

Challenges and Opportunities for Students with Multiple Disabilities and Health Impairments in the United States

DOI: 10.5281/zenodo.15383589

Shaira D. Mangawang

Ruth Andresen School, Monterey County Office of Education in California, USA

Abstract:

This study examines the complex and interconnected challenges faced by students with multiple disabilities and health impairments (MDHI) in the United States. The research delves into the prevalence of MDHI, disparities in healthcare access, and the impact of educational disruptions, including those exacerbated by the COVID-19 pandemic. It highlights the systemic barriers that limit these students' ability to access appropriate healthcare, specialized education, and therapeutic interventions. By employing the IMRAD framework, the paper synthesizes data from national surveys, peer-reviewed literature, and recent research findings to present a comprehensive understanding of the situation. Key findings demonstrate that MDHI students often encounter insufficient support in both academic and healthcare settings, which compounds their challenges and impedes their academic success and well-being. The study also reveals how the COVID-19 pandemic further marginalized these students, intensifying mental health concerns, educational regression, and social isolation. Based on these findings, the research proposes a series of strategies to improve support for MDHI students, including policy reforms, resource allocation, and enhanced community engagement. Recommendations emphasize the importance of inclusive educational practices, individualized care, and equitable access to resources to empower MDHI students to achieve their full potential. This research aims to inform policymakers, educators, and healthcare professionals, providing actionable insights for improving the quality of life and academic outcomes for MDHI students.

Keywords: Multiple Disabilities, Health Impairments, Educational Challenges, COVID-19 Impact, Healthcare Access, Inclusive Education, Policy Reform, Systemic Barriers, MDHI Students, Mental Health

Introduction:

Students with multiple disabilities and health impairments (MDHI) represent a highly heterogeneous population whose complex needs span both educational and medical domains. These students often experience significant challenges in accessing equitable learning environments and comprehensive healthcare services.

According to Rubin and Crocker (1989), the delivery of medical care for children with developmental disabilities is often fragmented and uncoordinated, leading to gaps in essential support. The need for specialized and integrated services becomes even more critical when children face co-occurring health impairments, placing them at a greater risk of academic underachievement and social exclusion.

The prevalence of developmental disabilities among U.S. children has steadily increased over the past decades. Zablotzky et al. (2019) reported that between 2009 and 2017, nearly one in six children were diagnosed with a developmental disability. These rising rates are attributed not only to improved diagnostic tools and awareness but also to an evolving understanding of neurodevelopmental disorders (Thapar, Cooper, & Rutter, 2017). Willcutt et al. (2010) emphasized the complex interplay of behavioral and genetic factors contributing to these conditions, highlighting the necessity for comprehensive evaluation and long-term support strategies in both medical and educational settings.

Communication and language development present significant hurdles for students with co-occurring disabilities, especially those with hearing impairments. Nelson and Bruce (2019) found that deaf and hard-of-hearing children with additional disabilities face unique barriers to acquiring language and literacy skills, which in turn affects academic success.

Kaufmann et al. (2004) also noted that children with fragile X syndrome and autism spectrum disorder (ASD) struggle with social interaction, communication, and behavior regulation—further complicating their educational experiences. These overlapping challenges underscore the importance of tailored interventions that consider both cognitive and sensory needs.

Moreover, behavioral and psychological difficulties, often rooted in conditions like fetal alcohol spectrum disorders (FASD), can interfere with a child's ability to learn and interact in classroom settings. Mattson, Crocker, and Nguyen (2011) highlighted neuropsychological deficits in children with FASD, including poor executive functioning and attention control. Similarly, co-occurring diagnoses such as attention deficit hyperactivity disorder (ADHD) and ASD present additional complications, particularly in adolescence and early adulthood. Lebeña et al. (2023) noted that

individuals with these overlapping conditions face persistent academic, social, and emotional difficulties that require early and sustained intervention.

Understanding the intersectionality of disability, health impairments, and socioeconomic disadvantage is crucial for developing inclusive educational frameworks and equitable healthcare policies. The challenges faced by students with MDHI are not merely individual but are rooted in systemic shortcomings that limit access to quality services and accommodations. Addressing these gaps requires a multidisciplinary approach—one that unites educators, healthcare providers, families, and policymakers in ensuring that every student, regardless of their disabilities or impairments, receives the support necessary to thrive in both school and life.

