclusion

This study indicated that, mental health was a potential factor that could have an impact on the mental health status of adolescents. While the fact that, mental abnormalities interferes in normal growth and development, coping with tough educational pressure of adolescents disrupting day to day social interactions, making them more vulnerable inside and outside home tapping an urgent call not only early recognition and intervention but also harnessing rich human dividend of our country. Further multi-centered prospective and population based studies should be designed to find out the exact situation.

References

1. Dube S, Sharma K. Knowledge, Attitude and Practice Regarding Reproductive Health among Urban and Rural Girls: A Comparative Study. Ethno Medicine 2012;6(2):85-94.
2. Srividhya V. Mental Health and Adjustment Problems of Students of Navodhaya, Central and State Schools 2007.
3. World Health Organization. Adolescent Health, Adolescent Mental Health. Geneva: World Health Organization; 2013.
4. Gonzales NA. On the Limits of Coping Interaction between Stress and Coping for Inner-City Adolescents 2001;372-94.
5. Jayashree K, Mithra PP, Nair MC, Unnikrishnan B, Pai K. Depression and anxiety disorders among schoolgoing adolescents in an urban area of South India. Indian J Community Med 2018;43:Suppl S1:28-32.
6. Angold A, Costello EJ, Erkanli A, Worthman CM. Pubertal changes in hormone levels and depression in girls. Psychol Med 2009;29:1043-53.
7. Thapar A, Collishaw S, Pine DS, Thapar AK. Depression in adolescence. Lancet 2012;379:1056-67.
8. Srinath S, Girimaji SC, Gururaj G, Seshadri S, Subbakrishna DK, Bhola P, et al. Epidemiological study of child & adolescent psychiatric disorders in urban & rural areas of Bangalore, India. Indian J Med Res 2015;122:67-79.
9. Prabha VS, Devi GS, Rao VB, Kanakabushanam GVVS. A comparative study of anxiety and depression among adolescents from rural and urban areas. J Med Sci Res 2017;5(1):29-32.
10. Kathleen RM, Jian-ping H, Marcy B, Sonja AS, Shelli A, Lihong CI. Lifetime prevalence of mental disorders in US adolescents: Results from the national comorbidity study-adolescent supplement (NCS-A). J Am Acad Child Adolesc Psychiatry 2010;49:980-9.
11. Srinivasa S, Chaithanya C, Nair C, Ravindra LS. A Study On Prevalence Of Anxiety Disorders Among Higher Secondary School Students. J Evolution Medical Dental Sci 2015;4(26):4473-8.
12. Satyanarayana PT, Prakash B, Kulkarni P, Kishor M, Renuka M. A comparative study of prevalence of mental abnormalities among high school children in tribal, rural and urban Mysuru district, Karnataka, India. Int J Community Med Public Health 2017;4(3):809-13
13. Sahoo S, Khess CRJ. Prevalence of Depression, Anxiety, and Stress Among Young Male Adults in India. ResearchGate 2010;198(12):901-4.
14. Shaikh BM, Doke PP, Gothankar JS. Depression, anxiety, stress, and stressors among rural adolescents studying in

Pune and a rural block of Nanded district of Maharashtra, India. Indian J Public Health 2018;62:311-4.

15. Iqbal S, Gupta S, Venkatarao E. Stress, anxiety and depression among medical undergraduate students and their socio-demographic correlates. Indian J Med Res 2015;141:354-7.
16. Kumar KS, Akoijam BS. Depression, anxiety and stress among higher secondary school students of imphal, Manipur. Indian J Community Med 2017;42:94-6.
17. Kumar GS, Jain A, Hegde S. Prevalence of depression and its associated factors using beck depression inventory among students of a medical college in Karnataka. Indian J Psychiatry 2012;54:223-6.
18. Watode BK, Kishore J, Kohli C. Prevalence of stress among school adolescents in Delhi. Indian J Youth Adolesc Health 2015;2:34-8.
19. Ee AC, Arshat Z. Parent-Child Relationship and Depression among Adolescents in Selangor, Malaysia. International Journal of Humanities and Social Science Invention 2019;2319-22.
20. Whitlock J, Schantz K. Mental Illness and Mental Health in Adolescence. Research Facts and Findings. 2008.