

Conference abstract

Information and communication technology in learning development and rehabilitation

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Abstract

Introduction: There is still no evidence to base interventions on neuropsychological rehabilitation or cognitive stimulation related with learning development. There are two main problems to solve. The first is the sustainability of the clinical interventions. The second one is the lack of evidence. This is not derived at all from a lack of studies but to methodological difficulties finding trials suitable for meta-analysis. This is a real hazard for translational research because of the difficulties of developers in testing new designs and showing efficacy, and also for the development of the body of knowledge, making difficult to find main theories and design appropriate experiments.

Description of care: ICTs have profoundly modified this scenario. Advances in communication technologies allow delivery of intensive, personalized, monitored neuropsychological intervention, through telerehabilitation platforms, and cognitive neuroscience based content, to guide plastic changes towards the recovery of more appropriate behaviour. Advances in information technologies have provide new possibilities to assess efficacy, opening new pathways to knowledge discovery from databases generated from clinical practice.

Conclusion: Institute Guttman, from its initiative PREVIRNEC, is pioneering the application of this dual approach, bridging knowledge to the end user through communication technologies (internet) and extracting implicit knowledge (efficacy on neuropsychological rehabilitation) from data generated from each intervention.

Keywords

neuropsychological rehabilitation, cognitive stimulation, efficacy, efficiency, telerehabilitation

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