

Israeli Society for Child Development & Rehabilitation Conference

Title: **Linked by Pressure: Breathing and Postural Control**

Date: Thursday, January 10th, 2019

Time: TBD

Location: Jerusalem, Israel



Instructor: Dr. Mary Massery PT, DPT, DSc

Dr. Massery received her BS in Physical Therapy from Northwestern University in 1977, her DPT from the University of the Pacific in 2004 and her DSc from Rocky Mountain University in 2011. Her publications and interests focus on linking motor behaviors to breathing and/or postural mechanics in both pediatric and adult patient populations. Mary's presentations have included keynote and major addresses on topics such as cystic fibrosis and posture, pectus excavatum (chest deformities), and connections between posture & breathing. Dr. Massery has been invited to give over 900 professional presentations in all 50 US states and in 16 countries worldwide, including more than 100 presentations for the *American Physical Therapy Association*. Mary has received national awards from the APTA, including its highest clinical award, *The Florence Kendall Practice Award*, honoring "one's outstanding and enduring contributions to the practice of physical therapy." She has also been honored as *Outstanding Alumnus of the Year* by each of her 3 universities, and she was awarded *Northwestern University's Alumnae Research Achievement Award*. Mary continues to maintain a private practice in Chicago, specializing in breathing and postural dysfunction.

Financial Disclosures: none

Description:

Through Dr. Massery's model of postural control (Soda-Pop Can Model), the speaker will link breathing mechanics and postural control through the modulation of trunk pressures. Mary will present novel research demonstrating the role of vocal folds at the "top of the can" as postural stabilizers. She will broaden the concept of core stability to include the vocal folds at the top, and the pelvic floor at the bottom of the can (trunk). These concepts will be applied to the long-term management of spinal alignment for children with cerebral palsy (or other neuromuscular conditions). Measurable functional outcomes for improved verbal communication, reaching, mobility, etc. will be presented and suggestions will be made for future research.

Learner Outcomes of Presentation: at the completion of this in-service, the learner will be able to:

1. Describe how trunk pressures link breathing to postural control using the Soda-Pop Can Model.
2. Demonstrate the role of the vocal folds in normal postural stability responses (balance).
3. State the case for using speaking valves for patients with tracheostomies to improve balance, limb force production, spinal alignment, and bowel and bladder function, as well as to improve voicing.
4. Demonstrate the importance of long-term, anticipatory spinal management for children with cerebral palsy for optimal health and participation.