

Prevalence of Mental Disorders Among Children and Adolescents at a Tertiary care Hospital

Ashish Kumar Pandey

Assistant Professor, Department of Psychiatry, Narayan Medical College & Hospital, Rohtas, Sasaram, Bihar, India.

ABSTRACT

Background: India contributes 21% of adolescent's population in the world. One out of six children is affected with mental disorder. The present study was conducted to assess prevalence of mental disorders among children and adolescents.

Materials and Methods: The present cross-sectional study was conducted to assess the prevalence of mental disorders among 640 children and adolescents. The Mini-International Neuropsychiatric Interview (MINI) was used for evaluation of mental disorders. The sociodemographic questionnaire was also filled. Data were analysed using Statistical Package for the Social Sciences (SPSS) version 20.0 (IBM SPSS Corp.).

Results: In the present study prevalence of mental disorders was 39.06% established by MINI. Generalized anxiety disorder was present in 65 patients, Recurrent depressive disorder was present in 45 patients followed by suicidality with low risk in 40 patients.

Conclusion: The present study concluded that prevalence of

INTRODUCTION

Mental disorders were the second leading cause of disease burden in terms of years lived with disability (YLDs) and the sixth leading cause of disability-adjusted life-years (DALYs) in the world in 2017, posing a serious challenge to health systems, particularly in low-income and middle-income countries.¹ Common Mental Disorders (CMD) refer to depressive and anxiety disorders and are distinct from the feeling of sadness, stress or fear that anyone can experience at some moment in life. Despite some methodological differences in the epidemiological studies, it is estimated that 4.4% and 3.6% of the world adult population suffers from depressive and anxiety disorders, respectively.² CMD can affect health and quality of life, and it is noted that CMD affect people at an early age.³ The prevalence of mental disorders among children and adolescents in the general population has significantly increased over the last years.⁴⁻⁶ Compared with the general population, little is known about the prevalence of mental disorders among children and adolescents in the child welfare system (CWS)⁷ specifically because they are often excluded from epidemiological studies because of their high mobility and difficulties surrounding parental responsibility and informed consent.8,9 The present study was conducted to assess prevalence of mental disorders among children and adolescents.

mental disorders were 39.06% among children and adolescents established by MINI.

Keywords: Mental Disorders, Children, Adolescents, MINI. *Correspondence to:

Dr. Ashish Kumar Pandey,

Assistant Professor, Department of Psychiatry, Narayan Medical College & Hospital, Rohtas, Sasaram, Bihar, India.

Article History:

Received: 27-07-2020, Revised: 18-08-2020, Accepted: 13-09-2020

Access this article online	
Website: www.ijmrp.com	Quick Response code
DOI: 10.21276/ijmrp.2020.6.5.008	

MATERIALS AND METHODS

The present cross-sectional study was conducted in Department of Psychiatry, Narayan Medical College & Hospital, Rohtas, Sasaram, Bihar (India) to assess the prevalence of mental disorders among 640 children and adolescents. Before the commencement of the study ethical approval was taken from the Ethical Committee of the institute and written consent was taken from the patient after explaining the study. Children and adolescents less than 17 were included in the study. Children and adolescents who refused to participate in the study, who were unable to participate due to their somatic condition (e.g., being deaf-mute), who had an acute medical condition requiring urgent hospitalization were excluded from the study. The Mini-International Neuropsychiatric Interview (MINI) is a standardized and short-structured diagnostic interview for epidemiology studies and was used for evaluation of mental disorders according to the DSM-IV and International Classification of Disease 10th version (ICD-10) in psychiatric populations and in general medical populations including primary care patients. Administration time of the MINI was approximately 15 min and the interview was conducted over the telephone. The MINI modules were used to identify current diagnoses of major depressive episode, recurrent

depressive disorder, mania, hypomania, bipolar disorder I, bipolar disorder II, suicidality, psychotic disorder, posttraumatic stress disorder, panic disorder, social phobia, generalized anxiety disorder, agoraphobia, obsessive–compulsive disorder, alcohol dependence, alcohol abuse, anorexia, and bulimia. The sociodemographic questionnaire was also filled. Data were analysed using Statistical Package for the Social Sciences (SPSS) version 20.0 (IBM SPSS Corp.).

RESULTS

In the present study prevalence of mental disorders was 39.06% established by MINI. Generalized anxiety disorder was present in 65 patients, Recurrent depressive disorder was present in 45 patients followed by suicidality with low risk in 40 patients.

Table 1: Prevalence of mental disorder

Prevalence of mental disorder	N(%)
Present	250(39.06%)
Absent	390(60.93%)
Total	640(100%)

Table 2: Type of mental disorder

Type of Mental Disorder	N
Major Depressive Episode	9
Recurrent Depressive Disorder	45
Mania	8
Hypomania	3
Bipolar Disorder I	2
Bipolar Disorder II	1
Suicidality	40
Psychotic Disorder	2
Posttraumatic Stress Disorder	11
Panic Disorder	25
Social Phobia	2
Generalized Anxiety Disorder	65
Agoraphobia	15
Obsessive–Compulsive Disorder	3
Alcohol Dependence	5
Alcohol Abuse	2
Anorexia, And Bulimia.	2

DISCUSSION

Globally, the reported prevalence rates of mental disorders among children and adolescent range from 1% to 51%. According to the WHO reports, community-based studies revealed an overall prevalence rate for mental disorders around 20% in several national and cultural contexts.¹⁰ Major depression was the fourth most prevalent human disease in 1990 and is expected to rank second by the year 2020 in adolescent age group (Lopez and Murray, 1998).¹¹ Overall, both these conditions are associated with poor quality of life at the adolescent age group and also with

significant negative consequences.¹² Untreated mental health problems among adolescents may lead to poor school performance, school dropout, strained family relationships, substance abuse, and engaging in risky sexual behaviors.¹³

The prevalence of mental disorders that manifest predominantly during adulthood was generally higher in the more developed southern states than in the less developed northern states, whereas the prevalence of mental disorders with onset predominantly in childhood and adolescence was generally higher in the less developed northern states than in the more developed southern states. The higher prevalence of depressive and anxiety disorders in southern states could be related to the higher levels of modernisation and urbanisation in these states and to many other factors that are not yet well understood.¹⁴⁻¹⁷

A recent comprehensive review of the field of child psychiatric epidemiology¹⁸ noted that the number of observations in community surveys of children and adolescents has risen from 10 000 in studies published between 1980 and 1993 to nearly 40 000 from 21 studies published between 1993 and 2002.19 The results of these studies indicate that about one out of every three to four youths is estimated to meet lifetime criteria for a Diagnostic and Statistical Manual of Mental Disorders (DSM) mental disorder.¹⁸ However, only a small proportion of these youth actually have sufficiently severe distress or impairment to warrant intervention.²⁰ About one out of every ten youths is estimated to meet the Substance Abuse and Mental Health Services Administration (SAMHSA) criteria for a Serious Emotional Disturbance (SRD), 19,20 defined as a mental health problem that has a drastic impact on a child's ability to function socially, academically, and emotionally.21

Suicidal ideation was the chief complaint in 39% of patients in the study by Santiago et al.²² and 47% in the study by Grupp-Phelan et al²³.

The prevalence of mental disorders reported in the study conducted in primary care populations indicate that 46.3% of individuals suffered from a current mental disorder in Israel.²⁴

A study in the Arab world demonstrated a 42.3% rate of prevalence of mental conditions in primary care settings.²⁵

In the previous studies reported that any mood disorders, especially depression, suicidality, and any anxiety disorders, were the most prevalent common psychiatric disorders in primary care.^{24,26,27}

CONCLUSION

The present study concluded that prevalence of mental disorders was 39.06% among children and adolescents established by MINI.

REFERENCES

1. Institute of Health Metrics and Evaluation. GBD compare data visualisation. https://vizhub.healthdata.org/gbd-compare/

2. World Health Organization. Depression and other common mental disorders: global health estimates. WHO World Heal Organ [Internet]. 2017;1–24. Available from: http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-

MER-2017.2-eng.pdf

3. UNICEF. The United Nations Children's Fund. Adolescence: A Time That Matters [Internet]. 2002. 7–44.

4. Achenbach TM, Rescorla LA, Ivanova MY. International epidemiology of child and adolescent psychopathology I: diagnoses, dimensions, and conceptual issues. J Am Acad Child Adolesc Psychiatry 2012; 51:1261–72.

5. Polanczyk GV, Salum GA, Sugaya LS, et al. Annual research review: a meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. J Child Psychol Psychiatry 2015; 56:345–65.

6. Rescorla L, Ivanova MY, Achenbach TM, et al. International epidemiology of child and adolescent psychopathology ii: integration and applications of dimensional findings from 44 societies. J Am Acad Child Adolesc Psychiatry 2012; 51:1273–1283.e1278.

7. McMillen JC, Zima BT, Scott LD, Jr, et al. Prevalence of psychiatric disorders among older youths in the foster care system. J Am Acad Child Adolesc Psychiatry 2005; 44:88–95.

8. Ford T, Vostanis P, Meltzer H, et al. Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. Br J Psychiatry 2007; 190:319–25.

9. Rosenfeld AA, Pilowsky DJ, Fine P, et al. Foster care: an update. J Am Acad Child Adolesc Psychiatry 1997; 36:448–57.

10. Murray CJ, Lopez AD. Alternative projections of mortality and disability by cause 1990-2020: global burden of disease study. Lancet 1997;349:1498–504.

11. Alvi T, Assad F, Ramzan M, Khan FA. Depression, anxiety and their associated factors among medical students. J Coll Physicians Surg Pak 2010;20:122 6. 2. Lopez AD, Murray CC. The global burden of disease, 1990 2020. Nat Med 1998;4:1241 3 12. Kessler RC, Avenevoli S, Costello EJ, Georgiades K, Green JG, Gruber MJ, et al. Prevalence, persistence, and

sociodemographic correlates of DSM-IV disorders in the national comorbidity survey replication adolescent supplement. Arch Gen Psychiatry 2012;69:372-80.

13. Kapphahn CJ, Morreale MC, Rickert VI, Walker LR. Society for Adolescent Medicine. Financing mental health services for adolescents: A position paper of the society for adolescent medicine. J Adolesc Health. 2006;39:456–8.

14. Hidaka BH. Depression as a disease of modernity: explanations for increasing prevalence. J Affect Disord 2012; 140: 205–14.

15. Jiloha R. Impact of modernization on family and mental health in South Asia. Delhi Psychiatry J 2009; 12: 42–60.

16. Chandra PS, Shiva L, Nanjundaswamy MH. The impact of urbanization on mental health in India. Curr Opin Psychiatry 2018; 31: 276–81.

17. Trivedi JK, Sareen H, Dhyani M. Rapid urbanization—Its impact on mental health: a South Asian perspective. Indian J Psychiatry 2008; 50: 161–5.

18. Costello EJ., Mustillo S., Keller G., Angold A. Prevalence of psychiatric disorders in childhood and adolescence. In: Levin BL,

Petrila J, Hennessy KD, eds. Mental Health Services: a Public Health Perspective, Second Edition. Oxford, UK: Oxford University Press; 2004:111–28.

19. Costello E., Egger H., Angold A. 10-year research update review: the epidemiology of child and adolescent psychiatric disorders: I. Methods and public health burden. J Am Acad Child Adol Psychiatry. 2005;44:972–86.

20. Brauner CB., Stephens CB. Estimating the prevalence of early childhood serious emotional/behavioral disorders: challenges and recommendations. Public Health Rep. 2006;121:303–10.

21. US Department of Health and Human Services. Mental Health: A Report of the Surgeon General Rockville, MD; 1999.

22. L. I. Santiago, M. G. Tunik, G. L. Foltin, and M. A. Mojica. Children requiring psychiatric consultation in the pediatric emergency department: epidemiology, resource utilization, and complications. Pediatric Emergency Care 2006; 22(2): 85–9.

23. J. Grupp-Phelan, P. Mahajan, G. L. Foltin et al. Referral and resource use patterns for psychiatric-related visits to pediatric emergency departments. Pediatric Emergency Care 2009; 25(4): 217–20.

24. Reneses B, Garrido S, Navalon A, Martin O, Ramos I, Fuentes M, et al. Psychiatric morbidity and predisposing factors in a primary care population in Madrid. Int J Soc Psychiatry. 2015;61(3):275–86.

25. Laufer N, Zilber N, Jecsmien P, Maoz B, Grupper D, Hermesh H, et al. Mental disorders in primary care in Israel: prevalence and risk factors. Soc Psychiatry Psychiatr Epidemiol. 2013;48(10):1539–54.

26. Alkhadhari S, Alsabrrie AO, Ohaeri JU, Varghese R, Zahid MA, Mulsant BH. Mental and physical comorbidity in an Arab primary health care setting. BMC Psychiatry. 2018;18:6.

27. Storr C, Gahbler LM, Linde K, Schneider A. Reasons for encounters and psychiatric comorbidity in an urban Bavarian primary care out-of-hour service—results of a cross sectional study. BMC Health Serv Res. 2017;17:6.

Source of Support: Nil. Conflict of Interest: None Declared.

Copyright: © the author(s) and publisher. IJMRP is an official publication of Ibn Sina Academy of Medieval Medicine & Sciences, registered in 2001 under Indian Trusts Act, 1882.

This is an open access article distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Cite this article as: Ashish Kumar Pandey. Prevalence of Mental Disorders Among Children and Adolescents at a Tertiary care Hospital. Int J Med Res Prof. 2020 Sept; 6(5): 38-40. DOI:10.21276/ijmrp.2020.6.5.008