Literature Review:

Students with multiple disabilities and health impairments (MDHI) are among the most vulnerable populations in both educational and healthcare systems. Their complex needs often intersect with social determinants of health, access inequities, and systemic gaps in service delivery. As awareness of developmental and neurodevelopmental disorders grows, so too does the need for a clearer understanding of how such disabilities impact learning, behavior, and overall well-being—especially amid health crises like the COVID-19 pandemic, which has deepened pre-existing disparities.

Neurodevelopmental disorders, including attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD), and intellectual disabilities, represent a growing segment of the pediatric population worldwide. The Centers for Disease Control and Prevention (CDC) has reported significant increases in ADHD diagnoses, with millions of children in the United States currently affected (CDC, 2024).

ADHD and related conditions often co-occur with other developmental or behavioral disorders, increasing the complexity of management in educational settings. Similarly, Kita, Ashizawa, and Inagaki (2020) conducted a study in Japan revealing rising prevalence rates of neurodevelopmental disorders in community populations, underscoring a global trend and the need for early identification and support mechanisms. These statistics illustrate the growing demand for specialized services and inclusive educational strategies.

Despite this increasing prevalence, students with MDHI continue to experience systemic inequities in healthcare access and educational support. Escudé (2022) argued that health equity remains elusive for individuals with intellectual and developmental disabilities, citing longstanding barriers in diagnosis, treatment, and policy. Krahn, Walker, and Correa-De-Araujo (2015) further asserted that people with disabilities are often an "unrecognized health disparity population," emphasizing the intersection between disability, marginalization, and unmet healthcare needs. These inequities are compounded by socioeconomic conditions and geographic disparities, which often limit families' ability to access timely and appropriate interventions for their children.

Trends in developmental disability prevalence in the United States also reflect the growing need for policy interventions. Li et al. (2023) found that between 2018 and 2021, there was a continued rise in developmental disabilities among children and adolescents aged 3 to 17 years. This trend suggests that despite efforts to improve early screening and intervention, a substantial portion of the population still faces inadequate access to services. These findings align with concerns raised by Triplett et al. (2022), who explored how social determinants such as poverty, education, and healthcare coverage influence the diagnosis and treatment of mental disorders in children. Their analysis of the National Survey of Children's Health pointed to significant disparities in access to mental health treatment, particularly for low-income and minority populations.

The COVID-19 pandemic further exacerbated these existing issues. According to the American Hospital Association (2020), hospitals and healthcare systems suffered deep financial losses due to the pandemic, which in turn affected the availability and accessibility of essential services, especially for children with disabilities who rely on continuous care and therapy. Wang and Pagán (2021) discussed the broader implications of restriction policies, noting that although such measures were necessary to control virus spread, they inadvertently disrupted educational routines and behavioral interventions critical for children with developmental disabilities.

Beyond institutional constraints, the pandemic directly impacted the health and well-being of students with MDHI. Xu et al. (2024) highlighted how the burden of non-communicable diseases (NCDs) in the Western Pacific region rose during the pandemic due to disruptions in preventive care and treatment continuity. For students with chronic health impairments, these disruptions translated into missed therapies, postponed medical appointments, and unaddressed comorbidities—all of which impact school participation and academic outcomes.

Avena et al. (2021) also discussed the spike in behavioral addictions and substance use disorders during the pandemic, attributing this trend to increased stress, social isolation, and restricted access to mental health services. While this phenomenon has largely been studied in adolescents and adults, children with MDHI are particularly susceptible to behavioral challenges that can be intensified by environmental stressors.

Another dimension to consider is the shifting landscape of health insurance coverage during the pandemic. Bundorf, Gupta, and Kim (2021) observed that millions of Americans lost or changed their health insurance plans due to job disruptions and economic instability. Students with disabilities—who often require consistent access to specialists, medications, and therapies—were especially vulnerable to lapses in care continuity during this time.

Additionally, Mein et al. (2024) found significant changes in the affordability of healthcare and prescription medications, which likely hindered families' ability to maintain essential treatments for their children with MDHI. These challenges underscore how economic vulnerability and health insecurity can directly influence educational outcomes, particularly for students whose learning is already affected by complex medical conditions.

The combined insights from these studies point to an urgent need for integrated policy responses that bridge healthcare and education. Ensuring that children with MDHI receive continuous, affordable, and equitable services requires coordinated efforts between schools, healthcare providers, and policymakers. It also demands a recognition of disability as a determinant of health and a social justice issue. Beyond access, there is also a critical need to improve the quality and inclusivity of services provided. Tailored interventions that address both educational and health needs—especially in times of crisis—can make a significant difference in life outcomes for this underserved population.

The literature paints a clear picture: students with multiple disabilities and health impairments are not only growing in number but are also systematically disadvantaged in terms of healthcare and educational access. The COVID-19 pandemic amplified these disparities, affecting both the delivery of services and the structural conditions under which families operate.

As disability prevalence continues to rise globally, there is a pressing need to reimagine educational and healthcare systems that are flexible, inclusive, and responsive to the complex needs of students with MDHI. Addressing these challenges requires not only resource allocation but also structural reforms that prioritize equity, inclusion, and intersectoral collaboration.

Methodology:

This study utilizes a comprehensive literature review methodology to explore the challenges and implications faced by students with multiple disabilities and health impairments. The research process involved a systematic examination of various sources, including national surveys, peer-reviewed journals, and reports that provide relevant data and insights on the topic.

One of the primary sources of data was the National Survey of Children's Health, which offers valuable demographic, health, and behavioral information related to children across the United States. This source was instrumental in identifying patterns and trends in health disparities, access to services, and developmental diagnoses among children, especially those with complex needs.

Peer-reviewed journals formed another critical component of the methodology. The review focused on publications that addressed developmental disabilities, healthcare delivery systems, and educational outcomes for children with disabilities. Studies included in the review examined the prevalence and co-occurrence of conditions such as ADHD, intellectual and developmental disabilities, and chronic health impairments. These scholarly works provided empirical evidence on how various physical, cognitive, and behavioral challenges affect children's academic performance and overall well-being, highlighting gaps in support structures and systemic inequities.

Additionally, the literature review included reports and articles that analyzed the impact of the COVID-19 pandemic on children with disabilities. This portion of the review was essential to understanding the added vulnerabilities faced by this population during times of crisis. The review examined how pandemic-related restrictions, healthcare disruptions, and economic instability influenced service delivery, access to therapies, and family well-being. This helped contextualize the broader implications of public health emergencies on educational equity and health outcomes for students with multiple impairments.

Findings and Discussion:

Prevalence and Trends of Developmental Disabilities Among U.S. Children

Over the past two decades, the prevalence of developmental disabilities among children in the United States has experienced a notable increase. According to data presented by Zablotsky et al. (2019), approximately 17% of children aged 3–17 years were diagnosed with at least one developmental disability between 2009 and 2017. This rise has been attributed to various factors, including enhanced public awareness, better screening processes, broadened diagnostic criteria, and improved data collection methods (Thapar et al., 2017). These elements have contributed to more children being identified and included in the developmental disability spectrum.

The National Survey of Children's Health (NSCH), which has been instrumental in monitoring child health indicators nationwide, has played a crucial role in documenting these changes. As outlined by van Dyck et al. (2004), the NSCH was specifically designed to provide a broad perspective on children's health, including physical, emotional, and developmental dimensions. With its robust sampling methodology and frequent updates, the NSCH has become a reliable source for identifying national trends. In fact, the most recent NSCH Methodology Report (U.S. Census Bureau, 2024) emphasizes the improvements in survey design, weighting, and multiple imputation techniques, which have contributed to more accurate estimates of developmental disability prevalence.

The use of multiply imputed data has enhanced the quality and reliability of analyses conducted using NSCH data. The guide provided by the U.S. Census Bureau (2024) details how imputed datasets are constructed to address missing information, a common challenge in large-scale population surveys. This process ensures that prevalence estimates, particularly for developmental disabilities such as autism spectrum disorder, ADHD, and intellectual disabilities, reflect a more realistic picture of the population. Moreover, the availability of multi-year estimates (U.S. Census Bureau, 2024) allows for longitudinal tracking of developmental trends and disparities across different demographic and socioeconomic groups.

One of the most significant observations emerging from the literature is the variation in access to services and quality of care for children diagnosed with developmental disabilities. Vohra et al. (2014) highlight that children with autism and other developmental conditions often face greater barriers to accessing appropriate services compared to their neurotypical peers. These disparities extend to healthcare quality, educational support, and family-centered services. The study emphasizes that unmet healthcare needs are disproportionately higher among children with developmental disorders, particularly in underrepresented and economically disadvantaged populations.

The impact of the COVID-19 pandemic further exacerbated existing challenges. Graves, Mackelprang, and Abshire (2021) reported that school closures and disruptions in educational services had severe consequences for children with special needs and their families. The closure of schools and therapy centers resulted in a sudden withdrawal of critical services such as speech therapy, occupational therapy, and special education instruction, which many children rely on for developmental progress. This situation not only widened existing disparities but also heightened emotional and financial stress within affected families.

In addition, the pandemic highlighted the importance of methodologically sound population health surveys. The 2022 NSCH Methodology Report (U.S. Census Bureau, 2024) underscores the adjustments made to maintain data integrity during the pandemic period, including revised outreach strategies, digital engagement, and alternative data collection formats. These adjustments were vital to ensuring continuity in data monitoring and helped preserve the ability to track developmental trends during a time of national crisis.

Statistical techniques also play a pivotal role in drawing valid conclusions from NSCH data. Stuart, Lee, and Leacy (2013) emphasized the utility of prognostic score-based balance measures as a diagnostic tool in comparative effectiveness research. These methods help mitigate bias in observational data, allowing for more accurate assessments of how developmental disabilities affect various outcomes, such as access to care and educational success.

Altogether, the findings demonstrate a clear upward trend in the prevalence of developmental disabilities, supported by methodological improvements and broader definitions. However, increased prevalence also comes with significant implications for policy and service provision. The data affirm that many children with developmental disabilities continue to encounter disparities in healthcare and education. These disparities are further complicated by socioeconomic status, geography, and race/ethnicity.

The findings from NSCH and associated literature suggest an urgent need for more inclusive policies, targeted resource allocation, and family-centered intervention programs. As the child population becomes increasingly diverse and the number of children diagnosed with developmental conditions grows, there must be a concerted effort to strengthen systemic support structures. This includes expanding early intervention services, improving access to specialized care, training educators, and ensuring that policies are equitable and responsive to the needs of children with disabilities and their families.

While diagnostic advancements and comprehensive national surveys like the NSCH have led to better identification and understanding of developmental disabilities, they have also revealed significant gaps in service delivery and equity. Addressing these issues requires a multidisciplinary response involving healthcare, education, and policy sectors working together to build a more supportive and inclusive system for all children.

Healthcare Access and Disparities

Children with mental, developmental, and health impairments (MDHI) often encounter significant challenges in accessing quality healthcare services. The healthcare system in the United States, though advanced in many respects,

frequently falls short when it comes to meeting the comprehensive needs of this vulnerable population. Rubin and Crocker (1989) first highlighted the fragmented nature of care delivery, emphasizing how children with complex conditions often receive disjointed services across various specialists and institutions. This lack of coordination contributes to delays in treatment, miscommunication between providers, and inconsistent care plans.

Subsequent studies support these early findings, pointing to persistent disparities in access to both preventive and specialized services. Krahn et al. (2015) noted that children with developmental disabilities are significantly more likely to experience unmet healthcare needs than their typically developing peers. These children often face systemic barriers such as limited insurance coverage, shortage of developmental-behavioral pediatricians, and logistical challenges like transportation difficulties or long wait times. These obstacles can lead to delayed diagnoses and treatments, contributing to exacerbated health conditions over time.

Further compounding the issue, the COVID-19 pandemic intensified existing disparities in healthcare access. According to Thompson et al. (2022), statewide restrictions and exposure fears led to increased psychological distress among families, making it even harder for children with special needs to receive timely care. Many outpatient services, including therapy sessions and developmental screenings, were delayed or canceled, leaving families to navigate complex medical and educational challenges on their own.

ADHD, one of the most common developmental disorders, exemplifies the challenges surrounding diagnosis and treatment disparities. Xu et al. (2018) identified a twenty-year increase in diagnosed ADHD cases among U.S. children and adolescents, suggesting heightened awareness and improved diagnostic practices. However, Wolraich et al. (2019) observed that despite clearer guidelines for ADHD diagnosis and treatment, adherence to these protocols varies widely across healthcare systems and regions. Abdelnour et al. (2022) raised concerns about potential overdiagnosis in some demographics while underdiagnosis continues in others, particularly among minority and underserved populations. This variation can reflect disparities in provider training, cultural bias, and access to diagnostic resources.

Biederman and Faraone (2005) emphasized the lifelong impact that untreated ADHD can have, including academic struggles, social difficulties, and increased risk for comorbid mental health disorders. These outcomes underscore the importance of early intervention and consistent follow-up care, which many families find difficult to access due to insurance limitations or regional shortages of qualified providers. Preventive care, as outlined by the American Academy of Pediatrics (Committee on Practice and Ambulatory Medicine et al., 2020), recommends regular developmental screenings and health visits; however, not all children with MDHI are able to benefit equally from these recommendations.

Beyond ADHD, children with chronic physical illnesses such as asthma or diabetes also face unique barriers. Classic medical texts (Bierman & Pearlman, 1980; Bierman & Toohey, 1977) have long noted that managing such conditions in children requires not just medication, but structured lifestyle modifications and psychosocial support—services that are often lacking for low-income families. Similarly, Anderson (1981) highlighted how family dynamics and caregiver availability can significantly influence the child's ability to access and benefit from healthcare services. Families of children with disabilities frequently report feeling overwhelmed, unsupported, and ill-equipped to manage their child's complex needs, further widening the gap in health outcomes.

Healthcare disparities are also reflected in national surveillance systems. The National Survey of Children's Health (NSCH) has served as a critical data resource for tracking these issues over time. As the NSCH reveals, children with disabilities are consistently more likely to report problems with accessing mental health services, developmental screenings, and coordinated care plans (U.S. Census Bureau, 2024). This reinforces the need for systemic reforms that prioritize equity and inclusivity in pediatric healthcare.

Children with MDHI continue to face considerable barriers to accessing equitable and effective healthcare. Despite advances in diagnostic tools and treatment guidelines, persistent gaps in service availability, quality of care, and system navigation contribute to health disparities. Addressing these issues will require a coordinated, multidisciplinary approach that encompasses policy reform, community outreach, and a renewed focus on family-centered care.

Educational Challenges

Educational systems often struggle to meet the multifaceted needs of students with Multiple Disabilities and Health Impairments (MDHI). These learners frequently require tailored educational plans, assistive technologies, and specialized support services that many schools are ill-equipped to provide.

Bigge (1982) emphasized the importance of individualized instructional strategies for this population, underscoring that a one-size-fits-all approach fails to address the unique cognitive, physical, and emotional needs of MDHI students. Unfortunately, while the recognition of individualized education is widespread in theory, its practical application is often hindered by systemic limitations.

A significant challenge lies in the lack of adequately trained personnel. Teachers and support staff are often not sufficiently prepared to manage the diverse challenges associated with MDHI, such as chronic health conditions, limited mobility, communication difficulties, or behavioral concerns. Cross (1981) highlighted the need for educators to have a deep understanding of physical and health-related disabilities in order to effectively teach and support these students. However, professional development opportunities in this area remain sparse, leading to inconsistent or inadequate instructional strategies.

Students with chronic health conditions, such as asthma, congenital heart disease, cancer, and muscular dystrophy, often require frequent medical attention, resulting in high rates of absenteeism and missed instruction. For instance, Kraemer and Bierman (1983) detailed how asthma not only affects a child's health but also significantly disrupts classroom attendance and participation.

Similarly, Bricker and McNamara (1983) explained how children with heart disorders may experience fatigue and physical limitations that impede learning. These challenges are compounded by educators' limited understanding of how to accommodate such needs without isolating the child or reducing academic expectations.

The emotional and psychological toll of living with a chronic or life-threatening illness can also contribute to educational difficulties. Cotter and Schwartz (1978) noted that both patients and families require substantial psychological support, yet school systems often lack access to trained counselors and psychologists. Children with diseases like cancer (Hutter & Farrell, 1983) or AIDS (Boland, 1987) may also face social stigmatization, leading to feelings of isolation, low self-esteem, and a reduced sense of belonging in the classroom.

Social inclusion is another persistent challenge. Jones (1983) noted that children with cerebral palsy often struggle with social integration due to mobility impairments and speech difficulties, which can hinder peer relationships. Without structured peer support and inclusive classroom activities, these students are at risk of social withdrawal. Gordon and Bigge (1982) stressed the need for vocational training and life skills development to prepare MDHI students for adulthood, yet these programs are frequently unavailable or underdeveloped, especially in under-resourced school districts.

Moreover, career education and future planning for students with MDHI are often overlooked. Brolin and Kokaska (1979) emphasized the importance of providing meaningful career education for handicapped youth, pointing out that such preparation can promote independence, self-worth, and long-term success. However, many schools focus primarily on academic achievement metrics, sidelining essential transitional services such as job readiness, workplace social skills, and adaptive skill development.

