Health impact of pandemic in children with physical disabilities and their families

Abstract

COVID-19 pandemic had a big impact on daily life in children with physical disabilities and their families. Children are facing mental, social, and physical risks.

<u>Objectives:</u> this study was produced to determine the impact of the pandemic on continuity of rehabilitation, especially physiotherapy in children with physical disabilities.

Methods: an online survey done in France by "enfant, confinement, handicap, besoin" ECHO was addressed to parents of children with physical disabilities aged 0 to 18 years old. Children well-being, rehabilitation information was collected from the 1000 eligible surveys and analyzed.

Another online survey published by the Irish journal of Medical Science was conducted for the Impact of COVID Pandemic on the Children with Cerebral Palsy using a nine-parts questionnaire comprising 26 questions. Survey included questions pertaining to demographic data, ambulatory status, lack of access to physiotherapy, orthotic adjustment, surgery, deterioration of function, and behavior. A simple binary answer was sought to cover all social strata of society. Results Responses were received from 101 caregivers who participated in an online questionnaire.

Results:

ECHO shown that the majority of cases were cerebral palsy (42%) and neuromuscular diseases (11%). Lockdown had negative effects on moral (44%) behavior (55%) and social interaction (55%) Overall 44% of children stopped physical activities, 48% continued physiotherapy, 27% occupational therapy, in more than 60% parents performed therapy.

Main parental concern was rehabilitation (72%) parents complained of lack of help and support (60%)

When it comes to the Impact of COVID Pandemic on the Children with Cerebral Palsy, 25.7% had no therapy sessions, 74.2% were on therapy of which 23.7% had online sessions. The lockdown restrictions coupled with lack of rehabilitation and orthotic support led to deterioration in physical function in 54 children and worsening of deformity in 34. Changes in behavioral pattern was observed in 45 children.

Conclusion: these studies showed the impact of the pandemic on the health of children with physical disabilities, with interruption of medical follow-up and rehabilitation. Regular assessment is essential to support families and ensure continuity of care.

The parents reported difficulties in managing the child therapy at home. There is always a possibility that the pandemic will result in a lockdown again, and hence our approach toward physical therapy assessment and rehabilitation needs to be towards home-based and family-centered care.