



Coordination Program in the Education-Health Interface for Early Childhood with Special Needs (ICF Validation Instrument)

11-17 October 2014
Barcelona, Spain

Poster Number
WHO/CTS to insert

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Abstract Early Childhood with special needs requires a strong coordination between health and education professionals. Considering the potential development of this group and the benefits of early intersecting attention, a coordination program is proposed based on case management that uses common language to avoid the fragmentation of interventions, establishing the profiles of functioning and support from a health and education perspective. The central focus of the coordination program is an ICF-based instrument which, through methodology corroborated by experts, demonstrated validity and reliability.



Image 1: Problem-Sequence for a child with special needs, where the parents, health, education, and social services professionals don't use common language (Squares 1-4). A transversal ICF-based instrument which is used as a common framework is validated (Square 5).

Introduction

During the first years of life, children with special needs and their families turn to health and education specialists to establish diagnoses and intervention plans, generating a great amount of information with dissimilar concepts between the professionals and the parents, slowing down opportune attention during this age of high developmental potential (Image 1). Having a central program based on case management and a transversal ICF-based instrument which permits the use of common language in the continual back-and-forth of health and education can facilitate the continuity and coordination of the interventions. Experts were consulted with the objective of evaluating the validity and reliability of the instrument, considering that it will be used in four large areas: a) General information for medical specialists, b) process and results indicators for the coordinator c) information for parents to commit to certain support and d) profile of functioning for rehabilitation professionals and early childhood education centers that also include special needs children (Image 2).

Methods & Materials

The sample consisted of 21 health and education professionals. A self-administered tool with 28 items and 5 dimensions was sent. An additive scale of evaluation was used. The maximum score is 126 points, while the minimum is 28. The data were normalized to a range of values from 0 to 100, where 0 represents the best state of evaluation and 100 represents the worst possible state of evaluation.

To evaluate the validity, the differences in the mean scores between the different groups of evaluators was analyzed with a unidirectional analysis of the variance.

To determine the convergent and divergent dimensions, the Pearson correlation coefficient between evaluators was calculated. In this way, the scale-item correlation was also assessed using the Pearson correlation coefficient.

The reliability was analyzed through the internal consistency of the dimensions, which was evaluated using the Cronbach coefficient on the scores of the evaluators.

Results

Of the 21 professionals that were sent the instrument, only 14 responded to the requirements (66,7%). Half of these respondents work in clinical functions, while half work in managerial functions. For validity, the descriptive data of the mean score, as well as the standard deviation for each of the dimensions indicate an adequate relevance of the instrument (1.23). There is no significant difference between the scores assigned by the evaluators ($F=3.4$; $p=0.78$). The correlation indicators ($r=0.69$, $p=0.001$) indicate a positive relation among the different evaluators. For the internal consistency of the 28 items, a Cronbach coefficient was used, which gave values of 0.89 for health professional and 0.85 for education professionals.

Dimension	Health	Education
Support requirements	1.143	1.286
Adaptive conduct	1.143	1.357
Intellectual abilities	1.214	1.214
Psychomotor abilities	1.071	1.210
Environment acting as barrier or facilitator	1.143	1.286

Table 1: Average scores upon evaluating whether or not the dimension of the instrument is adequate. (1= Very Adequate; 3= Inadequate)

Conclusions

Significant efforts by professionals are being made to strengthen the continuity, coordination, monitoring, and follow-up of actions in early childhood.

The model in its pilot phase has obtained significant results in all of its indicators.

According to the assessment specialists, the instrument is valid and reliable, permitting the implementation of the following steps: complete field tests, create a prototype of software design and validation in order to make an online digitalized monitoring system that permits users to access an information platform from any geographic point that has Internet connection.

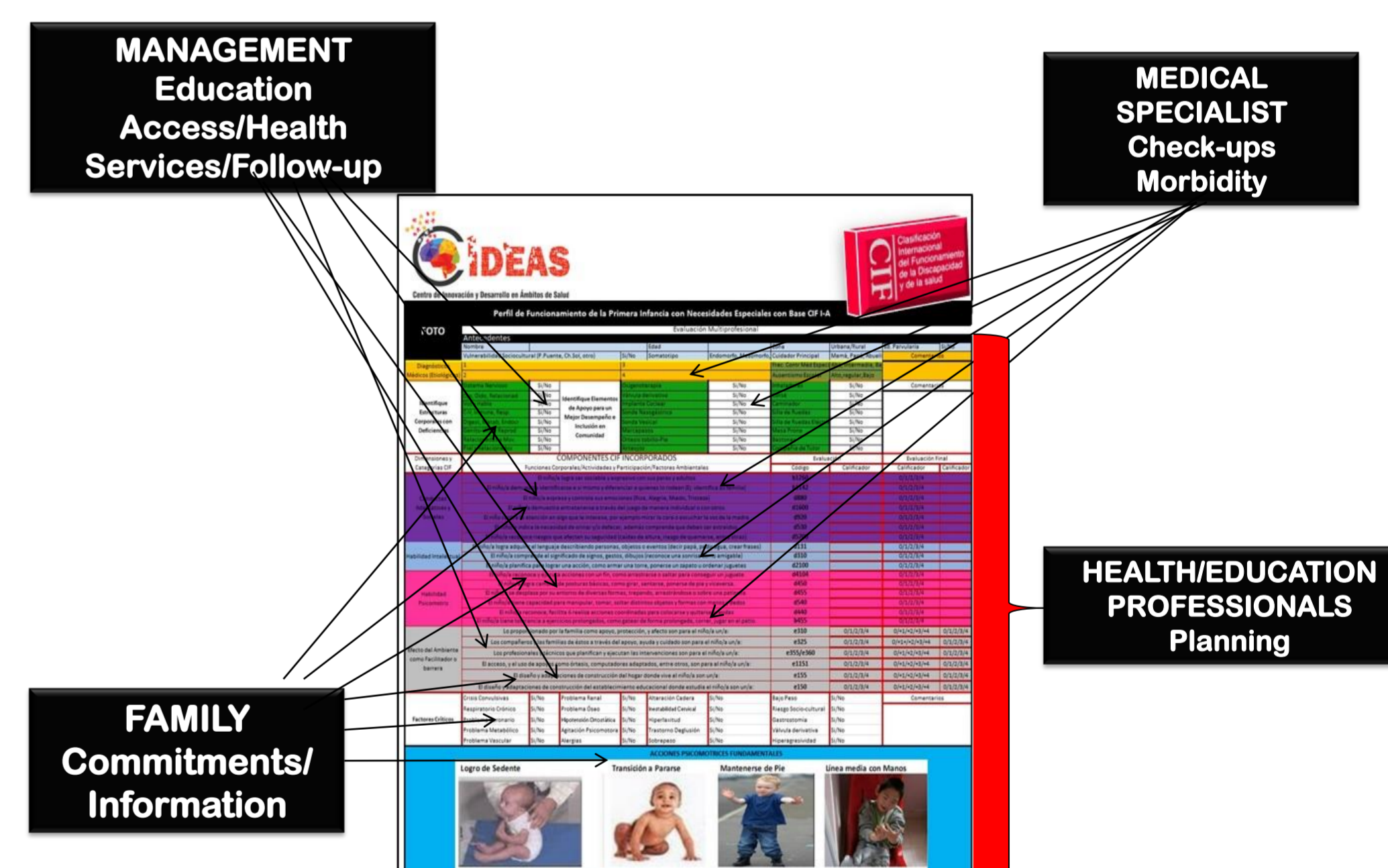


Image 2: The instrument generates information for central coordination with indicators of: management, basic actions for parental commitments to collaborate in interventions, a basic profile of the case for medical specialists, and the education-health team's support plans.

Acknowledgements or Notes

We would like to thank those that collaborated on the development of the instrument. Construction and design: Teresa Nuñez, María Pomez, Paulina Alid, Mauricio Zepeda; Revision and proofreading: Helia Molina, Carlos Quinteros, Patricia Soliz, Armando Vázquez, Carolina Toro, Marisol Moreno, Yonatan Encina, Elizabeth Fonseca, Guadalupe Morales, Fernanda Jara, Mariela Amaro, Mónica Donoso, Andrés Ehrmantraut, Magaly Jaimes, Jaime Collazos, Elizabeth Fernández; Tech support: Horst Rojas; Images: Ricardo Lara, Kurt Castro; Translation: Chelsea Dietsche

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