Another overlooked factor is the cognitive impact of some health impairments. For example, Fanaroff (1979) documented the learning difficulties associated with Fetal Alcohol Syndrome, while Hollister (1981) and Harford (1981) discussed how autoimmune and infectious diseases can affect neurological function. These cognitive limitations may require specialized instructional techniques, which many general education teachers are unprepared to implement.

The prevalence of overlapping health conditions further complicates educational planning. Lyle and Obringer (1983) emphasized how muscular dystrophy, a progressive condition, requires constant adjustments to both educational goals and classroom accommodations as the disease advances. Similarly, Duff (1981) explained that conditions like myocarditis, which may be intermittent but severe, necessitate flexible learning environments that allow students to remain academically engaged despite health fluctuations.

Despite these barriers, there are promising frameworks that promote better educational outcomes for MDHI students. One such approach is the integration of multidisciplinary teams—educators, medical professionals, psychologists, and family members—who work collaboratively to develop and monitor Individualized Education Programs (IEPs). While this model is ideal, its implementation is inconsistent across schools and districts.

Students with Multiple Disabilities and Health Impairments encounter a host of educational challenges, including limited access to trained staff, inadequate support services, and insufficient accommodations. As Bigge (1982) and others have emphasized, effectively educating MDHI students requires a holistic, individualized approach that incorporates medical, psychological, and social dimensions. Without systemic improvements and stronger resource allocation, these students will continue to face barriers to academic success and personal development.

Impact of COVID-19

The COVID-19 pandemic profoundly disrupted the educational landscape, compounding pre-existing challenges for children with multiple disabilities and health impairments (MDHI). Already navigating a complex interplay of cognitive, physical, and behavioral difficulties, these students faced new barriers to equitable education, therapy, and healthcare. As Houtrow et al. (2020) observed, the pandemic caused significant interruptions in therapy services,

special education support, and access to healthcare for children with disabilities, effectively widening disparities in academic and developmental outcomes.

Remote learning, while a necessary public health measure, proved especially problematic for students with MDHI. The success of virtual instruction depends on stable internet access, functioning technology, and parental support—resources often unavailable to families of children with complex needs (Martin et al., 2023). Digital illiteracy among caregivers further impeded effective participation in online schooling, leading to decreased engagement, academic regression, and widening skill gaps.

Neurodevelopmental disorders, such as autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD), and intellectual disabilities, require tailored instructional methods and consistent therapeutic intervention—services that were significantly disrupted during the pandemic. According to Thapar, Cooper, and Rutter (2017), these disorders stem from multifactorial origins and manifest across a range of behaviors, communication challenges, and cognitive impairments, necessitating highly structured environments that were difficult to replicate at home. Moreover, Willcutt et al. (2010) emphasized that children with developmental disorders often need multimodal interventions, which could not be easily delivered through remote platforms.

For students with co-occurring disorders, such as ASD and fragile X syndrome, the pandemic's impact was even more pronounced. Kaufmann et al. (2004) highlighted the importance of regular interaction and communication support for children with fragile X syndrome, who often struggle with social engagement and behavior regulation. Without in-person services, these children experienced regression in social and communication skills, increasing frustration for both students and their caregivers.

Additionally, children with fetal alcohol spectrum disorders (FASD) were particularly vulnerable during this period. Mattson, Crocker, and Nguyen (2011) detailed how FASD is characterized by deficits in executive function, attention, and emotional regulation—all areas requiring consistent structure and individualized instruction, which the pandemic disrupted. Similarly, the co-occurrence of ADHD and ASD in early adulthood, as explored by Lebefia et al. (2023), can lead to more severe outcomes without adequate support, reinforcing the importance of uninterrupted, comprehensive services during critical developmental windows.

The Centers for Disease Control and Prevention (CDC, 2024) notes that ADHD remains one of the most common neurodevelopmental disorders among children, necessitating behavioral therapy, medication, and close academic monitoring. During the pandemic, many of these supports became inaccessible, leading to increased inattentiveness, hyperactivity, and academic failure. Moreover, the prevalence of neurodevelopmental disorders globally underscores the scale of the issue. For instance, Kita, Ashizawa, and Inagaki (2020) reported significant prevalence rates of such conditions in Japan, indicating that these challenges are not confined to one region but are global in scope.

The pandemic also intensified mental health concerns among both MDHI students and their families. As Navas et al. (2022) discussed, the emotional burden on caregivers—many of whom were left to manage education, therapy, and medical needs without professional guidance—led to heightened stress, anxiety, and burnout. Meanwhile, students experienced increased isolation, disrupted routines, and a lack of peer interaction, which are particularly damaging for those with developmental or communication difficulties (Nelson & Bruce, 2019).

