Custom assistive devices for children with disabilities : Satisfaction and early abandonment

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Background:

- Custom-made device - tailored to the child's individual needs.
- Most literature on custom assistive devices focuses on adults. Lack of literature concerning children.
- The process of creating an assistive device that is not suitable for the user, leads to early abandonment of the device (before the expected time).

Aim

(a) Examining the differences in satisfaction between those who report using the device according to the original plan and those who report early abandonment.
(b) Examining the extent of abandonment of assistive devices among children.





Method

- N = 27 parents and caregivers of children who received customized assistive devices from the ALYN Hospital.
- Customized Satisfaction Questionnaire - Based on:
  - The Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST)[1].
  - Psychosocial Impact of Assistive Devices Scale (PIADS)[2].

Sample questions:

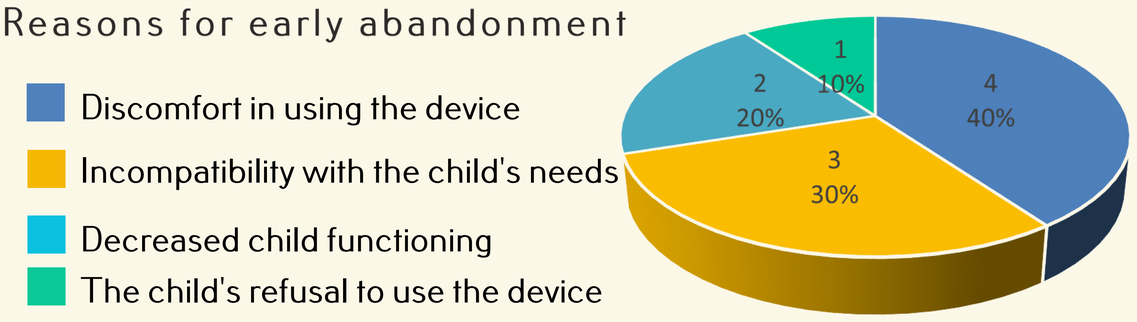
- To what extent does the device fulfill the need for which it was adapted/developed?
- To what extent are you satisfied with the contribution of the device in performing tasks that are important to your child/patient?
- To what extent are you satisfied with the size of the device?

%	n	The variable
		Type of disability
77.8	21	Congenital
22.2	6	Acquired
		Area of adjustment
44.4	12	ADL and sleep
25.9	7	Mobility and seating
22.2	6	Leisure and studies
7.4	2	Other

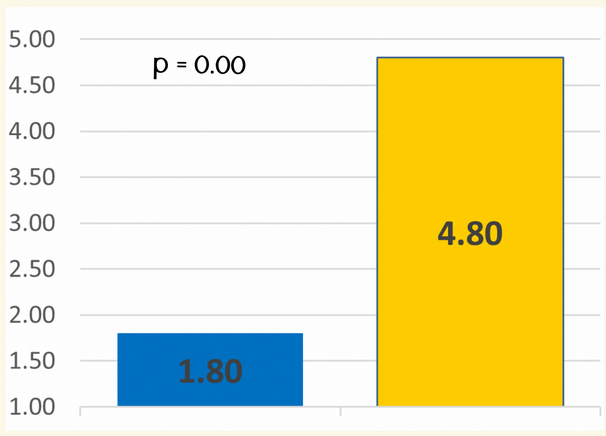
Results

- 63% (n = 17) used the device as intended

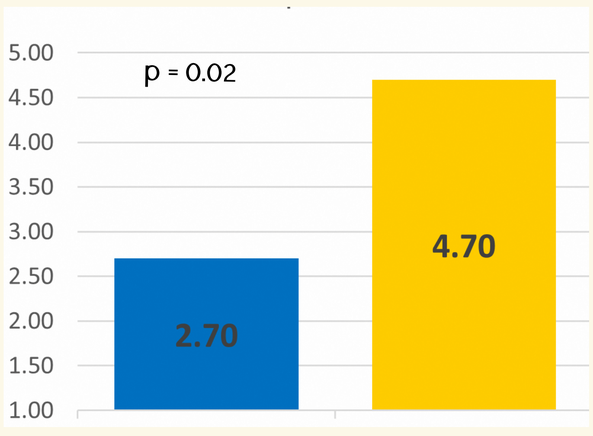
Reasons for early abandonment



Average satisfaction with the improvement in quality of life



Average overall satisfaction



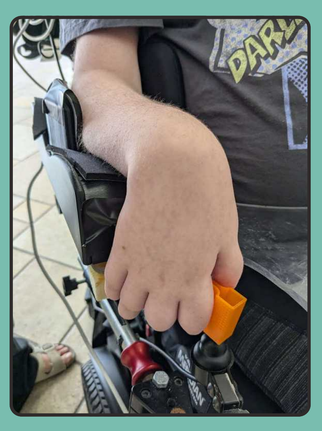
Early abandonment Used as planned

Discussion

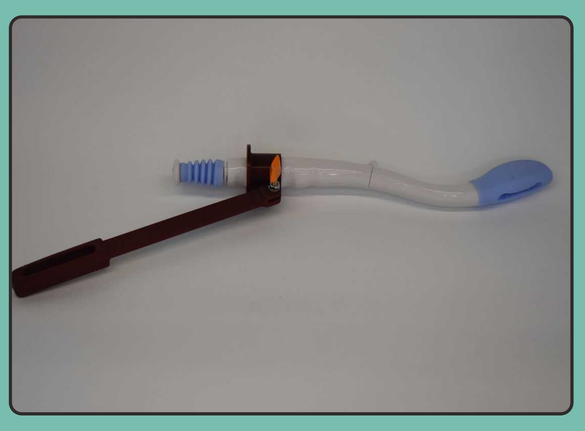
- The extent of abandonment of assistive devices is within the range accepted in the literature (20-70%).
- Compared to the group that reported early abandonment, those who used the device as intended expressed:
  - Higher overall satisfaction with the device.
  - Higher satisfaction with the improvement in quality of life.

Clinical implications

- When adapting the device, it is important to fine-tune it together with the child and his family so that it fits their daily needs.
- It is recommended to monitor the use of the device in daily life of the child and his family.







1 Demers, L. (2002). The Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST 20): An overview of recent progress. https://doi.org/10.13072/midss.298
2 Jutai, J., & Day, H. (2002). Psychosocial Impact of Assistive Devices Scale (PIADS). In Technology and Disability (Vol. 14). IOS Press.

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