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Mental Health Concerns in the Pediatric Population Following COVID-19

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Mental Health Concerns in the Pediatric Population Following COVID-19

COVID-19 has had an immense impact on society: changing the way we interact with others, manage our health, and our ideas of normalcy. While some individuals learned new recipes and connected with family, others entered into a period of mental health darkness and suffering. Each age range population has been uniquely impacted by COVID-19. Our interest in pediatric nursing has allowed us to ponder the impact that COVID-19 has had on the pediatric population specifically. As the world slowly emerges from this pandemic and we prepare ourselves to enter the healthcare workforce, the effects of COVID-19 on the mental health of the pediatric population is at the forefront of our minds. We noticed the suffering mental health of the populations we were serving in our acute care pediatric, psychiatric, and pediatric community health nursing rotations in Grand Rapids, MI. Conversations with unit nurses and our clinical faculty advisors allowed us to understand that mental health admission rates and emergency department visits are increasing notably after the pandemic. This opened our eyes to a need in our pediatric community and invigorated our souls to follow our passion to be better equipped to serve the holistic needs of the pediatric community.

To best serve this population, we will explore the effects of COVID-19 on the pediatric population by conducting secondary research related to our experiences. We will then create educational toolkits to be used by nursing students at Grand Valley State University to educate the pediatric population on mental health and wellness. Analysis will be conducted in the age groupings of kindergarten to second grade and third to fifth grade, allowing children of similar developmental stages to be grouped together. The purpose of this paper is to understand and investigate the effects of COVID-19 on the pediatric population by examining mental health incidents in the pediatric population, developmental effects occurring because of COVID-19, and

how the resiliency of the pediatric population can direct future nursing interventions and education.

Mental Health Incidences

To better understand the rising mental health crisis affecting the pediatric population, one must review research and statistics of hospitalizations related to mental health. Rao et. al. (2022) in their research article, researched the rates of mental health disorders across several age divisions in Westchester, New York. They found that even before COVID-19, mental health disorders had increased nearly 5.4% in individuals age zero to seventeen; with mood and behavior disorders showing the most prevalent increase (Rao et.al., 2022). It is mentioned that childhood adversity is most likely the attribute to this rise in mental health disorders. This enhances the possibility of rising mental health incidences in the pediatric population related to COVID-19 as children were not going to school or leaving their homes, facing possible adversities in their home life each and every day. The consistency of this suffering could bring mental health disorders to the forefront, especially due to the developing brains of the pediatric population.

The research by Rao et. al. allows for curiosity to grow in examining research related to COVID-19, knowing that mental health disorders were increasing in the adolescent population before the hardships of COVID began. According to Radhakrishnan et. al. (2022) and their research from the Center for Disease Control (CDC) data, there was a decrease in mental health incidences in 2020, followed by an increase, particularly in adolescent girls, in 2021 and 2022. This decrease in mental health incidences could be related to the lack of hospital beds to care for patients in mental health crises due to the intensity of the pandemic at that time. The increase

after, however, indicates that some adolescents were facing an amount of adversity, stress, or difficult change that allowed their mental health to become more severe and prominent.

This research proves important as it indicates that COVID-19 did impact mental health in the pediatric population in some way. This understanding allows for future interventions to contribute to the call for accessible community and acute mental health care.

Healthcare Response

With the recent increase in mental health incidences before and after the COVID-19 pandemic, it is imperative to understand the current healthcare response to this growing area of concern. Dokken et. al. (2020) explores not only the recent increase in mental health incidences following the pandemic, but also the current response of hospitals across the United States. Understanding this response will allow us to gauge the need for more education in the healthcare community on mental health needs as well as evaluate the effectiveness of the current strategies.

A factor that Dokken et. al. (2020) mentions that raises an important point, is that many children only have access to mental health services through their school systems. During COVID-19, this access was not available to individuals, and if it was, virtual meetings did not always provide a safe place for children and adolescents to have open conversations with their counselors. Children's hospitals in Philadelphia, PA, Columbus, OH, and Minneapolis, MN, according to the researchers, immediately adapted to the mental health needs of their populations, offering in-clinic visits, virtual appointments, and various online resources (Dokken et. al., 2020). The online resources were for the children facing the mental health incidence and their families as well. This allowed for a greater understanding of the patient's need, as well as contributed to fostering relationships with the mental health provider. This plan puts much emphasis on family assistance and engagement, though, and it cannot be assumed that all parents

are involved and invested in their child's mental health needs. This concern emphasized the need for easily accessible mental health education and resources. Inclusive care, especially in the midst of the mental health incidence increase, is imperative and crucial to meeting the needs of each unique community member. Dokken et.al. (2020) emphasizes the growth hospitals are making to accommodate the mental health needs of pediatric patients and the need for further and continued growth of the healthcare system in this area.

Effectiveness of the Response

Based on the research findings, virtual mental health care appears to be the most prominent approach to addressing mental health incidences in the pediatric population. Doan et. al. (2021) investigates the recent development of virtual mental health care in their research article, *From pandemic to progression: An educational framework for the implementation of virtual mental healthcare for children and youth as a response to COVID-19*. Their research coincides with the findings of Dokken et. al. while also addressing concerns that are associated with virtual mental health care. The benefits of virtual mental health care include time, cost, and the ability to see patients in multiple environments. However, there are also disadvantages to this approach. For example, patients may be less willing to speak the truth about their mental health if they are in unsafe or unsupportive home environments, patients may not have access to a computer or phone, as well as addressing the need for equity and accessibility in all populations and communities. Since development of these programs is relatively new, no significant data has been reported on the effectiveness.

Even after the introduction of these programs, however, pediatric mental health incidences have continued to rise in 2022. There is a clear need for further growth and

development in this area (Radhakrishnan et. al., 2022). Understanding the effects that COVID-19 has had on the pediatric population remains an important aspect of developing future programs.

Pediatric Developmental Effects

Due to brain development and the stages of childhood development, there are specific concerns related to the effects of COVID-19 on children and adolescents. The lack of normalcy and routine related to COVID-19 has the ability to impact the normal development of pediatric behaviors and social cues.

Kindergarten through Second Grade

Children in kindergarten through second grade are four to seven years old. According to Piaget's developmental stages, children in this age group are in the Preoperational stage and are developing language and abstract thoughts (McLeod, 2020). Piaget believed that children remain egocentric throughout the preoperational stage. This means they cannot understand that others think in ways different from them or that events that take place are not always related to them. According to Erikson's theory, children at this stage of development deal with initiative vs. guilt (McLeod, 2020). This stage begins at age three and lasts until age five. Children focus on doing things independently and begin to develop a sense of aims and goals. When they feel encouraged, children take the initiative to do things independently. If they are criticized or discouraged by caregivers, they may feel guilty instead. In relation to the COVID-19 pandemic, parents were frightened by the unknown effects that the virus would have on their children. This led to many parents sheltering their children and being more hesitant in allowing them to explore and interact in the social world. Interacting with the environment and people around them is a crucial necessity for children in this developmental range that was hindered through the COVID-19 pandemic.

Third through Fifth Grade

The third through fifth grade population refers to individuals between the age of eight and eleven years. During this time, children in elementary school are in the concrete operational stage of Piaget's theory, and the industry versus inferiority stage of Erikson's theory. This stage involves the idea that children are beginning to be less involved in themselves and are more aware of the individuals and events in the world around them (McKegney et. al., 2021). They rely on peer interaction, support, and social skills to develop the beginnings of their emotional being and self-confidence. These emotional and social developmental stages were immensely impacted by COVID-19 due to the stress it caused. In a time when they are becoming aware of the world around them, children are faced with intense stress, worry, and now the newness surrounding COVID-19. Analyzing the signs and symptoms of pediatric stress can help healthcare providers to understand the impact that stress related to COVID-19 may have on pediatric emotional development.

Henderson et. al. (2020), in their research article, *The COVID-19 pandemic and the impact on child mental health: A socio-ecological perspective*, explore the increase in mental and behavioral health conditions in the pediatric population amidst the pandemic. They address the idea that pediatric nurses must understand and recognize that COVID-19 is a major disruptor of typical growth and development of children. The article defines signs of stress and potential mental health problems in children between the ages of five and twelve (Henderson et.al., 2020). These signs and symptoms include a disregard or avoidance for school, sleep disturbances and frequent nightmares resulting in daytime sleepiness, hyperactivity, returning to outgrown behaviors such as bedwetting, loss of interest in normal activities, excessive crying, worry, or sadness, and/or frequent tantrums or irritability (Henderson et. al., 2020). These signs and

symptoms may indicate that a child is straying from a normal developmental pattern and that the timing and progress into the next developmental stage may be affected.

To further understand the effects of stress on developmental changes the research conducted by McKegney et.al. (2021) was explored. Similar to Henderson et. al. (2020), McKegney et. al. (2021) addresses the signs and symptoms of stress by age while explaining how these concerns affect the potential development of the pediatric population. According to McKegney et. al. (2021), the warning signs of severe stress for six to eleven year old children include withdrawal and isolation (McKegney et. al., 2021). Severe stress is more likely to lead to mental and behavioral health incidents, unless the child knows how to cope with this stress. As pediatric nurses, it is important to address these stress level changes and fully evaluate the emotional health of our patient population. Nurses must also aim to educate pediatric patients with impactful resources and mindful activities which help children and adolescents work through and manage stress and mental health concerns.

Importance to Nursing

COVID-19 created lockdowns and social changes, and the consequences of these inevitable stresses, especially in the pediatric population are still wildly unknown. However, by beginning to look at the pediatric stress response and its effect on development is a starting point. For example, an increase in pediatric mental health incidences or increased pediatric stress after the year 2020 is likely to have been related, in some way, to COVID-19. This could be due to social isolation, adverse childhood experiences, or concern about the pandemic and its effects. As discussed by Henderson et. al. (2020), healthcare providers should be aware of the particular symptoms exhibited in children as a result of stress from COVID-19.

Without addressing this new onset stress, the pediatric population can face developmental challenges in their adolescent and adulthood years. These signs and symptoms were present before COVID-19 impacted the world, however, the research from Henderson et. al. (2020) and McKegney et al. (2021) emphasizes the critical increase in pediatric stress during developmental stages that occurred with the pandemic. With the rise in pediatric mental health incidences, the healthcare team members must recognize symptoms of stress, and address them with compassion, empathy, and advocacy.

Resiliency and Nursing Interventions

Resiliency is developed when an individual adapts and recovers from stress and adversity. Children are often resilient and develop into the individual they will be based on the experiences and support they have. Dvorsky et.al. (2020) in their article, *Finding ordinary magic in extraordinary times: Child and adolescent resilience during the COVID-19 pandemic*, explains how it is important for children to face some challenges or adversity as these allow them to become skillful in handling stressful situations. In addition, facing adversity and challenges in the beginning of life allows children to develop coping skills at a young age. Understanding the resilience of children and the impact of adversity, to an extent, can bring awareness to the strength of the pediatric population during the extraordinary times of COVID-19.

Dvorsky et. al. (2020) explains how some children were able to grow and thrive during the COVID-19 pandemic. For example, some children picked up new hobbies or became more optimistic or curious about the world around them (Dvorsky et. al., 2020). These positive adaptations on pediatric mental health exemplify that even amidst stress and uncertainty, some children were able to change in new and mature ways that amplified their resiliency. To further explain, this generation of children learned to go to school online, have interactions socially

distanced, and forewent normal experiences like going to a park or hanging out with friends. Despite this lack of normalcy, these children adapted to their surroundings. Not all children, though, have tools and resources needed to achieve resilience. Skeen et. al., in their research, explore ways to build resiliency and educate children and adolescents on effective mental health practices.

Skeen et. al. (2019) researched and analyzed the effectiveness of mental health interventions on adolescents from ten to nineteen years old. This research is important for healthcare professionals as it encourages the evaluation of and need for further development of mental health education for the pediatric population. Skeen et. al. (2019) found that interventions such as interpersonal skills training, emotional regulation, and alcohol and drug education were effective in improving adolescent mental health (p.8). These interventions aim to not only improve pediatric mental health, but to also increase resiliency as well. To expand, for example, interpersonal skills training involves improving strong connections and building a stable support system. By having individuals the adolescent or child can trust and have the known support of, will allow them to enter stressful situations in a more positive nature. This strength will contribute to resiliency and further their ability to withstand difficult situations, build character, and further development.

