

The Burden of declining Mental Health in Adolescents - A wake up Call

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ABSTRACT

Mental health concerns have been rising like never before. WHO estimates that the burden of mental health problems is of the tune of 2,443 DALYs per 100,000 population , and the age-adjusted suicide rate per 100,000 population is 21.1. It is estimated that, in India, the economic loss, due to mental health conditions, between 2012-2030, is 1.03 trillions of 2010 dollars.” Worldwide, it is estimated that 10–20% of adolescents experience mental health conditions, yet these remain under diagnosed and undertreated. Signs of poor mental health can be overlooked for a number of reasons, such as a lack of knowledge or awareness about mental health among health workers, or stigma preventing them from seeking help. MH problems are still perceived as a form of failing or incapability on the part of the suffering person. There is a dire need to enlighten the masses and ensure helpful policy formation as well as social support so as to ensure positive Mental Health for our adolescents and thus, a healthy and a secure future for the humanity.

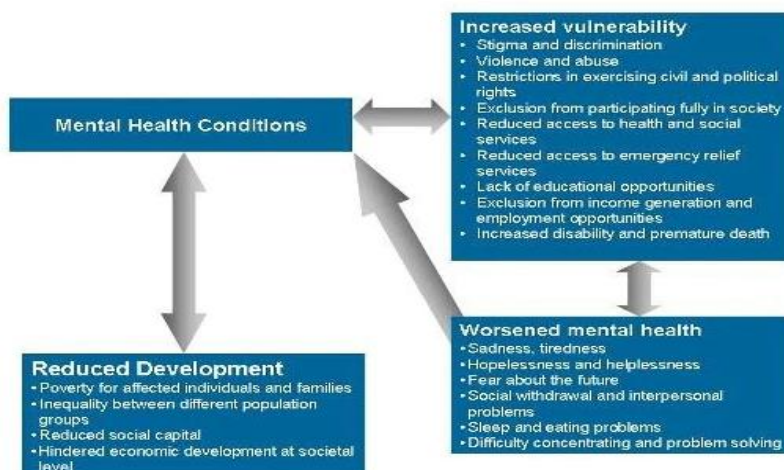
1. Introduction

“Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (World Health Organization,2014).Camus(2005)calls Mental Health “... not merely the absence of disease or infirmity”, and Nordqvist(2017) reiterates that Mental health is “not just the absence of mental disorder”. In the opinion of the American Psychiatric Association, Mental health involves effective functioning in daily activities resulting in productive activities (work, school, care giving), healthy relationships and ability to adapt to change and cope with adversity.” Thus, positive mental health is imperative for the overall wellbeing of an individual leading to a harmonious society and a better world.

The consequential credentials of a sound mental health become even more crucial in adolescence - the stepping stone from childhood to adulthood. According to the World Health Organization (2018), “Adolescence (10–19 years) is a unique and formative time. Whilst most adolescents have

good mental health; multiple physical, emotional and social changes, including exposure to poverty, abuse, or violence, can make adolescents vulnerable to mental health problems.

Promoting psychological well-being and protecting adolescents from adverse experiences and risk factors which may impact their potential to thrive are not only critical for their well-being during adolescence, but also for their physical and mental health in adulthood. Data shows us that 16.66% people are aged 10-19 years and half of all mental health conditions start by the age of 14 - which may escalate if left untreated. Globally, depression is one of the leading causes of illness and disability amongst adolescents. Moreover, suicide is the third leading cause of death in the age group of 15-19 years. In India, the suicide crisis in India’s schools and colleges is worsening (WHO,2018). According to a study by Bhattacharya(2017), in the three years since 2014, over 26,000 students killed themselves in India, as reflected in the latest data sent to the ministry of home affairs by all Indian states and union territories . The number for 2016 alone stood at 9,474—that’s one suicide every 55 minutes.



