



## The pivotal role of mental health in child and adolescent development<sup>☆</sup>

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### ABSTRACT

Mental health in childhood and adolescence is a complex and evolving concept that goes far beyond the absence of mental illness. It involves achieving critical developmental and emotional milestones, building strong social skills that foster positive relationships, and cultivating resilience through effective coping strategies for life's challenges. Recognizing mental health as a dynamic process, this view underscores its continuous evolution as young people grow and interact with their surroundings.

This commentary is prepared by the coordinators of the meeting on the importance of promoting child mental health, held on 9 November 2024 in Piazzola sul Brenta, Padua, Italy. The event was promoted and supported by the GE Ghirardi Foundation in collaboration with the Union of National European Pediatric Societies and Associations (EPA-UNEPSA), as part of the global initiatives marking World Mental Health Day 2024.

The initiative seeks to raise awareness—among healthcare professionals, educators, policymakers, and the wider public—about the essential role of mental health in the overall development of children and adolescents. The commentary provides a concise overview of the key determinants that support a healthy transition to adulthood and highlights the pressing need to protect and nurture the mental well-being of young people during this critical stage of life.

### Introduction

Mental health during childhood and adolescence is a multifaceted construct that extends beyond the mere absence of psychological disorders.<sup>1</sup> It encompasses the successful attainment of developmental and emotional milestones, the acquisition of healthy social skills that facilitate positive interactions, and the development of effective coping mechanisms to navigate life's inevitable challenges.<sup>2</sup> This perspective recognizes mental health as a dynamic process, evolving as children grow and interact with their environment. Crucially, mental health is not solely defined by the absence of a diagnosable condition; rather, it embodies a state of overall well-being and the inherent capacity to thrive in diverse settings, including the home, school, and broader community.<sup>3</sup> A multitude of interconnected factors shape a child's mental

health trajectory, including the quality of their relationships with family members and within their community, the availability of opportunities for personal growth and development, and the encompassing environmental circumstances that influence their daily lives.<sup>1</sup> This article is authored by the coordinators of the meeting on the importance of promoting child mental health, held in Piazzola sul Brenta, Padua, Italy, on 9 November 2024. The event was organized and supported by the GE Ghirardi Foundation, in collaboration with the Union of National European Pediatric Societies and Associations (EPA-UNEPSA), as part of the global initiatives dedicated to World Mental Health Day 2024.

Its primary aim is to raise awareness among professionals involved in the promotion of mental health in children and adolescents—as well as among the broader civil society—regarding the critical importance of

**Abbreviations:** EPA-UNPSA, European Pediatric Association-Union of National European Pediatric Societies and Associations (EPA-UNEPSA); ACEs, Adverse Childhood Experiences; PCEs, Positive Childhood Experiences.

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safeguarding the mental well-being of minors. The article offers a brief overview of the key factors that contribute to guiding children and adolescents through a healthy transition into adulthood. It emphasizes the urgent need to protect and nurture the mental well-being of young individuals during this formative period of development.

### **The role of pediatrics in the mental development of the individual**

Pediatrics plays a crucial role in the mental development of the individual, beginning from the earliest stages of life. In this field, pediatricians are responsible for monitoring and promoting various aspects that are vital to a child's cognitive, emotional, and social growth. Their work encompasses early detection of developmental delays, guidance for healthy behavioral patterns, and support for family dynamics that foster secure attachment and resilience.

This role becomes even more critical when working with vulnerable or fragile children—such as those with chronic illnesses, neurodevelopmental disorders, or adverse early life experiences—where timely and targeted pediatric interventions can significantly influence long-term outcomes. Through regular assessments, preventive care, and collaboration with other specialists, the pediatrician acts as a key figure in ensuring that each child's potential for mental development is nurtured and protected.

### **Defining child and adolescent mental health and establishing its importance**

The World Health Organization provides a comprehensive definition of mental health as a state of well-being in which an individual understands and can leverage their own abilities, possesses the capacity to manage the typical stresses encountered in life, can engage in productive work, and feels empowered to contribute meaningfully to their community.<sup>4</sup> This definition is particularly relevant to adolescents, emphasizing their developing sense of self and their increasing role in society. In recent years, increasing attention has been given in the pediatric field to the diagnosis, treatment, and proactive prevention of mental health disorders affecting young individuals and their families, using a multidisciplinary approach to address the complex emotional, cognitive, behavioral, and social dimensions of their lives.<sup>5</sup> Healthy development, in its truest sense, ensures in fact that children of all abilities and backgrounds, including those with special health care needs, are afforded the opportunity to grow up in nurturing home environments where their social, emotional, and educational needs are consistently and effectively met. Both childhood and adolescence represent exceptionally critical periods in the lifespan for the establishment and cultivation of mental health, laying a vital foundation that influences well-being throughout life. Globally, a significant proportion of adolescents, estimated at approximately one in seven, experience mental health conditions, a statistic that underscores the widespread nature of these challenges.<sup>1,4,6</sup> Alarmingly, a substantial number of these conditions remain unrecognized and, consequently, untreated, highlighting a critical gap in access to care and support. Mental health is increasingly understood as an inherently positive state, extending beyond the mere absence of distress to encompass a rich tapestry of positive psychological, emotional, and social well-being that contributes to a fulfilling life.<sup>7</sup> Challenges to mental health during these formative years can significantly hinder children from realizing their fundamental rights and achieving their full developmental potential across various domains. Fundamentally, mental health is now recognized as an essential and integral component of overall health and well-being, holding equal importance to physical health for both children and adults.<sup>4</sup>

The understanding of child and adolescent mental health has broadened considerably, moving from a focus primarily on the absence of illness to a more encompassing view that prioritizes positive functioning, effective coping mechanisms, and overall satisfaction with life.

This evolution acknowledges that mental health is not a static state but a dynamic process influenced by a multitude of factors.<sup>7</sup> Despite this increased understanding and recognition of its significance, mental health conditions continue to affect a substantial number of children and adolescents worldwide, with a concerning proportion remaining undiagnosed and without access to necessary treatment. This gap between need and service highlights the urgency of addressing mental health as a critical public health priority during these formative years.<sup>7,8</sup>

The significance of mental health in childhood and adolescence extends far beyond the individual, impacting educational outcomes, social interactions, and even the broader goals of global development. Good mental health empowers young people to learn effectively, build strong relationships, and navigate the complexities of life with resilience. Ensuring mental health during these formative years is not only crucial for individual well-being but also lays the groundwork for a healthier and more productive adulthood, contributing to the overall strength and well-being of communities and societies. The early identification of mental health challenges and the provision of timely interventions are essential to prevent more severe and long-lasting problems, underscoring the fundamental importance of prioritizing mental health as a cornerstone of healthy child and adolescent development.<sup>1,9</sup>

### **The foundational role of mental health in early childhood (Infancy to preschool)**

The period spanning from infancy through the preschool years represents a remarkably sensitive and formative phase in the development of mental health.<sup>10</sup> This early stage is characterized by rapid and profound brain growth, laying the essential groundwork for future emotional, social, and cognitive functioning. The first thousand days of a child's life are particularly critical, serving as a prime window for cognitive development and the provision of early stimulation, both of which are intrinsically linked to the establishment of mental and emotional well-being. The science of child development has consistently demonstrated that the foundations for sound mental health are established early on, with a child's experiences, particularly their relationships with primary caregivers, relatives, and eventually peers, actively shaping the intricate architecture of their developing brain.<sup>11</sup>

The interplay between a child's inherent genetic predispositions and the myriad of positive or potentially harmful environmental influences they encounter during the prenatal period and the initial two to three years of life plays a pivotal role in determining the strength and stability of their mental health foundation.<sup>4</sup> Positive environmental factors during this crucial time include the presence of consistent, stable, and responsive relationships with caregivers, both within the home and in early childhood education settings. A safe home environment, free from complicated interpersonal relationships and harmful stuffs, along with ample opportunities for outdoor play in green spaces, contributes significantly to healthy mental development. Conversely, exposure to a negative family environment and harmful environmental influences—such as air or water pollution, limited access to safe play areas, or a lack of nutritious food—can undermine this foundation and increase a child's vulnerability to mental health challenges. Furthermore, early childhood is a critical period for the emergence and development of essential self-regulation skills, which are fundamental for managing emotions, controlling impulses, and navigating social interactions throughout.<sup>1,12</sup>

The rapid brain development that occurs during early childhood creates a unique period of heightened sensitivity to environmental and relational factors. Positive experiences and nurturing relationships act as crucial building blocks for mental health, fostering resilience and promoting healthy emotional and social development. Conversely, adverse experiences during this time can have lasting negative effects, increasing a child's vulnerability to mental health challenges later in life. Recognizing and addressing the mental health needs of infants and preschoolers is therefore essential for laying a strong foundation for their

future well-being.<sup>6</sup>

Mental health in early childhood exerts a profound influence on virtually every aspect of a child's developing self. It significantly impacts their emerging behavior patterns, their innate capacity for learning and absorbing new information, the gradual development of their emotional intelligence, and their ability to acquire and refine essential social skills that facilitate positive interactions with others. Establishing a robust foundation of mental health during these early years is not merely beneficial but essential for enabling children to mature into happy, well-adjusted, and highly functioning adults, equipped with the resilience and emotional stability necessary to navigate the complexities of life effectively.<sup>1,13</sup> Healthy early childhood development is a holistic process, encompassing not only physical growth but also the equally important domains of socio-emotional, language, and cognitive development, all of which are intricately interwoven and contribute to a child's overall sense of well-being. Ensuring the healthy progression of socio-emotional skills during these early years, in conjunction with advancements in other developmental areas, directly contributes to safeguarding a child's overall well-being and fostering strong mental health, ultimately empowering them to realize their full potential throughout their entire life course. Moreover, positive mental health established early in life appears to provide a robust foundation that not only supports the development of positive and fulfilling interpersonal relationships in later years but also contributes significantly to lifelong mental and physical health, underscoring the enduring benefits of early well-being.<sup>14</sup> The formation of secure attachment relationships with primary caregivers during infancy and early childhood is absolutely vital for a child's ability to develop trust in others, effectively regulate their own emotions, and engage in healthy and reciprocal interactions with the world around them. Furthermore, engaging in developmentally appropriate play, particularly in interactions with parents and peers, offers a unique and invaluable opportunity to foster the development of crucial social-emotional, cognitive, language, and self-regulation skills, all of which are essential for building strong executive function abilities and promoting the development of a prosocial brain.

The interconnectedness of mental health with all other developmental domains during early childhood cannot be overstated. A child's emotional well-being acts as a central catalyst, positively influencing their physical health, fostering their social competence, enhancing their cognitive abilities, and laying a strong groundwork for healthy relationships and lifelong well-being. Prioritizing and nurturing mental health from the earliest stages of life is therefore paramount to ensuring optimal development across all areas of a child's growth.<sup>15</sup>

Given the profound impact of early experiences on lifelong mental health, the importance of early intervention cannot be overstated. The neurodevelopmental roots of many common mental health problems can be traced back to these early years, highlighting the potential for timely intervention to address underlying vulnerabilities before they become more entrenched. Implementing early intervention strategies allows for the provision of appropriate support and targeted treatment during this critical developmental period, effectively minimizing the potential for long-term negative impacts associated with mental health issues.<sup>1,14</sup> Preventing early childhood dysregulation, which refers to difficulties in managing emotions and behaviors, can have a profound and positive impact on overall health, disease prevention, and the development of human capital across the entire lifespan. Early identification of mental health concerns in children, ideally before they even enter school, may offer a significant opportunity to prevent future academic failure, reduce behavioral disruptions in the classroom, decrease the likelihood of delinquency, and mitigate the emergence of other mental health problems that could potentially persist into their adulthood.<sup>1,14</sup>

Recognizing and addressing mental health vulnerabilities as early as possible in childhood, through targeted early intervention programs, holds immense promise for mitigating risks, promoting positive developmental trajectories, and potentially preventing the onset or reducing

the severity of more significant mental health challenges later in life. This proactive approach not only alleviates immediate distress but also builds a stronger foundation for long-term mental health and well-being, ultimately fostering a more successful and fulfilling life course.

### Mental health in middle childhood (Ages 6–12)

As children transition into middle childhood, encompassing the ages of approximately six to twelve years, their mental health continues to play a vital role in shaping their overall development and well-being. During this stage, children face increasing academic demands, navigate more complex social dynamics, and further refine their emotional regulation skills. Their mental health significantly influences their ability to succeed in these crucial areas.<sup>16</sup>

A child's mental health during middle childhood has a direct and substantial impact on their academic journey. It affects their capacity to concentrate in the classroom, their ability to effectively learn and retain new information, and their overall engagement in educational activities, both within the formal school setting and in extracurricular pursuits. Research has shown a notable connection between early behavioral and mental health struggles, even as early as three years of age, and lower levels of academic performance later in childhood, specifically around the age of twelve.<sup>10,16</sup> Furthermore, mental health difficulties experienced at the age of twelve have been linked to a greater likelihood of teenagers not completing high school or becoming ineligible for higher education opportunities due to persistent academic challenges.<sup>1,4,16</sup> Conversely, children who receive appropriate mental health support are generally better positioned to focus their attention effectively, retain information presented in educational settings, and ultimately achieve higher levels of academic success, allowing them to fully realize their learning potential. Difficulties with emotional regulation, which can manifest as increased frustration, difficulty managing emotions, or disruptive behavior in the classroom, can also significantly hinder a child's ability to engage in learning and achieve their academic goals.<sup>17,18</sup>

The quality of a child's mental health during middle childhood also profoundly influences their social interactions and peer relationships. Children who have developed effective strategies for managing their emotions tend to experience more positive interactions and generally get along better with their peers in various social settings. Conversely, difficulties in emotional regulation can unfortunately lead to social rejection by peers, potentially isolating children who struggle with managing their feelings and behaviors in socially acceptable ways. Children who receive the necessary mental health support are generally better equipped to develop and maintain positive and healthy relationships with their peers, fostering a crucial sense of belonging and social connection. Research has indicated a strong association between positive peer relationships during middle childhood and more positive mental health outcomes, suggesting a reciprocal and reinforcing connection between a child's social well-being and their psychological health.<sup>19,20</sup> Moreover, peer support experienced during these middle years can act as a protective factor, potentially buffering against the development of negative mental health outcomes and providing a valuable sense of resilience when facing various challenges.

Middle childhood is also a critical period for the continued development and refinement of emotional regulation skills. Learning to effectively regulate one's emotions is a complex process that involves the integration of attention, planning, cognitive understanding, and language skills to identify and express feelings. Children acquire these essential skills at varying rates, influenced by factors such as their inherent temperament, the environment in which they are raised, and the guidance they receive from caregivers. Parents, teachers, and other significant adults in a child's life play a vital role in actively helping them learn and develop effective strategies for managing their feelings and emotional responses in healthy ways. The ability to manage emotions effectively is not only crucial for navigating social interactions but

is also significantly linked to academic achievement, overall well-being, and mental health throughout childhood and adolescence.<sup>17</sup> Children who do not develop adequate skills for mastering their emotional responses may face ongoing challenges in their relationships, their academic performance, and their overall mental health. Difficulties in emotional regulation during this stage have also been associated with an increased risk of problems such as aggression and anxiety.<sup>7</sup>

Mental health during middle childhood is a critical determinant of a child's success in academics, their ability to form and maintain healthy peer relationships, and their ongoing development of essential emotional regulation skills. Supporting a child's mental well-being during these years lays a vital foundation for their continued growth and development into healthy and well-adjusted adolescents and adults.<sup>17</sup>

### **Navigating adolescence: mental health as a cornerstone of development**

Adolescence, a unique and transformative period spanning roughly from ages 13 to 18, presents a distinct set of mental health challenges and considerations. This stage is characterized by rapid physical maturation, significant emotional fluctuations, and evolving social dynamics, all of which can profoundly impact an individual's psychological well-being. Adolescents often grapple with a multitude of novel stressors, including navigating increasing academic pressures, exploring their identity, and navigating complex peer relationships, which can contribute to heightened vulnerability to mental health problems. Globally, mental health conditions represent a substantial burden of disease for adolescents, affecting a significant proportion of this age group.<sup>21</sup>

Emotional disorders, particularly anxiety and depression, are prevalent during adolescence, with anxiety tending to be more common among older teenagers and depression also affecting a considerable number. Tragically, suicide stands as a leading cause of death among adolescents worldwide, underscoring the critical need to address mental health challenges during this vulnerable time. Furthermore, research indicates that many mental health disorders that manifest in adulthood have their initial onset during adolescence, highlighting the importance of early identification and intervention during these formative years. Adolescence is also often marked by a period of intense emotional and psychological exploration, with young people experiencing a wide range of highs and lows as they strive to understand themselves and their place in the world.<sup>17,18</sup>

Mental health during adolescence exerts a significant influence on an individual's ability to form meaningful and lasting relationships with peers and family members, as well as their capacity to ultimately reach their full potential across various aspects of their lives. Adolescents who are struggling with mental health conditions are often particularly susceptible to social exclusion, various forms of discrimination, and the pervasive effects of stigma, which can unfortunately create further barriers to seeking help and negatively impact their overall well-being. Peer relationships take on an increasingly vital role during adolescence, often serving as a primary source of emotional support, validation, and social connection as teenagers navigate their evolving identities and interpersonal dynamics. Cultivating positive peer relationships during this time plays a crucial role in fostering emotional and mental well-being, providing a much-needed sense of belonging, acceptance, and camaraderie that contributes significantly to overall psychological health. Conversely, experiencing difficulties with peer relationships during adolescence can have detrimental effects on their overall well-being, increasing the risk of developing mental health conditions such as depression and anxiety. The advent and widespread use of social media platforms present a complex landscape for adolescent mental health and social integration, offering potential benefits such as facilitating connections and providing support for some individuals, while also posing risks related to cyberbullying, the pressure of unrealistic

social comparisons, and feelings of isolation for others.<sup>17,18,19</sup>

Mental health problems experienced during adolescence can significantly affect an individual's ability to attend school regularly and to effectively engage with their academic work<sup>22,23</sup>, potentially impacting their educational attainment and future opportunities.<sup>24,25</sup> These challenges are also associated with an increased likelihood of engaging in risk-taking behaviors, such as substance use, and experiencing various forms of physical ill-health, further compromising their overall well-being. Poor mental health during adolescence can negatively impact an individual's decision-making abilities and their overall physical health, potentially creating a cycle of vulnerability and compromised well-being. Adolescents who are struggling with mental health problems may face an elevated risk of substance use and involvement in violence, highlighting the potential for negative behavioral outcomes. Importantly, mental health problems that emerge during adolescence can have long-lasting effects that extend well into adulthood, potentially impacting various aspects of their lives, including their relationships, career paths, and overall quality of life.<sup>24,25,26</sup>