Providing education about the importance of pediatric mental health screening, and resources, contributes to a deep empowerment to forever impact this population's lives. It is imperative that this education and advocacy begins now, as the world copes with COVID-19 and children and adolescents strive for resilience.

Nursing Education on Mental Health

As pediatric needs shift, nursing education should reflect these changes. Pediatric mental health decline is nearing a national crisis. Focus on pediatric nursing curriculum should focus on Adverse Childhood Experiences or ACEs. ACEs include neglect; physical, mental or sexual abuse; and household dysfunction, such as exposure to domestic violence, divorce, or the loss of a parent. Research has found that such experiences can alter a child's brain development and immune systems, leading to an increased risk of health and social problems in adults (Henderson et.al, 2020, p. 267). Adverse Childhood Experiences are now understood to be one of the most powerful determinants of health. Early intervention and prevention even in preschool and kindergarten, can have a profound impact on future health and behaviors. Approaching problems in a constructive, understanding way, called trauma responsive care, rather than traditional punitive methods, has a substantial positive impact on community health (p. 271) Education on ACES and nursing interactions with victims of childhood trauma is necessary. This will allow nurses to foster a change in mindset and culture, focusing on what happened to individuals and finding ways to engage them with compassion. This will further a nurse's connection with their patient and foster a therapeutic relationship between a nurse and patient.

Discussion

The current research warrants awareness and attention to the rising incidence of pediatric mental health concerns. Virtual mental health care provides some hope of providing positive change, but lacks accessibility and confirmed beneficial outcomes for the pediatric population. Before implementing our project, we planned an open discussion with the current instructors of CATCH to gather feedback and advice in our toolkits. This will be an opportunity for us to explain our current hopes for implementing this into the curriculum and how this can enact

change. As it stands, the importance of further education and access to mental health care is imperative in protecting and strengthening the resiliency and livelihood of children across the nation.

Our Project

We have an immense passion for the pediatric population and intend to create a supportive, encouraging, and educational resource for our future patients. Based on our clinical experiences at Helen DeVos Children's Hospital, Pine Rest Christian Mental Health Services, and the Coordinated Approach to Child Health (CATCH) program through Grand Rapids Public School system, and the secondary research conducted in this paper, a plan has been established to provide mental health support and education for the pediatric population. Two tool kits will be created, one for kindergarten through second grade and one for third through fifth grade. These tool kits will contain age-appropriate educational modules, activities, worksheets, and videos which aim to educate children and adolescents on their own mental health and how to take care of their mental health needs.

Addressing these needs in elementary school aged children will impact the way that these individuals approach their mental health needs, face adversity and challenges, and will allow tools for resiliency. In addition, we hope this early education will reduce the negative stigma that surrounds mental health and will further promote access in all communities to mental health care. Educating ourselves on the statistics of mental health prevalence in the pediatric population and the current interventions allows us to understand the need for continuation of best practice while also working to develop new, inclusive, and effective educational content. This research was instrumental in fostering our idea

Conclusion

The COVID-19 pandemic in the United States has made a significant impact on children and their mental health. The future of pediatric nursing will require knowledge and tools to address these concerns in a compassionate and empathetic manner. We have the potential to enact change within the community through empowering and educating nursing students within the Kirkhof College of Nursing on this need for mental health within the pediatric population. Implementing education that nursing students can teach will have a positive impact. With this project, we hope it will inspire more future nursing students to address this growing national crisis. Nursing students will educate children on coping strategies and methods that children can use in emotional and stressful situations. The mental health needs and demands for children especially in the Grand Rapids area is greater than the resources and supports available. As the pediatric mental health crisis continues, the state of Michigan and Kent county need to allocate more resources and programs for interventions and support. Nursing has the power to create this change through advocacy. Going forward in our careers, we hope to be advocates for this change in the community.

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