Living with Cerebral Palsy:

Literature Review

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Living with Cerebral Palsy

Cerebral palsy is a life-long condition that can affect movement, coordination, and sometimes cause learning difficulties (Badawi et al., 2018). According to the CDC, there are risk factors that increase the chance of developing cerebral palsy, such as assisted reproductive technology (ART) infertility treatments, infections during pregnancy, and birth complications that affect the motor development later in life (CDC, 2017).

I want to begin by introducing my own experience with cerebral palsy. I have a younger sister with cerebral palsy. She was born with it and was not expected to live over the age of 4; however, she is now 36 years of age. This paper will touch base on preventative strategies for young mothers, how to make the best of the worst outcome, and life-long methods of care. Overall, this assignment will reveal the best evidence-based practice on optimizing outcomes of patients with cerebral palsy. Cerebral palsy is not just one disease or one entity, but that it affects everything within the human body.

Neonatal interventions for preventing cerebral palsy: an overview of Cochrane Systematic Reviews

This article discusses the importance of how prematurity had the highest risk upon the future development of cerebral palsy (Badawi et al., 2018). Other impacts such as birth asphyxia, congenital disabilities, and adverse labor incidents contributed significantly to the future development of cerebral palsy, as well (Badawi et al., 2018). These other impacts suggest that the cause of cerebral palsy in the preterm infant is most likely multifactorial (CDC, 2017).

Key Points

Around 85% to 90% of cerebral palsy is congenital (CDC, 2017). Risk factors for congenital cerebral palsy may include low birth weight, premature birth, multiple births, infertility treatments, infections, kernicterus (jaundice), birth complications, and medical conditions of the mother (CDC, 2017). Cerebral palsy can also be acquired, and a small percentage of newborns acquire cerebral palsy after 28 days of life from infections, hypoxia, or head injury (CDC, 2017).

There are preventative measures young mothers can take to help reduce the risk of cerebral palsy before, during, and after the baby is born. There is strong evidence that shows the uptake of magnesium sulfate (MgSO4) during preterm labor reduced rates of cerebral palsy by around 30% (Chang et al., 2018). Some other preventive measures young mothers can take to help reduce the risk of cerebral palsy are to get vaccinated, get early and regular prenatal care, and to practice hand hygiene (CDC, 2019).

Assumptions

The article does point out that the cause(s) of cerebral palsy are not entirely known, but that actions taken to help prevent cerebral palsy before and during pregnancy can significantly reduce the risk of infants from developing it (CDC, 2017).

Although there is strong evidence that supports the risk factors mentioned, it does not mean that a child will develop cerebral palsy. This article provides a useful information source for educating patients who are pregnant and offers links to more information that can be beneficial.

Deficit/Conclusion

The overall conclusion of this article states that the majority of infants who have cerebral palsy have risk factors that cause brain injury during prematurity. Only a small percentage of

cerebral palsy is acquired after 28 days of life. There are actions that pregnant mothers can take before and after pregnancy that help prevent the development of cerebral palsy, and treatments that help ensure a healthy pregnancy.

Complementary, Alternative, and Mainstream Service use Among Families with Young Children with Multiple Disabilities: Family Costs to Access Choices

It can be devastating when a family hears that their child has a disability or disease. After the shock, there comes a time when the family must find ways to make the best out of the situation, and to find the best treatment(s) that will optimize their child's development. Families must learn about their child's condition and choose the unique plan of care for their child (Bourke-Taylor et al., 2014). This article discusses the importance of utilizing multidisciplinary healthcare professionals from an array of services to help with selecting the best interventions (Bourke-Taylor et al., 2014). Some families are bombarded with great responsibilities in the care for their disabled child, and do not receive the proper education they need for care, or know how to select the proper treatment for their disabled child (Bourke-Taylor et al., 2014).

Cerebral palsy is a permanent condition, but is not progressive. However, abnormal muscle tone or motor control can shorten muscles and deform bones, so early intervention and appropriate treatment is needed to help ease symptoms and improve the child's abilities (Freeman et al., 2014). There are a wide range of services available for disabled children, including complementary/alternative treatment (Bourke-Taylor et al., 2014). Some treatments, such as acupuncture combined with comprehensive rehabilitation can improve cognitive function, spasticity, and motor function in children with cerebral palsy (Che et al., 2019). However, not all treatments cater to the unique treatment an individual child needs (Ricci et al.,

2017). The early use of healthcare professionals in developing unique interventions for treatment may be a better solution in optimizing the care of the child, as well as being more cost-efficient than complementary/alternative treatments (Bourke-Taylor et al., 2014).

Key Points

Twenty-three (79%) of families in the study reported caring for a child with cerebral palsy and used one form of complementary/alternative treatment or more (Bourke-Taylor et al., 2014). The injury that occurs early in life can cause effects on many different functions like communication, eating, mobility, and learning. Children born with cerebral palsy may have difficulty with all the different functions, or just a few; requiring each child to have a unique plan of care (Freeman et al., 2014). According to Freeman, "Cerebral palsy is the most frequent cause of motor disability in children and adolescents with a prevalence of 2 to 3 children per 1000 live births." (2014, p. 101). When families are counseled about a diagnosis of cerebral palsy, healthcare professionals must anticipate what their thoughts and feelings are in developing a unique treatment plan to improve the patient's quality of life (Bourke-Taylor et al., 2014).

Assumptions

The article focuses on how families with disabled children use complementary/alternative medicine for treatment, instead of using healthcare professionals for early interventions. Over time, the cost of CAM services, such as chiropractic services, naturopathy, percussion therapy, and Chinese medicine financially drain families, but the article does not provide data for comparison between the costs associated with CAM and modern medicine.

Deficit/Conclusion

The overall conclusion of this article states that families with children who have multiple disabilities generally select costly complementary/alternative treatment, instead of seeking help from healthcare professionals for early intervention.

The clinical effectiveness and personal experience of supported standing for children with cerebral palsy: a comprehensive systematic review protocol

This article discusses the importance of the clinical effectiveness of standing for children with cerebral palsy, their activities, participation, and quality of life (Freeman et al., 2014). Cerebral palsy comes in different types depending on which part of the brain is affected, but spastic cerebral palsy, also known as spasticity, is the most common form (Freeman et al., 2014). Spasticity is the tightness of the muscles that can interfere with function, such as walking, can cause pain, and eventually lead to orthopedic deformities if left unchecked (Freeman et al., 2014). This article suggests that postural management programs, such as supported standing, will improve bone growth, encourage proper spine alignment, and minimize musculoskeletal problems.

Key Points

It is estimated that approximately 35% of children are unable to stand independently, four percent are unable to stand at all, and almost one third of children are non-ambulatory (Freeman et al., 2014). Many children with cerebral palsy spend their lives in a sitting or lying position, which puts them at greater risk for musculoskeletal problems, such as hip dysplasia, contractures, scoliosis, and osteoporosis (Freeman et al., 2014).

Assumptions

The article does point out that there no guidelines regarding standing programs for children with cerebral palsy, so there are no qualitative studies in this area. However, a large part of this article is the argument that there are no qualitative studies and that the National Institute of Clinical Excellence has identified the need for research into standing programs (Freeman et al., 2014).

Deficit/Conclusion

The current evidence-based research on cerebral palsy does conclude that multidisciplinary approach to treatment ultimately improves the child's quality of life (Ricci et al., 2017). So, healthcare professionals need to look at each child individually. One treatment may work on a child, whereas several options may work better. Cerebral palsy affects the development of posture and movement, so further research on standing programs can benefit in helping children with cerebral palsy to develop strong bones and muscles, and perhaps physiological and functional improvement. The article supports the need for further review of literature that may provide more evidence than what is currently available before undertaking further research.

Conclusion

Cerebral Palsy is brain damage that causes loss of muscle control like movement, coordination, and sometimes can cause learning difficulties (Badawi et al., 2018). The occurrence of cerebral palsy is thought to happen before birth (Badawi et al., 2018). Some congenital risk factors like exposure to infection during pregnancy, the use of assisted reproductive technology (ART) infertility treatments, or birth complications can cause cerebral

palsy (Badawi et al., 2018). Families must learn about their child's condition and choose the unique plan of care for their child (Bourke-Taylor et al., 2014).

There are preventative measures young mothers can take to help reduce the risk of cerebral palsy before, during, and after the baby is born. One measure is to uptake the intake of magnesium sulfate (MgSO4) during preterm labor reduced rates of cerebral palsy by around 30% (Chang et al., 2018). Other preventative measures include vaccinations, early and regular prenatal care, and practicing hand hygiene have proven to minimize infection (CDC, 2019). Only a small percentage of cerebral palsy is acquired after 28 days of life, so it is imperative to start early interventions (CDC, 2019).

A child with cerebral palsy must get the best treatment(s) that will optimize his/her development. Families must learn about their child's condition and choose the unique plan of care for their child (Bourke-Taylor et al., 2014). Families need to quickly seek out help from healthcare professionals in order to receive the early intervention (Bourke-Taylor et al., 2014). Families must learn about their child's condition and choose the unique plan of care for their child's needs (Bourke-Taylor et al., 2014).

The long-term care or treatment for cerebral palsy affects the child's quality of life (Freeman et al., 2014). There is still much to learn about cerebral palsy, and much research is needed in several aspects of the individual child with cerebral palsy. Research in standing programs can be beneficial in improving bone growth, encouraging proper spine alignment, and minimizing musculoskeletal problems (Freeman et al., 2014).

Living With Cerebral Palsy

Cerebral palsy is not just one disease or one entity, but that it affects everything within the human body. Although cerebral palsy is not curable, it is treatable. Treatment usually involves a multidisciplinary approach; using healthcare professionals like neurologists, rehabilitation specialists, occupational therapists, speech therapists, etc. This interdisciplinary team works together to find a unique plan of care for the child with cerebral palsy; ultimately improving their quality of life.

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