Adolescence is a critical juncture in human development where mental health serves as a foundational element influencing identity formation, social integration, and overall well-being. The unique challenges and vulnerabilities of this period necessitate focused attention and support to ensure healthy psychological development and a successful transition into adulthood.

### **The intertwined nature of mental and physical health in children**

The health and well-being of children and adolescents are not neatly divided into separate categories of mental and physical health; rather, these two aspects are intricately linked and exert a significant influence on each other. This interconnectedness underscores the importance of adopting a holistic perspective when considering the overall health of young people. Mental and physical health have a complex and interactive relationship, with each impacting how children think, feel, and act, both internally and in their interactions with the world around them.<sup>27</sup>

Mental health difficulties experienced by children can often manifest in tangible physical symptoms. For instance, children struggling with anxiety or stress may experience short-term physical problems such as headaches and muscle pains. Furthermore, mental health challenges in childhood have been linked to a higher risk of developing chronic physical diseases, experiencing disruptions in sleep patterns, and encountering digestive and malnutrition issues, indicating a deeper and more long-lasting connection between psychological and physiological well-being.<sup>27,28</sup> Conversely, a child's physical health can also significantly influence their mental well-being. For instance, a child dealing with a chronic illness or physical limitation may experience low mood or feelings of isolation, which can negatively impact their mental health. Research has also indicated an association between mood disorder diagnoses in children and adolescents and higher rates of infectious diseases, respiratory problems, and weight issues, further illustrating the close interplay between mental and physical health in young individuals.<sup>29</sup>

The experience of stress, particularly chronic stress, can have significant repercussions on a child's physical health. Prolonged stress can negatively impact growth patterns, thyroid function, and metabolic processes, highlighting the physiological consequences of psychological distress. Elevated levels of cortisol, a key stress hormone, can suppress the production of growth hormone and other vital hormones necessary for healthy development. Early-life adversities and chronic stress experienced during childhood and adolescence have been consistently linked to long-term negative physical and mental health outcomes that can persist throughout an individual's lifespan. Stress can also impair the normal development of a child's brain and nervous system, potentially leading to long-term vulnerabilities in their stress response and overall health. Toxic stress, resulting from prolonged and severe adversity without adequate support, can disrupt the development of the brain's

architecture and other vital organ systems, ultimately increasing the lifelong risk for both physical and mental health disorders.<sup>27,28,29</sup> In this regard, various forms of abuse, neglect, and household dysfunction, may be described as Adverse Childhood Experiences (ACEs), which represent a significant intersection between mental and physical health.<sup>30,31</sup> These early traumatic events have been variously linked to a higher risk of developing both mental health conditions and chronic physical illnesses, such as cancer and heart disease, later in life.

### Emotional development and mental health

Emotions are fundamental to the human experience, serving as adaptive psychological processes that play a crucial role in supporting an individual's survival and overall well-being. From a developmental perspective, the ability to understand, express, and regulate emotions is intrinsically linked to mental health. However, experiencing heightened negative emotions, whether as a response to specific stressors or as a more enduring aspect of temperament, has been associated with an increased risk for psychological problems in children and adolescents.<sup>32</sup>

The development of emotional regulation skills is a complex process that unfolds throughout childhood and adolescence. Infants begin learning to regulate their emotions through their interactions with caregivers, who provide soothing and responsive care. As children grow, their ability to manage and express emotions becomes more sophisticated, influenced by factors such as the development of executive functions and language skills. By around the age of seven, children typically acquire a range of basic emotion regulation strategies, including seeking help, avoiding triggers, redirecting attention, suppressing impulses, and problem-solving. Over time, emotional regulation becomes more self-directed, relying increasingly on internal cognitive strategies. However, difficulties in developing effective emotion regulation skills can have negative consequences, potentially leading to increased aggression, anxiety, and academic challenges. Furthermore, children who do not learn to manage difficult feelings effectively may be more prone to mental health problems in adulthood.<sup>32,33</sup>

Mental health plays a pivotal role in shaping a child's capacity for healthy emotional expression. Creating a safe and supportive environment where children feel comfortable discussing their feelings is crucial for fostering a healthy emotional outlet and promoting positive mental well-being. Children who are socially and emotionally healthy are generally able to recognize, label, and manage their own emotions in appropriate ways. An individual's mental health status also influences their ability to adopt health-promoting behaviors, including the capacity to regulate emotional responses to both internal and external stressors. Encouraging children to pause and reflect on their feelings can help them develop greater emotional awareness and promote the expression of their emotions in constructive rather than maladaptive ways.

The development of emotional competence, encompassing the ability to understand, express, and regulate emotions effectively, is a cornerstone of mental health in children. Supporting children's emotional development from an early age is essential for their overall psychological well-being and their ability to navigate the social and emotional complexities of life.<sup>34</sup>

### Social development and mental well-being

Social development and mental well-being are inextricably linked in children and adolescents.<sup>35</sup> The ability to form positive relationships, interact effectively with others, and navigate social situations plays a crucial role in supporting mental health throughout these formative years. Conversely, mental health challenges can significantly impact a child's social development and their capacity to build and maintain healthy relationships.

The acquisition of strong social skills is fundamental to a child's mental health. Good mental health enables children to develop socially,

**Table 1**  
Indicators of psychological distress in children and adolescents.

Age groups	Indicators of psychological distress
Infancy (0–3 years)	Signs of distress may include excessive crying that is difficult to soothe, significant changes in sleeping and eating patterns, increased irritability, a regression to earlier behaviors such as thumb-sucking or bedwetting, and heightened clinginess towards caregivers. Other indicators can be a refusal to eat, a lack of interest in cuddling, and a failure to smile or engage with familiar adults.
Preschool-aged children (3–5 years)	Common signs of psychological distress can involve increased clinginess, a return to earlier behaviors, intense and overwhelming fears, frequent and severe temper tantrums, difficulty separating from caregivers, delays in language development, and a lack of interest in playing with peers.
Middle childhood (6–12 years)	Indicators of distress may include increased irritability or mood swings, social withdrawal and isolation, changes in sleep and appetite, frequent complaints of stomachaches or headaches, a decline in school performance, loss of interest in enjoyable activities, increased anxiety or worry, and persistent disobedience or aggression.
Adolescence (13–18 years)	Signs of psychological distress can manifest as persistent sadness or feelings of hopelessness, withdrawal from friends and family, academic difficulties, changes in sleep and appetite, overwhelming fears, difficulty concentrating, severe mood swings, engagement in risk-taking behaviors, self-harm, and expressing thoughts of suicide.

fostering their ability to form friendships, build connections within their communities, and engage in positive interactions with peers and adults. The quality of peer relationships can also act as a protective factor against traumatic stress during adolescence, highlighting the resilience-promoting aspect of positive social connections. These social skills are essential for a child's emotional well-being and contribute to successful social interactions. Research suggests that poor social skills can lead to increased stress and feelings of loneliness, both of which can negatively affect mental and even physical health. Deficits in social skills have been associated with poorer overall mental and physical health outcomes, underscoring the importance of social competence for well-being.<sup>34</sup>

A child's mental health status significantly influences the development of their social skills and their ability to interact effectively with others. Without early diagnosis and appropriate treatment, mental health conditions can create barriers to forming and maintaining friendships, leading to feelings of isolation and exclusion. Children experiencing social and emotional difficulties, often stemming from underlying mental health challenges, may struggle to follow social cues, participate in group activities, and engage in learning that involves social interaction. Mental health problems in children have been shown to negatively impact all dimensions of their development, with particularly strong links to social development and the ability to form positive relationships.<sup>36</sup> Social isolation, which can be both a symptom and a consequence of mental health problems, has been linked to increased rates of anxiety and depression in young people, highlighting the detrimental impact of a lack of social connection on mental well-being.<sup>36,37,38</sup>

### Recognizing the signs: the importance of identifying psychological distress in children

Recognizing the signs of psychological distress in children across all age groups, from infancy to adolescence, is absolutely crucial for facilitating prompt intervention and ensuring their healthy growth and development.<sup>39,40</sup> Psychological distress can manifest in a variety of ways, and understanding these indicators is the first step towards providing necessary support (Table 1). Across all age groups, children

experiencing psychological distress may also exhibit various physical reactions, such as persistent tiredness, chest tightness, shortness of breath, dry mouth, muscle weakness, stomachaches, dizziness, shaking, headaches, and general aches and pains.<sup>41</sup>

Recognizing these diverse manifestations of psychological distress across different developmental stages is paramount. Early identification allows for timely intervention, which can significantly improve outcomes and prevent more severe mental health challenges from developing. Parents, caregivers, educators, and healthcare professionals all have a crucial role to play in being vigilant and responsive to these potential signs of distress in children.

### The impact of adverse childhood experiences (ACEs) on mental health

Adverse Childhood Experiences (ACEs) are defined as traumatic events that occur in childhood, typically between the ages of 1 and 17, and encompass a wide range of negative experiences including abuse, neglect, and household dysfunction.<sup>42</sup> These experiences can profoundly impact a child's sense of safety and security, often leading to feelings of unsafety and an inability to form secure and trusting bonds with others.

The long-term consequences of ACEs for mental health are significant and far-reaching. Individuals who have experienced ACEs are at an increased risk of developing various mental health conditions later in life, such as anxiety disorders, depressive disorders, and post-traumatic stress disorder (PTSD). These early traumatic experiences can also negatively affect a child's ability to regulate their emotions effectively and can impair their cognitive abilities, potentially leading to difficulties with learning and problem-solving.<sup>43</sup> Furthermore, ACEs are associated with a higher risk of engaging in substance abuse, exhibiting self-harming behaviors, and attempting suicide, indicating a strong link between early trauma and severe mental health outcomes.<sup>44,45</sup> The experience of ACEs can also contribute to various social problems in adulthood and has been linked to a shorter life expectancy. Research has indicated a dose-response relationship, suggesting that the more ACEs an individual experiences, the greater their risk for negative health outcomes, including mental health problems.<sup>46</sup>

Interestingly, research has shown that Positive Childhood Experiences (PCEs),<sup>31</sup> which include nurturing relationships and supportive environments, can act as a protective factor, potentially buffering against the negative long-term effects of ACEs on adult health, including mental health. Higher scores on measures of PCEs have been associated with better self-reported adult health and a lower risk of developing mental and physical health conditions, even after accounting for ACEs.

Adverse Childhood Experiences have a substantial and lasting negative impact on children's mental health, increasing their vulnerability to a wide range of psychological problems throughout their lives. Recognizing the profound consequences of early trauma underscores the critical need for prevention efforts and trauma-informed care to mitigate these harmful effects and foster resilience through positive childhood experiences.<sup>43,44,45</sup>

### The critical need for early intervention in child and adolescent mental health

The importance of early intervention in addressing mental health challenges faced by children and adolescents cannot be overstated. Implementing timely and appropriate interventions during the initial stages of mental health difficulties can significantly improve outcomes for young people, offering a pathway towards better symptom management, enhanced overall well-being, and a more positive long-term prognosis. Early treatment and support can play a crucial role in preventing the escalation of mental health issues into more severe or chronic conditions, thereby minimizing the potential for long-term negative impacts on a child's development and overall quality of life.<sup>47</sup>

Research consistently demonstrates that early intervention can

significantly improve the prognosis and long-term outcomes for individuals facing mental health challenges. By addressing these concerns promptly, evidence-based treatments can be implemented effectively, leading to a reduction in symptoms and an improvement in overall functioning.<sup>48</sup> Furthermore, early intervention can prevent the development of subsequent related problems and lessen the overall severity of the illness as it progresses. Timely support also equips children and teenagers with essential coping skills, enhances their resilience in the face of adversity, and helps them learn effective ways to manage their emotions before challenges become overwhelming. Taking early action can also help children feel seen, heard, and understood, which can significantly boost their self-confidence and encourage them to actively participate in their own recovery process. Moreover, early intervention has been linked to improvements in both academic performance and social engagement, allowing children to stay on track with their development and maintain vital connections with their peers and community.<sup>48,49</sup>

Conversely, delaying intervention for mental health problems in children and adolescents can have severe and far-reaching negative consequences. Untreated mental health issues can disrupt a young person's ability to function effectively at home, in school, and within their community. Without timely and appropriate treatment, children and teenagers struggling with these challenges face an elevated risk of academic failure, involvement with the criminal justice system, dependence on social services, and tragically, an increased risk of suicide. Ignoring the early warning signs and delaying intervention can unfortunately lead to deeper and more entrenched struggles that negatively impact every facet of a child's life, making recovery more challenging. The average length of time between the initial onset of mental health symptoms and an individual receiving appropriate treatment can be alarmingly long, often spanning many years, leading to prolonged suffering before help is received. Failing to act early can result in devastating consequences such as suicide, incarceration, homelessness, and school dropout, representing a significant loss of life and human potential.<sup>48,49,50</sup>

Fortunately, a comprehensive network of evidence-based therapies, family-focused interventions, school-based support programs, and a wide array of accessible resources are available to facilitate early intervention for child and adolescent mental health challenges. The proactive implementation of mental health screenings in schools and primary care settings further enhances our ability to identify needs early and connect young people with the support they require.

Early intervention is not merely beneficial but absolutely critical in addressing the mental health needs of children and adolescents. Timely support can alter the course of these challenges, promoting positive development and preventing more severe and enduring difficulties from taking hold, ultimately leading to healthier and more fulfilling lives.<sup>1</sup>

### Conclusion

In conclusion, mental health stands as a fundamental and indispensable cornerstone upon which the healthy development and future success of children and adolescents are built. It is intricately interconnected with their physical health, their capacity for emotional regulation, their ability to form meaningful social connections, and their overall cognitive functioning, shaping their experiences and trajectories across the entire developmental spectrum from the earliest days of infancy through the complexities of adolescence. The early identification of psychological distress in young people is of paramount importance, serving as the crucial first step towards enabling timely and effective interventions that can alter potentially negative pathways and foster positive outcomes, ensuring that challenges are addressed before they become deeply entrenched.

Prioritizing and actively supporting the mental health of children and adolescents yields profound and long-lasting benefits that extend far beyond their immediate well-being. It lays the foundation for their

Table 2

Resources for parents and caregivers.

**Shortlist and Contact Information of Leading Organizations Providing Support and Resources for Parents and Families on Children's and Adolescents' Mental Health in the U.S. and Europe**

- **Centers for Disease Control and Prevention (CDC):** Provides comprehensive information on children's mental health, including data, symptoms, treatment options, and resources: <https://www.cdc.gov/children-mental-health/index.html>
- **World Health Organization (WHO):** Offers global information and fact sheets on adolescent mental health: <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- **UNICEF Europe** – Promotes initiatives to safeguard the mental health of minors through awareness campaigns and advocacy projects. <https://www.unicef.org/eap/what-we-do/mental-health-and-psychosocial-support>
- **UNICEF world:** Provides resources and information on child and adolescent mental health, including reports and policy briefs: <https://www.unicef.org/mental-health/children-and-adolescents>
- **Terre des Hommes – ReStARS Project** – A support network for adolescents experiencing social withdrawal. It offers interventions such as pet therapy, art therapy, and family support. <https://www.tdh.org/en/projects/i-restore>
- **National Institute of Mental Health (NIMH):** Offers research-based information on various child and adolescent mental health topics, including specific disorders and treatment options: <https://www.nimh.nih.gov/health/topics/child-and-adolescent-mental-health>
- **Mental Health America (MHA):** Provides resources for recognizing mental health problems in children and offers support and advocacy information: <https://www.mhanational.org/>
- **Child Mind Institute:** A leading independent nonprofit dedicated to transforming the lives of children and families struggling with mental health and learning disorders, offering a wide range of resources: <https://childmind.org/>
- **SAMHSA's National Helpline:** A confidential, free, 24-hour-a-day, 365-day-a-year information service, in English and Spanish, for individuals and family members facing mental health and/or substance use disorders. <https://www.samhsa.gov/find-help/helplines/national-helpline>
- **The Trevor Project:** A crisis intervention and suicide prevention service for LGBTQ young people. <https://www.thetrevorproject.org/>
- **"Telefono Azzurro" Italy** – A 24/7 helpline for children and adolescents in distress in Italy. It also manages the emergency number 114 for reporting abuse or maltreatment. <https://azzurro.it/>
- **SOS Children's Villages Italy** – Provides psychosocial support to adolescents and caregivers, with programs addressing anxiety, stress, and depression. <https://www.sositalia.it/>

future success in education, their ability to forge healthy and fulfilling relationships, their capacity to thrive in their chosen careers, and their overall satisfaction with life, creating positive ripple effects that strengthen their families and enrich their communities as a whole. It is therefore imperative to continue and intensify a collective efforts in raising public awareness regarding the critical importance of child and adolescent mental health, actively working to dismantle the pervasive stigma that unfortunately still surrounds mental health challenges, and ensuring equitable and readily accessible access to high-quality mental health care for all children and adolescents, irrespective of their individual backgrounds or circumstances (Table 2). By recognizing mental health as a fundamental right and investing in its promotion and support, we can empower young people to reach their full potential and build a brighter future for themselves and for society.<sup>4</sup>

**Statements**

Massimo Pettoello-Mantovani, under his responsibility as corresponding author and on behalf of the other co-Authors releases the following declarations:

All Authors equally contributed to the conceptualization, data curation, investigation, methodology, supervision, writing and validation of the original draft, its review and editing.

- a. the manuscript has not been and will not be submitted in the current form to any other journal while it is under consideration by Global Pediatrics.
- b. the Authors do not have any potential conflict of interest, real or perceived.
- c. No generative artificial Intelligence tools were used to develop and complete the manuscript.
- d. The Authors have seen and approved the final version of the manuscript.

The corresponding Author, Massimo Pettoello-Mantovani declare that NO honorarium, grant, or other form of payment was given to anyone to produce the manuscript.

Finally, the undersigned Author states under his responsibility that each author listed on the manuscript has seen and approved the submission of this final version of the manuscript and takes full responsibility for the manuscript;

**CRedit authorship contribution statement**

**Agnese Suppiej:** Supervision, Writing – original draft, Conceptualization, Writing – review & editing. **Isabella Longo:** Writing – review & editing, Conceptualization, Supervision. **Massimo Pettoello-Mantovani:** Writing – original draft, Supervision, Conceptualization, Writing – review & editing.

**Declaration of competing interest**

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Massimo Pettoello-Mantovani's role as Consulting Editor, had no involvement in the peer review of this article and had no access to information regarding its peer review. Full responsibility for the editorial process for this article was delegated to another journal editor. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported.

**References**

1. Schwarzenberg SJ, Georgieff MK. Committee on Nutrition. Advocacy for improving Nutrition in the first 1000 days to support childhood development and adult health. *Pediatrics*. 2018;141(2), e20173716.
2. Prado EL, Dewey KG. Nutrition and brain development in early life. *Nutr Rev*. 2014; 72(4):267–284.
3. Waddell C, Hua JM, Garland OM, et al. Preventing mental disorders in children: a systematic review to inform policy-making. *Can J Public Health*. 2007;98:166–173.
4. World Health Organization. *Mental Health: Strengthening Our Response*. Geneva: World Health Organization; 2016.
5. Avison WR. Incorporating children's lives into a life course perspective on stress and mental health. *J Health Soc Behav*. 2010;51:361–375. <https://doi.org/10.1177/0022146510386797>.
6. Trivedi JK, Tripathi A, Dhanasekaran S, Moussaoui D. Preventive psychiatry: concept appraisal and future directions. *Int J Soc Psychiatry*. 2014;60:321–329. <https://doi.org/10.1177/0020764013488570>.
7. Ferrara P, Cammisa I, Zona M, et al. Child maltreatment and psychopathology: a brief review on the potential role of the hypothalamic-pituitary-adrenal axis. *Curr Pediatr Rev*. 2024.
8. Allen J, Balfour R, Bell R, Marmot M. Social determinants of mental health. *Int Rev Psychiatry Abingdon Engl*. 2014;26:392–407. <https://doi.org/10.3109/09540261.2014.928270>.
9. Organization IL. *Mental health in the workplace. Introduction*. Geneva: International Labour Organization; 2000. Available online at: <chrome-extension://efaidnbnmnihpcjpcglclefindmkaj/> [https://www.ilo.org/sites/default/files/wcms\\_p5/groups/public/@ed\\_emp/@ifp\\_skills/documents/publication/wcms\\_108221.pdf](https://www.ilo.org/sites/default/files/wcms_p5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcms_108221.pdf) [Accessed 2 May 2025].

10. Australian Government. The Mental health of children and adolescents. Report on the Second Australian child and Adolescent Survey of Mental Health and Wellbeing. [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.health.gov.au/sites/default/files/documents/2020/11/the-mental-health-of-children-and-adolescents\\_0.pdf](https://www.health.gov.au/sites/default/files/documents/2020/11/the-mental-health-of-children-and-adolescents_0.pdf) [Accessed 15 May 2025].
11. Fox SE, Levitt P, Nelson III CA. How the timing and quality of early experiences influence the development of brain architecture. *Child Dev.* 2010;81(1):28–40.
12. Georgieff MK, Brunette KE, Tran PV. Early life nutrition and neural plasticity. *Dev Psychopathol.* 2015;27(2):411–423.
13. Bick J, Nelson CA. Early adverse experiences and the developing brain. *Neuropsychopharmacology.* 2016;41(1):177–196.
14. Wachs TD, Georgieff M, Cusick S, McEwen BS. Issues in the timing of integrated early interventions: contributions from nutrition, neuroscience, and psychological research. *Ann N Y Acad Sci.* 2014;1308:89–106.
15. Georgieff MK. Long-term brain and behavioral consequences of early iron deficiency. *Nutr Rev.* 2011;69(suppl 1):S43–S48.
16. American Academy of Pediatrics. AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health. <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/> [Accessed 15 May 2025].
17. Willner CJ, Gatzke-Kopp LM, Bray BC. The dynamics of internalizing and externalizing comorbidity across the early school years. *Dev Psychopathol.* 2016;28(4pt1):1033–1052.
18. Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents.* 4th ed. American Academy of Pediatrics; 2017.
19. Weitzman C, Wegner L. Section on Developmental and Behavioral Pediatrics; Committee on Psychosocial Aspects of Child and Family Health; Council on Early Childhood; Society for Developmental and Behavioral Pediatrics; American Academy of Pediatrics. Promoting optimal development: screening for behavioral and emotional problems. *Pediatrics.* 2015;135(2):384–395.
20. Garner A, Yogman M. Committee on Psychosocial Aspects of Child and Family Health, Section on Developmental and Behavioral Pediatrics, Council on Early Childhood. Preventing childhood toxic stress: partnering with families and communities to promote relational health. *Pediatrics.* 2021;148(2), e2021052582.
21. World Health Organization. Adolescent Mental Health. 2021. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>. [Accessed 16 May 2025].
22. Cree RA, Bitsko RH, Robinson LR, et al. Health care, family, and community factors associated with mental, behavioral, and developmental disorders and poverty among children aged 2–8 years — United States, 2016. *MMWR Morb Mortal Wkly Rep.* 2018;67(50):1377–1383. [https://www.cdc.gov/mmwr/volumes/67/wr/mm6750a1.htm?s\\_cid=mm6750a1\\_w](https://www.cdc.gov/mmwr/volumes/67/wr/mm6750a1.htm?s_cid=mm6750a1_w) [Accessed 16 May 2025].
23. Bitsko RH, Claussen AH, Lichtstein J, et al. Mental health surveillance among children — United States, 2013–2019. *MMWR Suppl.* 2022;71(2):1–42. <https://www.cdc.gov/mmwr/volumes/71/su/su7102a1.htm> [Accessed 16 May 2025].
24. Lebrun-Harris LA, Ghandour RM, Kogan MD, Warren MD. Five-year trends in U.S. children's health and well-being, 2016–2020. *JAMA Pediatr.* 2022;176(7), e220056. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8922203/> [Accessed 16 May 2025].
25. Key substance use and mental health indicators in the United States: results from the 2019 National Survey on Drug Use and Health. <https://www.samhsa.gov/data/sites/default/files/reports/rpt29393/2019NSDUHFRPDFWHTML/2019NSDUHFR090120.htm>. [Accessed 16 May 2025].
26. Ghandour RM, Sherman LJ, Vladutiu CJ, et al. Prevalence and treatment of depression, anxiety, and conduct problems in U.S. children. *J Pediatr.* 2019;206:256–267. e3.
27. di Giacomo E, Krausz M, Colmegna F, Aspesi F, Clerici M. Estimating the risk of attempted suicide among sexual minority youths: a systematic review and meta-analysis. *JAMA Pediatr.* 2018;172(12):1145–1152.
28. American Academy of Pediatrics. AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health; 2021. <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/> [Accessed 16 May 2025].
29. Leeb RT, Bitsko RH, Radhakrishnan L, Martinez P, Njai R, Holland KM. Mental health-related emergency department visits among children aged <18 years during the COVID-19 pandemic—United States, January 1–October 17, 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69(45):1675–1680.
30. US Center for Diseases Control (CDC). Adverse childhood experiences (ACEs). <https://www.cdc.gov/aces/about/index.html> [Accessed 16 May 2025].
31. Huang CX, Halfon N, Sastry N, Chung PJ, Schickedanz A. Positive childhood experiences and adult health outcomes. *Pediatrics.* 2023;152(1). e2022060951.
32. Kosterman R, Mason WA, Haggerty KP, Hawkins JD, Spoth R, Redmond C. Positive childhood experiences and positive adult functioning: prosocial continuity and the role of adolescent substance use. *J Adolesc Health.* 2011;49(2):180–186.
33. Garner A, Yogman M. Committee on Psychosocial Aspects of Child and Family Health, Section on Developmental and Behavioral Pediatrics, Council on Early Childhood. Preventing childhood toxic stress: partnering with families and communities to promote relational health. *Pediatrics.* 2021;148(2), e2021052582.
34. Cherland E. The development of emotional competence. *Can Child Adolesc Psychiatr Rev.* 2004;13(4):121.
35. Bethell C., Jones J., Gombojav N., Linkenbach J., Sege R. Positive childhood experiences and adult mental and relational health in a statewide sample: associations across adverse childhood experiences levels.
36. Holt-Lunstad J. Social connection as a critical factor for mental and physical health: evidence, trends, challenges, and future implications. *World Psychiatry.* 2024;23(3):312–332.
37. Myktya L. Living alone and feelings of depression among adults age 18 and older. *Natl Health Stat Report.* 2024;199:1–11.
38. Mann F, Wang J, Pearce E, et al. Loneliness and the onset of new mental health problems in the general population. *Soc Psychiatry Psychiatr Epidemiol.* 2022;57:2161–2178.
39. Drageset J. Social support. In: Haugan G, Eriksson M, eds. *Health Promotion in Health Care – Vital Theories and Research [Internet]*. Cham (CH): Springer; 2021. [https://doi.org/10.1007/978-3-030-63135-2\\_11](https://doi.org/10.1007/978-3-030-63135-2_11) Chapter 11. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK585650/doi>.
40. Küçükoğlu S, Celebioğlu A. Identification of psychological symptoms and associated factors in adolescents who have a parent with cancer in Turkey. *Eur J Oncol Nurs.* 2013;17(1):75–80.
41. Koning, N.R. Identification of children at risk for mental health problems in primary care—Development of a prediction model with routine health care data. *Lancet eClinicalMedicine*, Volume 15, 89–97.
42. Gu W, Zhao Q, Yuan C, Yi Z, Zhao M, Wang Z. Impact of adverse childhood experiences on the symptom severity of different mental disorders: a cross-diagnostic study. *Gen Psychiatr.* 2022;35(2), e100741.
43. Shonkoff JP, Committee on Psychosocial Aspects of Child and Family Health. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics.* 2012;129:e232–e246.
44. Croft J, Heron J, Teufel C, et al. Association of trauma type, age of exposure, and frequency in childhood and adolescence with psychotic experiences in early adulthood. *JAMA Psychiatry.* 2019;76.
45. Falukozi E, Addington J. Impact of trauma on attenuated psychotic symptoms. *Psychosis.* 2012;4:203–212.
46. Cde Vos, Thompson A. Paul A. The relationship between childhood trauma and clinical characteristics in ultrahigh risk for psychosis youth. *Psychosis.* 2019;11:1–14.
47. McGorry PD, Mei C. Early intervention in youth mental health: progress and future directions. *Evid Based Ment Health.* 2018;21(4):182–184. <https://doi.org/10.1136/ebmental-2018-300060>. Epub 2018 Oct 23.
48. Kessler RC, Berglund P, Demler O, et al. Lifetime prevalence and age-of-onset distributions of dsm-iv disorders in the national comorbidity survey replication. *Arch Gen Psychiatry.* 2005;62:593–602.
49. Burcusa SL, Iacono WG. Risk for recurrence in depression. *Clin Psychol Rev.* 2007;27:959–985.
50. Gibb SJ, Fergusson DM, Horwood LJ, et al. Burden of psychiatric disorder in young adulthood and life outcomes at age 30. *Br J Psychiatry.* 2010;197:122–127.