

6<sup>th</sup> International Conference & Exhibition on

# Physiotherapy & Physical Rehabilitation

August 13-14, 2018 | London, UK

## Motor difficulties presented by children with ASD suggest physical therapy as a needed early intervention for this group of clients

Meir Lotan<sup>1,3</sup>, Osnat Atun-Einy<sup>2</sup> and Yael Harel<sup>3</sup><sup>1</sup>Ariel University, Israel<sup>2</sup>Haifa University, Israel<sup>3</sup>Association for Children at Risk, Israel

**Background:** Previous reports suggest that many children with ASD demonstrate atypical motor development and delay in motor milestones achievements such as: a-symmetry, oral-motor problems, repetitive motor movements, and dyspraxia, motor coordination, movement preparation reaction, motor milestones delays. Research from a cohort of 154 children with ASD has described that fifty one percent were showing Hypotonia, thirty four percent were found with motor apraxia. Toe-walking was observed in 19% of the research population. Moreover, there are some that suggest that movement disturbances play an intrinsic part in the development of the child with ASD, and that they are present from birth.

**Present Investigation:** Our findings from an Israeli cohort of a 100 children ages 2-7 (mean age 4) suggest that children at age 2-3 already present significant delays in motor function (which correspond with previous findings) and that those motor difficulties escalate with age, becoming more and more disabling for the child.

**Conclusion:** As physical activity was found to have positive effects on social behavior, communication skills, academic engagement, as well as sensory skills for children with ASD. And as motor skills provide a platform for functioning in other areas (e.g., social skills, academics), motor-related difficulties may need to be addressed as part of a more holistic, integrative and multi-disciplinary intervention. Our findings suggest that children with ASD present an alarming motor delay which compels the implementation of early intervention physical therapy programs for children with ASD.

### Biography

Meir Lotan, MScPT, PhD is a Physiotherapist working as Senior lecturer at the School of Health Sciences, Department of Physical Therapy, Ariel University, Israel. He is affiliated with the Israeli National Rett Syndrome evaluation team and is a world expert in Physical Therapy for Rett syndrome. He has a special interest in physiotherapy and persons with intellectual disability, children with autism, Snoezelen and physical activity for people with intellectual disability.

ml\_pt\_rs@netvision.net.il

### Notes: