Physical & Occupational Therapy In Pediatrics

ISSN: 0194-2638 (Print) 1541-3144 (Online) Journal homepage: https://www.tandfonline.com/loi/ipop20

COVID-19 Pandemic: Is This a Good Time for Implementation of Home Programs for Children's Rehabilitation in Low- and Middle-Income Countries?

Egmar Longo, Ana Carolina de Campos & Veronica Schiariti

To cite this article: Egmar Longo, Ana Carolina de Campos & Veronica Schiariti (2020): COVID-19 Pandemic: Is This a Good Time for Implementation of Home Programs for Children's Rehabilitation in Low- and Middle-Income Countries?, Physical & Occupational Therapy In Pediatrics, DOI: 10.1080/01942638.2020.1759947

To link to this article: https://doi.org/10.1080/01942638.2020.1759947

Published online: 14 May 2020.

PHYSICAL & OCCUPATIONAL THERAPY IN PEDIATRICS
https://doi.org/10.1080/01942638.2020.1759947

Taylor & Francis
Taylor & Francis Group

COMMENTARY

COVID-19 Pandemic: Is This a Good Time for Implementation of Home Programs for Children's Rehabilitation in Low- and Middle-Income Countries?

Egmar Longo[a], Ana Carolina de Campos[b], and Veronica Schiariti[c]

[a]Graduate Program in Rehabilitation Sciences and in Collective Health, Faculty of Health Sciences of Trairi, Federal University of Rio Grande do Norte (UFRN-FACISA), Santa Cruz, Rio Grande do Norte, Brazil; [b]Graduate Program in Physical Therapy, Department of Physiotherapy, Federal University of São Carlos (UFSCAR), São Carlos, São Paulo, Brazil; [c]Division of Medical Sciences, University of Victoria, Victoria, Canada

It is time to stay home. This is the global call to fight the advance of the most recently discovered coronavirus causing coronavirus disease COVID-19 (World Health Organization [WHO], 2020). While the whole world is looking for strategies to follow the recommendations of the WHO to stop this pandemic, low-and middle-income countries like Brazil face additional challenges regarding the care of children with disabilities, specifically we asked ourselves how to maintain rehabilitation services in times of social isolation?

The WHO advises people of all ages to take steps to protect themselves from the virus, and current recommendations emphasize the importance of avoiding public places and staying at home (Niu & Xu, 2020). Children with disabilities such as cerebral palsy, congenital Zika syndrome, and other chronic childhood conditions require extra care. Schools and daycare centers, public and private, are currently suspended for a period ranging from 15 days to undetermined.

In the midst of this whirlwind of information, families of children with disabilities continue to seek rehabilitation services to keep their children undergoing physical, occupational, or speech therapies. As children with disabilities are a vulnerable population, isolation actions are mandatory (United Nations [UN], 2020). Notably, in this health emergency caused by the COVID-19 pandemic, it is crucial to adopt a biopsychosocial model in rehabilitation, strengthening the role of the immediate environment, in this case the families. However, in low-and middle-income countries the medical model continues to prevail in rehabilitation care (Longo et al., 2019). Moreover, there are additional factors hindering the implementation of family-centered practices (FCP), despite evidence to support FCP, e.g., improvement in psychosocial behavior of children and their parents as well as greater satisfaction with services (Bamm & Rosenbaum, 2008). A major hindering factor is that many parents may feel unmotivated and unprepared to actively participate in the process of rehabilitating their children with disabilities.

Recent research indicates that home-based programs are effective in improving the motor function of children with cerebral palsy (Novak et al., 2020), which is the main

CONTACT Egmar Longo egmarlongo@yahoo.es Faculty of Health Sciences of Trairi, Federal University of Rio Grande do Norte (UFRN-FACISA), Santa Cruz, 59200-000, Brazil.

cause of childhood disability in Brazil and worldwide. The reference model for providing an effective home program includes five steps: (1) establishing a collaborative partnership, where parents are the experts in knowing their child and their home environment; (2) having the child and family (not the therapist) setting goals about what they would like to improve; (3) establishing home programs by choosing evidence-based interventions that match the child and family goals and empowering the parents to exchange the activities to match the child's preferences and the unique family routine; (4) providing regular support and coaching to the family to identify the child's improvements and adjust the complexity of the program as needed; and (5) evaluating the outcomes as a team (Novak & Cusick, 2006).

Several interventions have been modified to be delivered at home, since the context where the child grows and develops can be a facilitator and improve the results of participation in the rehabilitation process (goal directed functional therapy, constraint induced movement therapy). Considering the current Brazilian scenario, despite their benefits, home programs are challenging to implement. Such challenges can be partially explained by the excessive amount of information that parents receive on various types of interventions, many with low evidence and high cost (Longo et al., 2019). This mercantilist tendency, which overestimates the specialty, leads parents to feel fragile and unable to stimulate their children at home, even though the parents receive appropriate coaching and supervision.

