

Rudolph's Pediatrics, 24<sup>th</sup> Edition >

## Chapter 88: Introduction to Pediatric Mental Health

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### MENTAL HEALTH IS “HEALTH”

Behavioral health is an integral component of children's health, lifetime well-being and adjustment, educational attainment, and ability to thrive in all functional domains. While historical medical perspectives contextualized pediatric mental health as one of myriad variables potentially affecting physical health, the contemporary evidence base unequivocally characterizes youth socioemotional well-being as predictive of, and inextricable from, overall health. Moreover, youth mental health risk and resilience factors are indisputably associated with the full spectrum of latent physical health outcomes when considering the intersection of medical illness and psychosocial or biological adversity.

The significance of emotional and behavioral health problems in pediatrics is underscored by the rising prevalence of mental health disorders in children and adolescents throughout the last 3 decades. This phenomenon is particularly striking when compared to older age groups' mental illness prevalence rates that have, in contrast, remained relatively stable. One in 5 youth now present with a serious and persistent mental health disorder, less than a third of those identified ever receive treatment, and for those receiving treatment, it is typically initiated 8 to 10 years after symptoms first surface. With half of all lifetime mental health disorders beginning by age 14 and 75% starting by age 24, mental health is unambiguously a pediatric issue.

Suicide, now considered a public health crisis, is the second leading cause of death in youth ages 10 to 24 years, accounting for 3 times more deaths than all childhood malignancies or heart conditions combined and more than 20 times the deaths attributable to diabetes in this age group. Similar to overall youth mental illness, pediatric suicide rates have increased significantly in the United States, nearly tripling between 2007 and 2017 among children ages 10 to 14 years. National surveillance data suggest that roughly 7-8% of adolescents attempt suicide each year, and the COVID-19 pandemic escalated rates of pediatric suicidal ideation over 50% in certain regions of the United States between 2020 and 2021. Non-suicidal self-injury (NSSI), like cutting and burning oneself without suicidal intent, is more common than suicide attempts with an increased estimated prevalence rate of approximately 17-18% of adolescents. More ominously, the number of completed suicides appears to be increasing in at least some pediatric populations. Starting in 2007, the rates of suicide for girls 10 to 14 increased 12.7% per year, compared with 7.1% for boys the same age. A similar trend was seen for teens 15 to 19, with rates of suicide increasing 7.9% for girls and 3.5% for boys.

The statistics regarding access to firearms are equally grave: 2020 was the first year in history that firearm-related injuries superseded accidents to become the leading cause of death in the zero to 19-year-old age group. And from 2019 to 2020, the relative increase in the rate of firearm-related deaths of all types (suicide, homicide, unintentional, and undetermined) among children and adolescents was 29.5%—more than twice the relative increase in the general population. Other mental health disorders, including adolescent depression, anxiety, eating disorders, and certain developmental disabilities, have also shown similar increases in prevalence over the past 3 decades.

### RISK FACTORS ASSOCIATED WITH PEDIATRIC MENTAL HEALTH PROBLEMS

The prevalence of mental health disorders increases substantially (to one-third of children) when youth are exposed to adverse childhood experiences (ACEs), which include physical, emotional, or sexual maltreatment, death of a loved one, or chronic or severe medical conditions. (For further discussion of ACEs, see [Chapter 92](#) on post-traumatic stress disorder). The COVID-19 pandemic contributed significantly to the increase in mental health issues among children and adolescents as a result of the numerous ACEs (especially traumas and losses) that youth encountered over the course of the pandemic. For example, national statistics show that anxiety and depression increased 4-fold among youth and young adults since the onset of the COVID-19 pandemic. In addition, national rates of suicidal ideation have doubled and emergency department visits for children's mental health needs have increased by one-third secondary to the public health crisis.

Racial, ethnic, and gender disparities contribute to disconcertingly unequal mental health conditions among youth of color when compared to their white counterparts. Nine percent of high-schoolers overall but 12% of Black students, 13% of students of two or more races, and 26% of American Indian or Native Alaskan high-schoolers had at least 1 suicide attempt between 2016 and 2021. Members of stigmatized groups (eg, youth of color) face group-specific stressors (eg, discrimination, racial trauma) that can exacerbate their already disproportionate exposure to general stressors (eg, higher rates of COVID-related deaths), thereby contributing to even greater mental health disparities. Long histories of racial and ethnic discrimination also create unique obstacles for youths' access to culturally responsive, trauma-informed care that can adequately address the environmental factors that greatly influence their mental health and well-being. Further, many LGBTQ+ youth are encountering unique mental health challenges. Among heterosexual high school students of all races and ethnicities, 6% attempted suicide; however, the rate increases to 23% for gay, lesbian, or bisexual students, often due to identity-based bullying and other forms of discrimination.

Outside of the preceding, additional social determinants of health have been found to increase the likelihood of mental health issues and reduce access to care in most pediatric populations. Economic uncertainty has had an outsized effect on youth and families experiencing financial challenges, consistently leading to increased anxiety for many. It is impossible for youth in poverty, whose parents lack secure employment, or in households with unsustainable residential cost burdens, not to feel the weight of their family's financial overwhelm. Youth who live in rural or under-resourced communities may experience additional anxiety from such stressors. Seventeen percent of children of all backgrounds live in poverty, but among African American and American Indian children, the ratio is 32% and 31%, respectively. Twenty-seven percent of all children have parents lacking secure employment, but that number goes up to over 40% for American Indian and African American children; Latino children also face a significantly higher burden in these 2 categories than their white counterparts. Finally, uninsured children are less likely in general to have access to any mental health services, preventing them from securing crisis support, let alone early identification and treatment that could circumvent crises altogether.

## LONG-TERM EFFECTS OF PEDIATRIC MENTAL HEALTH PROBLEMS

There is growing significance placed on the profound detrimental life course outcomes, as well as the cost to both the individual and to society, that the burden of youth mental illness imparts on well-being across the lifespan. Evidence highlights how mental illness results in lower educational achievement and significantly increased risk of incarceration, violence toward both self and others, and poor overall health. From a medical standpoint, individuals with depression have a 40% higher chance of developing cardiac disease, hypertension, stroke, and diabetes than the general population. Moreover, links identified between mental illness and associated maladaptive lifestyle behaviors suggest pediatric mental health issues significantly increase the risk of substance use and dependency. Though causation cannot be implied between serious mental illness and substance abuse, the correlation of such comorbidities highlights the importance of early, consistent screening of pediatric populations for mental health and substance use disorders to increase the likelihood of early intervention and reduce deleterious long-term outcomes. Ultimately, certain mental health diagnoses can lead to chronic psychopathology and reduce life expectancy by up to 20 years, reinforcing the notion that there is no "health" without mental health.

## PEDIATRICIANS AS KEY GATEKEEPERS FOR ACCESS TO MENTAL HEALTH CARE

In light of the increasing rates of youth mental illness and barriers to identification and treatment, pediatricians are uniquely positioned to promote healthy social-emotional development of youth and to detect and address their mental health and substance use conditions. Moreover, a pronounced behavioral and mental health workforce shortage has magnified historical impediments to receiving care when a mental health issue is identified. Though different models have been offered to better support this frontline shift to redefine primary care as both a medical and mental health home for youth and their families, integrated behavioral health has generated the most favorable outcomes across clinical, fiscal, and health equity arenas. Integrated behavioral health care is best defined as a treatment strategy where behavioral and physical health clinicians work together to address the complex needs of their patients. Since primary care is the most common setting where pediatric illnesses are detected, treatment is initiated, and specialty referrals originate, it stands to reason that a primary care transformation allowing for more comprehensive front line whole-healthcare delivery to youth is warranted.

The Collaborative Care Model (CoCM) is an evidence-based strategy for the integration of physical and behavioral health treatment in primary care or other physical health settings. Through systematic and structured consultation, a primary care provider leads a team of professionals, including a consulting psychiatrist and a behavioral healthcare manager, all working together to coordinate care and ensure access to the best available treatment for each patient's needs. The team implements a measurement-guided care plan based on evidence-based practice guidelines and focuses particular attention to patients not meeting their clinical goals. CoCM effectively leverages scarce psychiatric expertise, is financially sustainable with specially

designated billing codes, may be delivered through virtual treatment modalities, reduces behavioral health stigma, mitigates racial/ethnic treatment disparities, and is extensively evidence-based. To date, more than 90 randomized controlled trials corroborate the effectiveness of CoCM across numerous settings, populations, and diagnoses. Further, CoCM has been demonstrated to be feasible for real-world implementation in under-resourced and rural settings.

Any model of integrated or collaborative care should include measurement-based care (MBC). MBC is a systematic approach, using repeated, validated measures to track symptoms and outcomes in the clinical setting. Abundant evidence has shown that use of repeated, validated rating scales will improve outcomes of mental health and substance use treatment, just as the use of repeated measurement of other metrics such as blood pressure and blood sugar, for example, improves outcomes in care for other health conditions. Potential outcome improvements are in the range of 20% to 60%. MBC can both inform clinical decision-making for individual patients, and—by aggregating data from repeated outcome measurement—be used to track and improve quality of care across patient panels, practices, systems, and plans.

## HOW TO USE THE INFORMATION IN THIS SECTION

Integrating mental health care into general healthcare settings places pediatricians in a key position to effectively meet the mental health needs of children. Yet studies consistently find that pediatricians feel uncertain of their own skills, fundamental knowledge, and practical tools needed to address mental health problems in their practices. A random sample of 1600 members of the American Academy of Pediatrics concluded that pediatricians feel both responsible and comfortable assessing and managing attention-deficit/hyperactivity disorder (70% of respondents), yet less than one-third of those sampled felt equally comfortable managing other mental health conditions. A study of recently graduated pediatricians points out that additional training in mental health and developmental pediatrics could allow pediatricians to assume a larger role in identifying and providing first-line treatment for the most common mental health disorders in a variety of settings, from stand-alone pediatric practices to integrated care models.

The Pediatric Mental Health section of this book describes the mental health issues that pediatricians are most likely to encounter among their patients including depression, anxiety, suicide risk, behavior disorders, psychosis, posttraumatic stress, and prolonged grief disorder. The chapters are designed to help pediatricians gain comfort and familiarity regarding (1) the identification of various mental health disorders, including their prevalence and developmental manifestations; (2) the use of common, evidence-based interventions to treat these disorders; and (3) recognition of when a referral to a mental health professional may be necessary.

In sum, mental health is key to health. Pediatricians can play a vital role in identifying and assessing pediatric mental health disorders, addressing the intersection of mental and physical health in youth, and ensuring that any child suffering from mental health problems receives access to best practice, evidence-based care.

## SUGGESTED READINGS

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