

As Their Outcomes Change Over Time, People with Cerebral Palsy Use Motor Rehabilitation Services in Different Ways

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Introduction

Coordinated and multidisciplinary rehabilitation is necessary to fully address the health issues that individuals with cerebral palsy (CP) encounter throughout their lifetime. The use of motor rehabilitation services and outcomes among people with CP vary across the lifespan. Most of the research on rehabilitation for people with CP has been done on children, even though CP is a condition that lasts a lifetime [1]. All dimensions of the International Classification of Functioning deteriorate early with aging, even though the cerebral lesions that impede brain development are non-progressive. Mobility becomes more restricted, pain gets worse, and cardiovascular and cognitive disorders develop earlier than expected [2]. Adults with CP have recently become the focus of a growing interest in research due to these shifting health statuses over time, which result in varying medical and rehabilitation requirements. However, it is extremely difficult for healthcare systems to provide coordinated, multidisciplinary rehabilitation programs that are able to adapt to the changing rehabilitation requirements of each individual throughout the various stages of their lives.

Healthcare for adults and children differs greatly, and the transition to adult services is rarely easy. When they leave the pediatric system, people with CP frequently report feeling empty. Even though clinical guidelines for the transition from childhood to adulthood have been established in various nations over the past ten years, young adults with CP continue to report that this transition is challenging. In France, the medical services framework gives 100 percent inclusion of all medical services uses under a public fortitude plan ("Contribution Maladie - Sécurité Sociale") to thirty ongoing circumstances, including

posed to the participants regarding the availability of physiotherapists, access to a CP rehabilitation-trained physiotherapist, the care setting (private outpatient clinic versus healthcare organization), the presence of a designated healthcare professional coordinating their MR, and regular communication between professionals [6]. Rehabilitation Service Use – the participants reported their current participation in MR, the weekly amount of physical therapy (PT) they received (90 minutes per week), MR multidisciplinary (two or more therapies), and whether or not they shared the goal setting process, satisfaction with pain management during physical therapy, and perceived outcome of MR (impact of MR on activities of daily living and quality of life for people with CP and for their primary carer) were used to assess patients' satisfaction with rehabilitation services [7–11].

Most outcome responses were scales 0–5 (availability of physiotherapists, access to a physiotherapist with specific training, communication between professionals, satisfaction with pain management, shared physiotherapy goal setting) or 5–5 (impact of MR on people with CP and their primary carer). Some outcome responses were dichotomous (service provider, MR multidisciplinary, attending school or work). The primary determinant of the study was the age of the participants. To reflect the division between the pediatric and adult healthcare systems, age was divided at 18 years. To additionally investigate the change age, the variable was sorted in four levels: children between the ages of 2 and 11, adolescents between the ages of 12 and 17, young adults between the ages of 18 and 24, and individuals over the age of 25. Population Factors – the participants reported their gender, CP subtype, Gross Motor Function Classification System (GMFCS) and Manual Ability Classification System (MACS) levels, associated impairments (severe visual, hearing, intellectual, and epilepsy), mother education, frequency of pain episodes, and participation in professional or academic activities [12–17].

Discussion

The study's accessibility to rehabilitation services was a significant outcome: Nearly half of children, and even more adults and adolescents, reported finding a physiotherapist to be extremely difficult. It was even more challenging to locate a physiotherapist with experience in CP rehabilitation, and the difficulty was even greater for adults. Since both children and adults with CP are fully covered by the French healthcare system, the accessibility issues we found cannot be related to the direct financial cost of MR sessions. Instead, healthcare availability and organization may be related to accessibility. There was a noticeable switch in the setting where recovery was given. Children and adolescents mostly went to MR in a healthcare organization, while adults, especially those over 25, mostly went to private outpatient practices for rehabilitation. Interestingly, adulthood was associated with a decrease in the presence of an MR coordinator and the perception of communication between healthcare professionals. In contrast to the WHO's recent call for a stronger multidisciplinary rehabilitation workforce and promotion of the role of allied health professionals in a coordinated strategy aiming at better health outcomes, adults (41%) and adolescents (61%) showed a distinct lack of multidisciplinary management. These changes, which occurred around the age of 18, suggest that the adult healthcare system may be less adapted to the needs of people with CP than the pediatric healthcare system, which has well-identified and promoted rehabilitation pathways. A failure to provide a smooth transition has been well-described in adulthood, but it has also been described much earlier in the transition from pre-school to school-based services, highlighting the need to take into account a larger window of transition.

Even though the rate was slightly lower among adults, almost all participants reported using MR services, particularly physical therapy. Since physical therapy (PT) is routinely prescribed and now recommended as a first-line treatment in France, this outcome was anticipated; Additionally, it is consistent with a prior study of adults with CP in a France region. The in-depth analysis revealed that young adults received less weekly physiotherapy than children and adolescents did, and that this trend continued after the age of 25. This conclusion is consistent with data from numerous nations with diverse healthcare systems: United States, Canada, United Kingdom, Australia, Singapore, and low- and middle-income nations. The French system's different approaches to healthcare after the age of 18 or a shift in the specific needs of people with CP could explain the decline in rehabilitation service use.

Conclusion

This study provides a novel, lifespan perspective of how people with CP perceive and utilize the French healthcare system. Its primary focus was on age-related changes in rehabilitation system indicators and patient outcomes.

Individual and system-level actions can be suggested based on the findings:

- Taking into account a longer period of time between early adolescence and the late twenties

- Creating MR programs that specifically address the requirements of adolescents

- Keeping a multidisciplinary approach throughout adulthood

- Providing access to MR professionals who are trained in CP at all ages

- Promoting pain management and shared goal setting throughout the MR at all ages, but especially in adulthood.

Finally, the findings of this and other studies indicate that national healthcare systems face significant difficulties in meeting the needs of people with CP.

This study adds to the evidence that comprehensive national strategies that address healthcare, rehabilitation, education, employment, and social support systems for people with CP are needed.

Conflict of Interest

According to the authors, there were no financial or commercial relationships that might have led to a conflict of interest in the research.

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