

# PEDIATRICS AND NEONATOLOGY

August 16, 2021 | Webinar



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## Autism spectrum disorders therapy: the efficacy of neuro-psychomotor approach in children

**Background and Objectives:** Autism Spectrum Disorders (ASD) are characterized by impairments in social interaction and reciprocal communication. ASD affects about 1% of the general population and is associated with substantial disability and economic loss. A variety of approaches to improve the core deficits and lives of people with ASD have been developed, including behavioral, developmental, educational, and medical interventions. The main objective of this study was to evaluate the efficacy of neuro-psychomotor approach in children affected by ASD.

**Materials and Methods.** The results involve 84 children (66 males, mean age of  $56.9 \pm 15.8$  months) affected by ASD assessed between September 2020 to April 2021. The therapist was asked to complete the ASDBI test at two different times T0 (September 2020) and T1 (April 2021) to assess the child's evolution over the course of six months.

**Results.** After 6 months of neuro-psychomotor treatment ASD children showed a significant improvements for AUTISM composite  $75.8 \pm 11.5$  (T0) and  $65.4 \pm 12.2$  (t1) ( $p < 0.0001$ ) and specifically for the domains: problems of excitability (ECCIT); aggression (AGG); behaviors in social relations (RELSOC), expressive ( $p < 0.001$ ), sense/perceptual contact modes (SENS)  $p = 0.0007$ ; ritualisms/resistance to changes (RIT)  $p = 0.0002$ ; pragmatic/social problems (PPSOC)  $p = 0.0009$ ; Specific fears (FEARS) ( $p = 0.01$ ) and learning and memory (AMLR) ( $p = 0.0007$ ). No differences for the domains Semantic/pragmatic problems (PPSEM) and language (LESP) were found.

**Conclusions.** These findings corroborate the importance of neuro-psychomotor treatment in children with ASD. However, more research needs to be done to better understand the long-term effects of this specific type of approach.

## Biography:

Marco Carotenuto is Associate Professor and Chief of the Unit of Child and Adolescent Neuropsychiatry at Università degli Studi della Campania "Luigi Vanvitelli" in Italy. His research interest field are focused on polysomnographic studies in children and adolescents affected by neurodevelopmental disorders and on pediatric rehabilitation of autism spectrum disorders.