WHO report "Mental health and development: Targeting people with mental disability as a vulnerable group"

2. Mental health concerns of Adolescents -

Many prominent associations at micro and macro level have been toiling hard for spreading awareness regarding cause and prevention of Mental health concerns of adolescents. A look at various Mental health conditions in adolescents makes their pernicious effect on the later stages of an adolescent's life quite evident and are definitely a cause of concern for the intellectuals and the common man alike.

Emotional Disorders in Adolescence--
Depression affects about 20% of adolescents by the time they become adults. Other statistics about teen depression reflect that more than 8% of adolescents suffer from depression that lasts a year or more. Teen suicide is the third leading cause of death in youth 10-24 years of age in the United States. Teenage depression does not have one single definitive cause but rather several psychological, biological, and environmental risk factors. Depression occurs at a rate of about 2% during childhood and from 4%-7% during adolescence. This mental illness is a leading cause of health impairment (morbidity) and death (mortality). (Edwards 2018). In 2014, approximately 11.7% of adolescents between 12 and 17 years old and approximately 10% of young adults between 18–25 years old had a Major Depressive Episode in the previous year (National Survey on Drug Use and Health, 2015).

Closer at home, one in four children in the age group of 13-15 years in India suffer from depression, which affects 86 million people in South-East Asia region, as reported by the World Health Organization (WHO 2018). The total population of India was 1,311.1 million, of which, adolescent (13-15 years) population was 75.5 million, which is 5.8 per cent of total population. Of that, 39.8 million were boys and 35.7 million girls. Seven per cent adolescents were found to be "bullied" and they felt disturbed due to comments of their peers, family members or teachers. 25 per cent of adolescents were "depressed" and "sad or hopeless" while 11 per cent were "distracted" and had a hard time staying focused on their work most of times or always, the report said. Eight per cent adolescents faced "anxiety" or could not sleep because of being worried while a similar percentage of adolescents felt lonely most of times or always, it said, adding 10.1 per cent of adolescents in India had no close friends. The report said a "significant" number of students reported low levels of parental engagement, ranging from 15 per cent in Sri Lanka to almost one fifth students in India (Press Trust of India 2017).

Anxiety in Adolescents - Mayo Clinic (2018) cites that experiencing occasional anxiety is a normal part of life. However, people with anxiety disorders frequently have intense, excessive and persistent worry and fear about everyday situations. Anxiety is a normal human emotion and involves behavioral, affective, and cognitive responses to the perception of danger. (Bhatia 2018). It is considered to be excessive or pathological when it is out of proportion to the challenge or stress or when it results in significant distress and impairment.

Anxiety disorders are one of the most common disorders seen among children and adolescents. The prevalence of

anxiety disorders ranges from 4% to 20% (Krain et al. 2007). Common anxiety disorders among children are specific phobia, social phobia, generalized anxiety disorder, and separation anxiety disorder having mean prevalence rates between 2.2% and 3.6%. Agoraphobia (1.5%) and post-traumatic stress disorder (1.5%) are less prevalent, whereas panic and obsessive-compulsive disorders are relatively rare (i.e., below 1%) (Costello et al. 2004). Karande et al. (2018) found anxiety symptoms more in older children which was in contrast to European studies. Deb, Chatterjee and Walsh (2010), in a study of Anxiety among high school students in India found that anxiety was prevalent in the sample with 20.1% of boys and 17.9% of girls found to be suffering from high anxiety. More boys were anxious than girls ($p < 0.01$) (Mayo Clinic 2018).

Frustration, Anger and Irritability are landmark features of adolescence. The hormonal disharmony and frequent mood swings of this stage may be exaggerated by frustration which is a state of emotional stress characterized by confusion, annoyance and anger. Interruption to goal seeking behavior causes frustration. (Stagner, 1961). With the continued experience of failure to achieve one's goals and consequent non satisfaction, one experiences frustration (Pasricha, 2014). Low frustration tolerance occurs when a goal-oriented action is delayed or thwarted. (Esposito 2017)

Kenchappanava (2012), in a study found the adverse consequences of Frustration on the development of inferiority complex in adolescents. According to Psychology Today, "Anger disorders result primarily from the long-term mismanagement of anger, a process in which normal, existential anger grows insidiously over time into resentment, bitterness, hatred and destructive rage. A Harvard study found that nearly 1 in 12 teens has anger disorder. While most teens have a violent, angry outburst at some point during their adolescence, nearly 8 percent have regular violent outbursts that would fall into the category of a mental health disorder. Nearly two-thirds of adolescents (63.3%) reported lifetime anger attacks that involved destroying property, threatening violence, or engaging in violence. Of these, 7.8% met DSM-IV/CIDI criteria for lifetime IED. (McLaughlin, 2012).

Irritable mood, defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM) as "easily annoyed and provoked to anger," and irritability have been part of numerous DSM diagnoses since 1952 (Safer 2009). Children with high irritability and depressive/anxious mood and, to a lesser extent, with moderate irritability only had a higher suicidal risk during adolescence compared with children with low symptom levels. Early manifestation of chronic irritability during childhood, especially when combined with depressive/anxious mood, may be associated with an elevated risk for adolescent suicide (Orr, 2018).

Childhood behavioural Disorders – Conditions like **Attention-deficit/hyperactivity disorder (ADHD)** typically include symptoms in difficulty paying attention, hyperactivity and impulsive behavior. Some children with ADHD have symptoms in all of these categories, while others might have symptoms in only one (Mayo Clinic Staff). The percent of

children estimated to have ADHD has changed over time and its measurement can vary. The American Psychiatric Association states in the Diagnostic and Statistical Manual of Mental Disorders that 5% of children have ADHD (APA,2013). However, other studies in the US have estimated higher rates in community samples. In 2016, the estimated number of children and adolescents ever diagnosed with ADHD, according to parent report, was consistent with previous estimates from the National Survey of Children's Health. (Redesigned NSCH 2016).

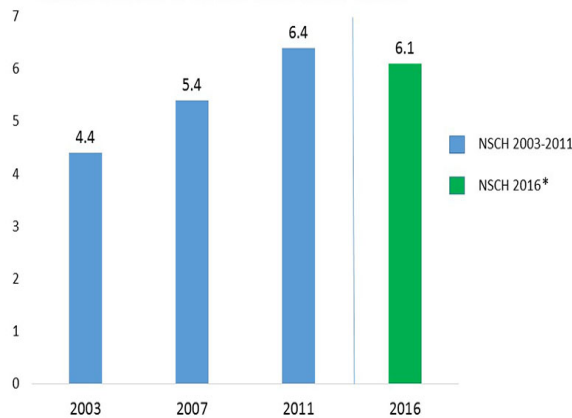


Fig. Estimated number of children who ever had ADHD, in millions (Redesigned NSCH 2016)

Mental health disorders are prevalent even more among **youths in the juvenile justice system**. A meta-analysis by Vincent and colleagues (2008) suggested that at some juvenile justice contact points, as many as 70 percent of youths have a diagnosable mental health problem. This is consistent with other studies that point to the overrepresentation of youths with mental/behavioral health disorders within the juvenile justice system (Shufelt and Coccozza 2006; Meservey and Skowrya 2015). However, prevalence varies depending on the stage in the justice system at which youths are assessed. In a nationwide study, the prevalence of diagnosed disorders increased the further that youths were processed in the juvenile justice system (Wasserman et al. 2010). While there appears to be a prevalence of youths with mental health issues in the juvenile justice system, the relationship between mental health problems and involvement in the system is complicated, and it can be hard to disentangle correlational from causal relationships between the two (Shubert and Mulvey 2014).

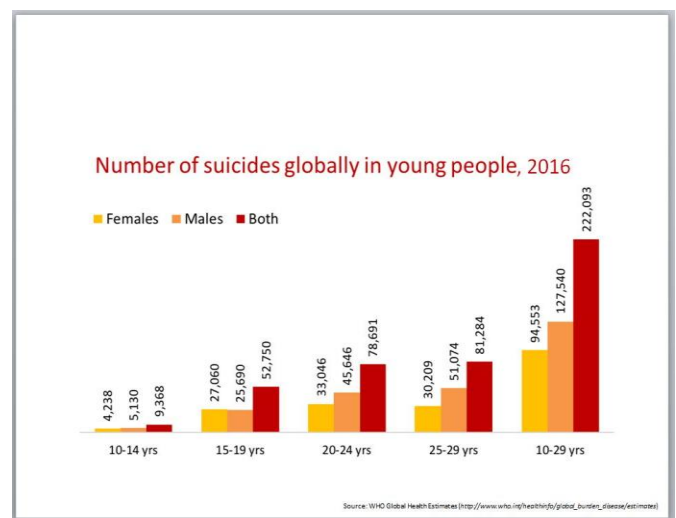
Eating disorders such as anorexia nervosa, bulimia nervosa and binge-eating disorder — are serious, even life-threatening, conditions. Eating disorders and subthreshold eating conditions are prevalent in the general adolescent population. Their impact is demonstrated by generally strong associations with other psychiatric disorders, role impairment, and suicidality. The unmet treatment needs in the adolescent population place these disorders as important public health concerns. (National Eating Disorders Association 2018).

According to Swanson(2011), lifetime prevalence rates of Anorexia Nervosa(AN), Bulimia Nervosa(BN)Binge Eating Disorder(BED) , subthreshold AN (SAN) and subthreshold BED (SBED) were 0.3%, 0.9%, 1.6%, 0.8%, and 2.5%, respectively. The 12-month prevalence rates of AN, BN, BED,

and SBED were 0.2%, 0.6%, 0.9%, and 1.1%, respectively, with 12-month to lifetime prevalence ratios of 57.9%, 72.0%, 56.0%, and 44.5%, respectively. Among adolescents with BN, 41.3% reported purging in their lifetime while the rest met criteria through non purging compensatory behaviors.

Psychosis - . Psychotic symptoms in children and adolescents can occur in the context of a bevy of psychiatric disorders other than schizophrenia (eg, depression, anxiety, attention-deficit/hyperactivity disorder, posttraumatic states, and autism spectrum disorders) or can be secondary to a wide variety of medical conditions.(Stevens et. al.,2014).Population-based surveys show that the prevalence of psychotic symptoms may be far greater than had been previously considered, with a meta-analysis suggesting a prevalence rate of 5%–8% in the general population (which is nearly 10 times higher than the prevalence of diagnosed psychotic disorders)(Van et al.2009).The risk of having at least 1 psychiatric disorder by age 16 years is much higher than point estimates would suggest.(Costello,2003). Prevalence rates of such symptoms may be even higher among young people. Since then, large, population-based studies surveying psychotic symptoms among adolescents have found rates of 9%–14% in interview-based studies (Bartels et.al.,2010,Horwood et.al.,2008) and rates greater than 25% in some studies using self-report questionnaires(Laurens et.al. ,2007, Kelleher et.al.,2011) This emerging body of research suggests that a sizable minority of young people experience psychotic symptoms. (Stevens 2013).

Schizophrenia is a chronic, often devastating, neuropsychiatric disorder associated with severe deficits in cognition, behavior, and social functioning (McClellan et.al.,2001).Its onset is generally between the ages of 14–35 years, with 50% of the cases diagnosed before the age of 25 years. Studies have shown that 90% of youth who commit suicide have a mental disorder, and up to 30% of those with schizophrenia will make a suicide attempt during their lifetime making monitoring young people with schizophrenia for suicide essential (Stevens, 2013).



Suicide Each year, approximately 800,000 people die by suicide worldwide (WHO, 2017). Whereas suicide is a leading

cause of death across all age groups, suicidal thoughts and behaviors among youth warrant particular concern for several reasons. First, the sharpest increase in the number of suicide deaths throughout the life span occurs between early adolescence and young adulthood (Nock et al., [2008](#); WHO, [2017](#)). Second, suicide ranks higher as a cause of death during youth compared with other age groups. It is the second leading cause of death during childhood and adolescence, whereas it is the tenth leading cause of death among all age groups (Centre for Disease Control and Prevention in US, [2017](#)). Third, many people who have ever considered or attempted suicide in their life first did so during their youth, as the lifetime age of onset for suicidal ideation and suicide attempt typically occurs before the mid-20s (Kessler, Borges, & Walters, [1999](#)). Finally, suicide death is preventable, with adolescence presenting a key prevention opportunity resulting in many more years of life potentially saved. By gaining a better understanding of how and why suicide risk emerges during youth, we can offer opportunities to intervene on this trajectory earlier in life (Cha 2017).

3. Risk Taking Behaviors

Approximately 22% of adolescents in the United States are estimated to have a mental health disorder (Merikangas et. al.,2010). The National Survey on Drug Use and Health (NSDUH, 2014) utilizes a nationally representative sample and found that 4.6% of adolescents met the criteria for substance use disorders (SUDs) (Epstein 2002). Rates of co-occurring MH disorders among adolescents with SUDs range from 50% to 71% (Grilo et al. 1996; Roehrich & Gold 1986; Armstrong & Costello 2002). risks. (Winstanley 2012).

Not only this,there are other areas of concern-in the United States, youth under age 25 account for nearly half of newly diagnosed sexually transmitted infections (STIs) annually, including HIV (CDC, 2005)

Another most common condition affecting their MH present among adolescents and young adults is problematic alcohol use and depressive symptoms. Problematic alcohol use increases progressively during adolescence and young adulthood (CBHSQ,2015) In 2014, 2.7% of 12–17 year-old adolescents and 12.3% of young adults 18–25 years old met criteria for an Alcohol Use Disorder (AUD). Heavy alcohol consumption in youth is associated with severe problems including suicide, motor vehicle accidents, accidental injuries, sexual transmitted diseases, sexual assaults, as well as impairments in prefrontal cortex functions such as memory and attention (Glasheen,2015). Furthermore, many adolescents and young adults who are heavy drinkers continue to exhibit alcohol-related problems in adulthood (NIDA,2007) and later develop an AUD (Jennison,2004). Underage drinking costs \$27 billion per year and a significant portion of these costs are due to lost productivity, youth violence (suicide, homicide, aggravated assault) and premature death (Pedrelli 2016).

4. Conclusion

Thus, promotion of Mental Health is imperative for an adolescent to grow into a healthy adult. Adolescence is a developmental period with a number of important transitions including puberty, shifting parental and peer support, dating, self-identity, and cognitive maturation(Steinberg, 2001) The consequences of not addressing adolescent mental health conditions extend to adulthood, they lead to impaired physical and mental health and also cuts down on overall development and opportunities to live fulfilling lives as adults Promotion of mental health and well-being helps adolescents in building resilience so that they can cope well in difficult situations or adversities. It is essential that any problem or hurdle faced by the adolescent be nipped in the bud at the adolescent stage itself which would help promote a healthier life for the individual.

References

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth edition: DSM-5*. Washington: American Psychiatric Association, 2013.
2. Bartels-Velthuis AA, Jenner JA, van de Willige G, et al. Prevalence and correlates of auditory vocal hallucinations in middle childhood. *Br J Psychiatry*. 2010;196(1):41–46. [PubMed] [Google Scholar]
3. Bhatia M S, Goyal A(2018). Anxiety disorders in children and adolescents: Need for early detection. *J Postgrad Med* 2018;64:75-6
4. Bhattacharya, Ananya. (2018, January). *In India, one student commits suicide every hour*. Quartz India. Retrieved from <https://qz.com/india/1174057/in-india-one-student-commits-suicide-every-hour/>
5. Camus, Catherine Le Galès. (2005) *Promoting Mental Health CONCEPTS ■ EMERGING EVIDENCE ■ PRACTICE - A Report by the W.H.O*. Retrieved from https://www.who.int/mental_health/evidence/MH_Promotion_Book.pdf
6. Center for Behavioral Health Statistics and Quality. Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health. 2015 (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from <http://www.samhsa.gov/data/>
7. Cha, Christine B. et al. (2017) *Annual Research Review : Suicide among youth – epidemiology, (potential) etiology, and treatment*. *Journal of Child Psychology and Psychiatry*, Volume 59, Issue 4. <https://doi.org/10.1111/jcpp.12831>. Retrieved from <https://onlinelibrary.wiley.com/doi/10.1111/jcpp.12831>
8. Costello EJ, Egger HL, Angold A. Developmental epidemiology of anxiety disorders. In Ollendick TH, March JS, editors. *Phobic and anxiety disorders in children and adolescents. A clinician's guide to effective psychosocial and pharmacological interventions*. New York: Oxford University Press; 2004. pp 61-91.
9. Costello EJ, Mustillo S, Erkanli A, Keeler G, Angold A. Prevalence and Development of Psychiatric Disorders in Childhood and Adolescence. *Arch Gen*

- Psychiatry*. 2003;60(8):837–844.
doi:10.1001/archpsyc.60.8.837
10. Deb S, Chatterjee P, & Walsh K Anxiety among high school students in India: Comparisons across gender, school type, social strata and perceptions of quality time with Parents. *Australian Journal of Educational & Developmental Psychology*. Vol 10, 2010, pp18 - 31
 11. Edwards, Dryden Roxanne. (2018). *Teen Depression*. Retrieved from https://www.medicinenet.com/teen_depression/article.htm#teen_depression_facts
 12. Esposito, Linda. (2017). *Frazzled: High Anxiety and Low Frustration Tolerance*. Psychology Today. Retrieved From <https://www.psychologytoday.com/intl/blog/anxiety-zen/201711/frazzled-high-anxiety-and-low-frustration-tolerance>
 13. Glasheen C, Pemberton MR, Lipari R, Copello EA, Mattson ME. Binge drinking and the risk of suicidal thoughts, plans, and attempts. *Addict Behav*. 2015 Apr;43:42–9. [PubMed] [Google Scholar]
 14. Horwood J, Salvi G, Thomas K, et al. IQ and non-clinical psychotic symptoms in 12-year-olds: results from the ALSPAC birth cohort. *Br J Psychiatry*. 2008;193(3):185–191. [PMC free article] [PubMed] [Google Scholar]
 15. Jennison KM. The short-term effects and unintended long-term consequences of binge drinking in college: a 10-year follow-up study. *Am J Drug Alcohol Abuse*. 2004;30(3):659–84. [PubMed] [Google Scholar]
 16. Karande S, Gogtay NJ, Bala N, Sant H, Thakkar A, Sholapurwala R. Anxiety symptoms in regular school students in Mumbai city, India. *J Postgrad Med* 2018;64:92-7.
 17. Kelleher I, Harley M, Murtagh A, et al. Are screening instruments valid for psychotic-like experiences? a validation study of screening questions for psychotic-like experiences using in-depth clinical interview. *Schizophrenia Bull*. 2011;37(2):362–369. [PMC free article] [PubMed] [Google Scholar]
 18. Kenchappanavar ,Rajeshwari. N.(2012) Relationship between Inferiority complex and Frustration in Adolescents IOSR Journal of Humanities and Social Science (JHSS) ISSN: 2279-0837, ISBN: 2279-0845. Volume 2, Issue 2
 19. Krain AL, Ghaffari M, Freeman J, Garcia A, Leonard H, Pine DS. Anxiety disorders. In: Martin A, Volkmar FR, editors. *Lewis's child and adolescent Psychiatry*. 4th ed. Philadelphia: Lippincott Williams and Wilkins; 2007. p. 538-48.
 20. Laurens KR, Hodgins S, Maughan B, et al. Community screening for psychotic-like experiences and other putative antecedents of schizophrenia in children aged 9–12 years. *Schizophr Res*. 2007;90(1–3):130–146. [PubMed] [Google Scholar]
 21. Mayo Clinic Staff. *Mental illness in children: Know the signs*. Mayo Clinic. Retrieved from <https://www.mayoclinic.org/healthy-lifestyle/childrens-health/in-depth/mental-illness-in-children/art-20046577>
 22. Mayo Clinic.(2018). *Anxiety Disorders*. Retrieved from <https://www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961>
 23. McClellan J, Werry J. American Academy of Child and Adolescent Psychiatry. Practice parameter for the assessment and treatment of children and adolescents with schizophrenia. *J Am Acad Child Adolesc Psychiatry*. 2001;40(suppl):4S–23S. [PubMed] [Google Scholar]
 24. Am Acad Child Adolesc Psychiatry. 2001;40(suppl):4S–23S. [PubMed] [Google Scholar]
 25. McLaughlin KA, Green JG, Hwang I, Sampson NA, Zaslavsky AM, Kessler RC(2012). Intermittent Explosive Disorder in the National Comorbidity Survey Replication Adolescent Supplement. *Arch Gen Psychiatry*. 2012;69(11):1131–1139. doi:10.1001/archgenpsychiatry.2012.592
 26. Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ... Swendsen, J. (2010). Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Survey Replication--Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980–989. doi:10.1016/j.jaac.2010.05.017
 27. Meservey, Fred, and Kathleen R. Skowrya. 2015. "Caring for Youth with Mental Health Needs in the Juvenile Justice System: Improving Knowledge and Skills." Research and Program Brief 2(2).
 28. National Eating Disorders Association. (2018). *Eating Disorders – Anorexia Nervosa*. Retrieved from <https://www.nationaleatingdisorders.org/learn/by-eating-disorder/anorexia>
 29. National Survey on Drug Use and Health -Center for Behavioral Health Statistics and Quality. Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health. 2015 (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from <http://www.samhsa.gov/data/>
 30. NIDA,2007. Monitoring the Future National Results on Adolescent Drug Use-Overview of Key Findings 2006. (NIH Publication No 07-6202) Vol. 2006. Bethesda, MD: National Institute on Drug Abuse; 2007. [Google Scholar]
 31. Nock, M. K., Borges, G., Bromet, E. J., Alonso, J., Angermeyer, M., Beautrais, A., ... Williams, D. (2008). Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *The British journal of psychiatry : the journal of mental science*, 192(2), 98–105. doi:10.1192/bjp.bp.107.040113
 32. Nordqvist, Christian. (2017, August 24). *What is Mental Health?* Retrieved from <https://www.medicalnewstoday.com/articles/154543.php>
 33. Orr M, Galera C, Turecki G, et al.(2018) Association of Childhood Irritability and Depressive/Anxious Mood Profiles With Adolescent Suicidal Ideation and Attempts. *JAMA Psychiatry*. 2018;75(5):465–473.
 34. Pasricha,A(2014) . A Comparative Study of Frustration Among Adolescents Boys And Girls In Relation To Their Certain Cognitive Attributes. IRJMSH Volume 5 Issue 2 International Research Journal of Management Sociology & Humanity Page 112
 35. PEDRELLI P. ET ALL. (2016). *ALCOHOL USE AND DEPRESSION DURING ADOLESCENCE AND YOUNG ADULTHOOD: A SUMMARY AND INTERPRETATION OF MIXED FINDINGS*. CURR ADDICT REP. MARCH,2016; 3(1): 91-97. DOI: [10.1007/s40429-016-0084-0](https://doi.org/10.1007/s40429-016-0084-0).
 36. Psychiatric Disorder, Comorbidity, And Suicidal Behavior In Juvenile Justice Youth Jonescriminal Justice And Behavior, Vol. 37 No. 12, December 2010 1361-1376 Doi: 10.1177/0093854810382751 © 2010 International Association For Correctional And Forensic Psychology
 37. Redesigned NSCH 2016: [Now an online and mail survey](#) external icon, estimate includes children 2-17 years of age.
 38. Safer, Daniel J. (2009). *Irritable Mood and the diagnostic and statistical manual of Mental Disorders*. *Child Adolesc Psychiatry Ment Health*. 2009; 3: 35. Published online 2009 Oct 24. doi: [10.1186/1753-2000-3-35](https://doi.org/10.1186/1753-2000-3-35)
 39. Schubert, Carol A., and Edward P. Mulvey. 2014. Behavioral Health Problems, Treatment, and Outcomes in Serious Youthful Offenders. *Juvenile Justice Bulletin*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention

40. Shufelt, J. & Coccozza, J. (2006). Youth with mental health disorders in the juvenile justice system: Results from a multi-state, multi-system prevalence study. (Research and Program Brief). Delmar, NY: National Center for Mental Health and Juvenile Justice. <http://www.ncmhjj.com/wp-content/uploads/2013/07/7.-PrevalenceRBP.pdf>
41. Stagner, R. (1961): *Psychology of Personality* (3rd Edition). New-York, McGraw Hill.
42. Steinberg L, Morris AS. Adolescent development. Annual Review of Psychology. 2001;52:83–110. [PubMed] [Google Scholar]
43. Stevens, J. R., Prince, J. B., Prager, L. M., & Stern, T. A. (2014). Psychotic disorders in children and adolescents: a primer on contemporary evaluation and management. *The primary care companion for CNS disorders*, 16(2), PCC.13f01514. doi:10.4088/PCC.13f01514
44. STEVENS, JONATHAN R. (2013). *PSYCHOTIC DISORDERS IN CHILDREN AND ADOLESCENTS: A PRIMER ON CONTEMPORARY EVALUATION AND MANAGEMENT*. THE PRIMARY COMPANION FOR CNS DISORDERS. 2014; 16(2). DOI: [10.4088/PCC.13F01514](https://doi.org/10.4088/PCC.13F01514) RETRIEVED FROM [HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC4116281/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4116281/)
45. Swanson SA, Crow SJ, Le Grange D, Swendsen J, Merikangas KR. Prevalence and Correlates of Eating Disorders in Adolescents: Results From the National Comorbidity Survey Replication Adolescent Supplement. *Arch Gen Psychiatry*. 2011;68(7):714–723. doi:10.1001/archgenpsychiatry.2011.22
46. Van Os J, Linscott RJ, Myin-Germeys I, et al. A systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis-proneness-persistence-impairment model of psychotic disorder. *Psychol Med*. 2009;39(2):179–195. [PubMed] [Google Scholar]
47. Vincent, Gina & Grisso, Thomas & Terry, Anna & M Banks, Steven. (2008). Sex and Race Differences in Mental Health Symptoms in Juvenile Justice: The MAYSI-2 National Meta-Analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*. 47. 282-90. 10.1097/CHI.0b013e318160d516
48. Wasserman Gail A. , Mcreynolds Larkin S. , Craig S. Schwalbe , Joseph M. Keating Shane A.(2010)
49. WINSTANLEY, ERIN L. ET AL. (2012). *ADOLESCENT SUBSTANCE ABUSE AND MENTAL HEALTH: PROBLEM CO-OCCURRENCE AND ACCESS TO SERVICES*. JOURNAL OF CHILD ADOLESCENTS SUBSTANCE ABUSE. JULY 1, 2012; 21(4): 310-322. DOI: [10.1080/1067828X.2012.709453](https://doi.org/10.1080/1067828X.2012.709453). RETRIEVED FROM : [HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC3923628/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3923628/)
50. World Health Organisation. (2014, August). *Mental health: a state of well-being*. Retrieved from https://www.who.int/features/factfiles/mental_health/en/
51. World Health Organisation. (2018, September 18). *Adolescent Mental Health*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>