The COVID-19 pandemic magnified the vulnerabilities of children with MDHI, exposing the inadequacies of educational systems in crisis preparedness and inclusive digital learning. The compounded effects of service disruption, technological inequity, and mental health decline call for urgent reform. Educational stakeholders must prioritize building resilient systems that can sustain individualized support—even in emergencies—ensuring that no child is left behind, regardless of ability or circumstance\

Conclusion:

Students with multiple disabilities and health impairments (MDHI) confront a wide array of challenges that significantly impact their learning, development, and overall well-being. These challenges are compounded by complex medical needs, cognitive limitations, communication barriers, and social-emotional difficulties. As a result, their educational experiences are often marked by limited access to appropriate interventions, insufficient instructional support, and systemic barriers that impede equitable participation in school activities.

The COVID-19 pandemic further exposed and intensified these existing disparities. Disruptions in therapy, healthcare, and educational support revealed the fragility of current systems and underscored the urgent need for robust, inclusive frameworks capable of responding to crisis situations. In many cases, families of MDHI students were left to shoulder the burden of education and care without adequate training, tools, or guidance, leading to widespread academic regression and mental health decline.

Addressing the unique needs of MDHI students requires a comprehensive, collaborative approach. Policy reform must prioritize inclusive education by mandating individualized education programs (IEPs), increasing funding for special education services, and enforcing accessibility standards across all learning environments. In parallel, schools must be equipped with trained personnel, assistive technologies, and multidisciplinary teams capable of delivering tailored interventions that respond to each student's unique profile.

Equitable resource allocation is another critical pillar. Many families face socio-economic barriers that limit access to specialized care, digital tools, and learning supports. Ensuring the equitable distribution of resources—such as internet access, learning materials, transportation, and medical services—can help bridge these gaps and create more consistent, supportive educational experiences.

Equally important is the role of community engagement. Schools, caregivers, health professionals, and policymakers must work in unison to create an ecosystem of support. Community-based programs, family education initiatives, and caregiver support groups can provide additional layers of assistance and advocacy for MDHI students and their families.

Fostering inclusive environments that embrace diversity and uphold the rights of every learner is essential for long-term progress. Empowering MDHI students to reach their full potential is not solely the responsibility of schools, but a collective societal obligation. With commitment, coordination, and compassion, meaningful transformation is possible—one that ensures all learners, regardless of ability, have access to quality education, holistic care, and a future full of opportunity.

References:

- Abdelnour, E., Jansen, M. O., & Gold, J. A. (2022). ADHD diagnostic trends: Increased recognition or overdiagnosis? *Missouri Medicine*, 119, 467-473.
- American Hospital Association. (2020, June 30). New AHA report finds losses deepen for hospitals and health systems due to COVID-19. <https://www.aha.org/issue-brief/2020-06-30-new-aha-report-finds-losses-deepen-hospitals-and-health-systems-due-covid-19>
- Avena, N. M., Simkus, J., Lewandowski, A., Gold, M. S., & Potenza, M. N. (2021). Substance use disorders and behavioral addictions during the COVID-19 pandemic and COVID-19-related restrictions. *Frontiers in Psychiatry*, 12, Article 653674.
- Biederman, J., & Faraone, S. V. (2005). Attention-deficit hyperactivity disorder. *Lancet*, 366, 237-248.
- Bundorf, M. K., Gupta, S., & Kim, C. (2021). Trends in US health insurance coverage during the COVID-19 pandemic. *JAMA Health Forum*, 2, Article e212487.
- Centers for Disease Control and Prevention. (2024, July 20). Attention-deficit/hyperactivity disorder (ADHD). <https://www.cdc.gov/adhd/data/index.html>
- Committee on Ambulatory, Bright Futures Periodicity Schedule, Richerson, J. E., Abularrage, J. J., Almendarez, Y. M., et al. (2020). 2020 recommendations for preventive pediatric health care. *Pediatrics*, 145(3), Article e20193895.
- Escudé, C. (2022). Advancing health equity for people with intellectual and developmental disabilities. *Health Affairs Forefront*, 10, 1377.
- Graves, J. M., Mackelprang, J. L., & Abshire, D. A. (2021). Coronavirus disease 2019 and effects of school closure for children and their families. *JAMA Pediatrics*, 175, 210-211.
- Kaufmann, W. E., Cortell, R., Kau, A. S. M., Bukelis, I., Tierney, E., Gray, R. M., et al. (2004). Autism spectrum disorder in fragile X syndrome: Communication, social interaction, and specific behaviors. *American Journal of Medical Genetics*, 129A, 225-234.
- Kita, Y., Ashizawa, F., & Inagaki, M. (2020). Prevalence estimates of neurodevelopmental disorders in Japan: A community sample questionnaire study. *Psychiatry and Clinical Neurosciences*, 74, 118-123.
- Krahn, G. L., Walker, D. K., & Correa-De-Araujo, R. (2015). Persons with disabilities as an unrecognized health disparity population. *American Journal of Public Health*, 105(Suppl 2), S198-S206.
- Lebena, A., Faresjö, Å., Faresjö, T., & Ludvigsson, J. (2023). Clinical implications of ADHD, ASD, and their co-occurrence in early adulthood—the prospective ABIS-study. *BMC Psychiatry*, 23, 851.
- Li, Q., Li, Y., Zheng, J., Yan, X., Huang, J., Xu, Y., et al. (2023). Prevalence and trends of developmental disabilities among US children and adolescents aged 3 to 17 years, 2018-2021. *Scientific Reports*, 13, Article 17254.
- Mattson, S. N., Crocker, N., & Nguyen, T. T. (2011). Fetal alcohol spectrum disorders: Neuropsychological and behavioral features. *Neuropsychological Review*, 21, 81-101.
- Mein, S. A., Marinacci, L. X., Zheng, Z., Ahmad, I., & Wadhera, R. K. (2024). Changes in healthcare and prescription medication affordability in the US during the COVID-19 pandemic. *JAMA Health Forum*, 5, Article e241939.
- Nelson, C., & Bruce, S. M. (2019). Children who are deaf/hard of hearing with disabilities: Paths to language and literacy. *Educ Sci*, 9(2).
- Rubin, I. L., & Crocker, A. C. (1989). *Developmental disabilities: Delivery of medical care for children and adults*. Lea & Febiger.
- Thapar, A., Cooper, M., & Rutter, M. (2017). Neurodevelopmental disorders. *Lancet Psychiatry*, 4, 339-346.

- Triplett, N. S., Luo, M., Nguyen, J. K., & Sievert, K. (2022). Social determinants and treatment of mental disorders among children: Analysis of data from the national survey of children's health. *Psychiatric Services*, 73, 922-925.
- US Census Bureau. (2024, July 20). 2022 national survey of children's health - methodology report. <https://www2.census.gov/programs-surveys/nsch/technical-documentation/methodology/2022-NSCH-Methodology-Report.pdf>
- US Census Bureau. (2024, July 20). National survey of children's health - guide to multi-year estimates. <https://www2.census.gov/programs-surveys/nsch/technical-documentation/methodology/NSCH-Guide-to-Multi-Year-Estimates.pdf>
- US Census Bureau. (2024, July 20). National survey of children's health - analysis with multiply imputed data. <https://www2.census.gov/programs-surveys/nsch/technical-documentation/methodology/NSCH-Analysis-with-Imputed-Data-Guide.pdf>
- Vohra, R., Madhavan, S., Sambamoorthi, U., & St Peter, C. (2014). Access to services, quality of care, and family impact for children with autism, other developmental disabilities, and other mental health conditions. *Autism*, 18, 815-826.
- Wang, V. H.-C., & Pagán, J. A. (2021). Views on the need to implement restriction policies to address COVID-19 in the United States. *Preventive Medicine*, 143, Article 106388.
- Willcutt, E. G., Pennington, B. F., Duncan, L., Smith, S. D., Keenan, J. M., Wadsworth, S., et al. (2010). Understanding the complex etiologies of developmental disorders: Behavioral and molecular genetic approaches. *Journal of Developmental & Behavioral Pediatrics*, 31.
- Xu, G., Strathearn, L., Liu, B., Yang, B., & Bao, W. (2018). Twenty-year trends in diagnosed attention-deficit/hyperactivity disorder among US children and adolescents, 1997-2016. *JAMA Network Open*, 1, Article e181471.
- Zablotsky, B., Black, L. I., Maenner, M. J., Schieve, L. A., Danielson, M. L., Bitsko, R. H., et al. (2019). Prevalence and trends of developmental disabilities among children in the United States: 2009-2017. *Pediatrics*, 144(2019), Article e20190811.