At this unique moment due to the COVID-19 pandemic, when rehabilitation services are shut down by recommendations from the authorities, increased expectations for parents to be responsible for their children's therapy at home can cause them to experience feelings such as insecurity, abandonment and anxiety. In Brazil, some rehabilitation services encourage parents to continue the activities performed by professionals in their familiar context, however, in addition to not being a common practice, such experiences are more focused on the transfer of interventions focused on body function. Few services use home visits to get to know the context of the disabled child and his family, to combine rehabilitation intervention with the environment. Thus, therapists and families may be unprepared for moments such as the lair COVID-19 pandemic and therapy can increase family stress. Although abrupt and unplanned, this can offer an opportunity for the implementation of FCP, encouraging therapists to interact with the family in the context of priorities and the need for the child's role at home. How can we be creative and take concrete steps toward implementing home programs during the COVID-19 pandemic?

First, it is important to understand family circumstances during the pandemic to place the therapy program at home in the context of the family's general needs and priorities. Joint strategies can be developed, such as the use of information technologies, described as a key strategy to deal with emerging public health situations in low-and middle-income countries (Winkler, 2020). Monitoring families through messaging applications, for example, can result in a better perception of care and safety. On the other hand, more up-to-date regulations on the part of professional councils – for example promoting telehealth for follow-up and continuity of care- are necessary, in order to protect professionals, while allowing advances in this regard, especially considering the ethical imperative of maintaining health care actions in times of a major pandemic.

The use of booklets can also be an important resource, especially when we consider the vulnerability of some families, who may have low educational levels as the poverty-disability cycle continues to prevail in low-and middle-income countries (Banks et al., 2017). Listening to families is essential. It is necessary to make them feel they are a fundamental part of the care process. This empowerment process can be the first step in facilitating the implementation of home programs. We would like to call for actions as the COVID-19 pandemic is developing, rehabilitation professionals, parents and children with disabilities may collaboratively design home therapy models in this pressing moment.

In a globalized world, care actions must also include health education aimed specifically at preventing transmission, considering the low levels of education and high vulnerability of populations in low-and middle-income countries. Looking beyond the pandemic scenario, this window of opportunity can drive a change in the rehabilitation care scenario and contribute to the implementation of evidence-based practices in Brazil and other low-and middle-income countries.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

Bamm, E. L., & Rosenbaum, P. (2008). Family-centered theory: Origins, development, barriers, and supports to implementation in rehabilitation medicine. *Archives of Physical Medicine and Rehabilitation*, *89*(8), 1618–1624. https://doi.org/10.1016/j.apmr.2007.12.034

Banks, L. M., Kuper, H., & Polack, S. (2017). Poverty and disability in low-and middle-income countries: A systematic review. *PloS One*, *12*(12), e0189996. https://doi.org/10.1371/journal.pone.0189996

Longo, E., de Campos, A. C., & Palisano, R. J. (2019). Let's make pediatric physical therapy a true evidence-based field! Can we count on you? *Brazilian Journal of Physical Therapy*, *23*(3), 187–188.

Longo, E., de Campos, A. C., & Schiariti, V. (2019). Zika virus after emergency response: Can the ICF guide rehabilitation of children with microcephaly? *Pediatric Physical Therapy*, *31*(4), 370–372. https://doi.org/10.1097/PEP.0000000000000647

Niu, Y., & Xu, F. (2020). Deciphering the power of isolation in controlling COVID-19 outbreaks. *The Lancet Global Health*, *8*(4), e452–e453. https://doi.org/10.1016/S2214-109X(20)30085-1

Novak, I., & Cusick, A. (2006). Home programmes in paediatric occupational therapy for children with cerebral palsy: Where to start? *Australian Occupational Therapy Journal*, *53*(4), 251–264. https://doi.org/10.1111/j.1440-1630.2006.00577.x

Novak, I., Morgan, C., Fahey, M., Finch-Edmondson, M., Galea, C., Hines, A., Langdon, K., Namara, M. M., Paton, M. C., Popat, H., Shore, B., Khamis, A., Stanton, E., Finemore, O. P., Tricks, A., Te Velde, A., Dark, L., Morton, N., & Badawi, N. (2020). State of the evidence traffic lights 2019: Systematic review of interventions for preventing and treating children with cerebral palsy. *Current Neurology and Neuroscience Reports*, *20*(2), 1–21. https://doi.org/10.1007/s11910-020-1022-z

United Nations. (2020). *COVID-19: Who is protecting the people with disabilities? – UN rights expert*. https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25725&LangID=E Date accessed: March 19, 2020.

Winkler, A. S. (2020). The growing burden of neurological disorders in low-income and middle-income countries: Priorities for policy making. *The Lancet Neurology*, *19*(3), 200–202. https://doi.org/10.1016/S1474-4422(19)30476-4

World Health Organization. (2020). *Report of the WHO-China joint mission on coronavirus disease 2019 (COVID-19)*. Retrieved March 20, 2020, from https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf