

Challenges and Future Directions of Pediatric Neurobiological Disorder

Boman L Johri*

Department of Health Science, University of Limpopo, Turfloop, South Africa

Abstract

The term "neurological disorder" describes a condition that affects the brain and nervous system. In other words, a malfunction in a region of the brain or neurological system causes it. The illnesses affect the brain, spinal column, or nerves, and the symptoms vary depending on the site of damage. Physical, cognitive, emotional, and behavioural symptoms that impact movement, communication, vision, hearing, and reasoning, among other things, may be present. The area of paediatric neurology has undergone a significant transformation in the modern period. The infectious disease and an international movement denouncing racial, social, and health inequality shattered an amazing positive trajectory of gains in patient treatment and research. Many illnesses, such as mental disorders and trauma, generate significant health problems but no or few deaths. As a result, various measures of survival and survivors' health state had to be merged to provide a single, holistic measure of total population health.

Keywords: Neurological Disorders • ADHD • Child Neurology

Introduction

Many neurological disorders in children are congenital, which means they are birth abnormalities or illnesses that occur while the kid is still in the womb. Other issues arise later in a child's life. Neurological issues in children are most common in their early years of development, and they can be recognised as early as birth. The disorder might manifest itself as birth defects or later in a child's life. Symptoms of neurological abnormalities in children can occur for a variety of reasons: Developmental difficulties, a virulent infection, and a traumatic brain damage the nerves deep inside the spinal cord and brain are more prone to damage because they are coated by many membranes [1]. The illness can cause malfunction by affecting the entire neural pathway. Infections, physical trauma, and lifestyle or nutrition-related concerns can all contribute to the illness. Many neurological abnormalities in toddlers are congenital, meaning they were present at birth, whereas others arise later in life. "Idiopathic" refers to conditions that have no known cause. Early in the twenty-first century, child neurology, like other paediatric sciences, developed into a unique clinical and scientific speciality. The neurosciences have made significant gains in our understanding of how the brain develops and responds to external stimuli, particularly in the domains of genetics, molecular biology, metabolism, immunology, and nutrition. Neuroimaging, electroencephalography, electromyography, muscle histology, biochemistry, and neuropharmacology have all made significant improvements in our abilities to evaluate and treat children with neurological problems [2]. In the fields of epilepsy, neurodegenerative and neurometabolic illnesses, nervous system infections, demyelinating diseases and malignancies, neonatal neurological problems, and neuromuscular diseases, these advancements have allowed for new and growing methods that are particular to children. They've also improved our understanding of the Neurobiologic underpinnings of common issues including global developmental delay, cerebral palsy, and autism. As spectacular as the last century's successes have been, the rapid progress in our understanding of the fundamental mechanisms underlying brain development will lead to even greater advancements in the clinical care of children with neurological problems in the future. Partial or total paralysis, muscle weakness, partial or complete loss of feeling, seizures, difficulty reading and writing, poor cognitive ability, pain, and decreased alertness are

*Address for Correspondence: Johri LB, Department of Health Science, University of Limpopo, Turfloop, South Africa, E-mail: ljohri.b-sa@gmail.com

Copyright: © 2021 Johri LB. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 03 October, 2021; Accepted 17 October, 2021; Published 25 October, 2021

all frequent symptoms of paediatric neurological illnesses. Infants can develop neurological abnormalities for a variety of reasons, with a wide range of consequences for the new-born and his or her family. Some frequent childhood neurological illnesses include autism, epilepsy, cerebral palsy, brain damage, and headache. Autism, Attention Deficit Hyperactivity Disorder (ADHD), Dyspraxia, Dyslexia, Cerebral Palsy, and other conditions are examples. Some children with a neurological disease that causes muscle weakness or coordination problems may benefit from physical therapy. After a surgical treatment, some children may benefit from physical rehabilitation [3]. Seizures sleep disorders, head traumas, learning difficulties, and other developmental problems are among the conditions that paediatric neurologists diagnose and treat. Pediatric neurologists are also experts in the prevention and reduction of neurological disease and disability. Medication can assist control the disease, minimise the symptoms of neurological abnormalities in children, and enhance their overall quality of life [4]. The type of medication used to treat the ailment, on the other hand, will be determined by the condition. It may contain corticosteroids, which are used to treat multiple sclerosis.

Conclusion

Neurological disorders are difficult to understand. Symptoms frequently overlap and can be misconstrued. We know that having cutting-edge neurological diagnostic equipment is critical for good imaging and test results, but we also know that it's only half of the storey. The paediatric neurologists who interpret the results must be well trained and versed in a variety of neurological conditions.

References

1. Obi, JO., and Sykes RM. "Neurological diseases as seen at the outpatient Pediatric neurology clinic in Benin City". *Ann Trop Pediatr.* 4; (1984): 217-220.
2. Williams, K., Thomson D, and Seto I. "Standard 6: age groups for Pediatric trials". *Pediatrics.* 129; (2012): 153-160.
3. Wammanda, RD., Onalo R, and Adama SJ. "Pattern of neurological disorder presenting at a Pediatric neurology clinic in Nigeria". *Ann Afr Med.* 6; (2007): 73-75.
4. Frank-Briggs, AI., and Alikor-D EA. "Pattern of Pediatric neurological disorders in port Harcourt, Nigeria". *Int J Biomed Sci.* 7; (2011): 145-149.

How to cite this article: Johri, Boman L. "Challenges and Future Directions of Pediatric Neurobiological Disorder". *Clin Med Case Rep* 5 (2021):174.