

Effectiveness of Pediatric occupational therapy

Kranthi Merugu

Department of Pharmacology, Osmania University, Hyderabad, India

Occupational therapy intervention for children promotes engagement and participation in children's daily life roles. Children's roles include, developing personal independence, becoming productive and participating in play or leisure pursuits (Roger et al.). Inability to participate because of disease, disability or skill deficits, can cause marginalisation, social isolation and lowered self-esteem. Occupational therapists select interventions for children based upon an analysis of the child's performance of daily life roles, how their performance is affected by their disability, and how their environment supports or constrains their performance.

The practices of paediatric occupational therapists have evolved and changed based on research and theory, such as family centred care and the World Health Organisation's (WHO) International Classification of Functioning, Disability and Health (ICF; World Health Organisation, 2001). These frameworks have led many occupational therapists to move away from impairment-based interventions at the body structures and functions level aimed at remedying the child's deficits (known as 'bottom-up' interventions), and instead to focus on improving functional activity performance and participation ('top-down' interventions), as well as partnering with parents to deliver therapy embedded within daily life.

Clinicians will always have different expertise and preferences, but there are financial and ethical ramifications of delivering interventions. Ensuring the latest research findings are easily accessible to families' and clinicians is vital. Occupational therapists positively embrace evidence-based practice, but on the ground, implementation can lag. Systematic reviews (SR) indicate that the translation of the latest evidence into routine clinical care lags 10–20 years in all countries and specialities, which for paediatric patients is an entire childhood. Multiple paediatric occupational therapy interventions exist to address children's specific goals. The purpose of reviewing and rating the entire evidence-base is to provide a 'one-stop' access guide for clinicians and policy-makers, allow for the easy comparison of interventions, encourage the uptake of evidence-based interventions, to confer better outcomes for children. We sought to answer the following 'PICO's' question: What is the effectiveness of occupational therapy intervention for children with disabilities? Population = children with a disability (including arthrogyposis OR attention deficit hyperactivity disorder OR autism spectrum disorder OR behaviour disorders OR brachial plexus OR brain injury OR burns OR cerebral palsy OR cancer OR chronic pain OR developmental coordination disorder OR developmental disability OR down syndrome OR foetal alcohol spectrum disorder OR learning disability OR mental health OR muscle dis-eases; OR intellectual disability OR obesity OR preterm infants OR physical disability OR rheumatoid arthritis OR spina bifida); Intervention = occupational therapy (including all specific named occupational therapy techniques); Comparison = none specified; Outcome = all outcomes accepted; and Study Design = SR OR randomised controlled trials (RCTs).

Inclusion criteria

Published studies fulfilling the following criteria were included: (i) Type of study: All SRs and RCTs meeting inclusion criteria were appraised. SRs were preferentially sought since they provide a summary of large bodies of evidence and help to explain differences amongst studies. Plus, SRs limit bias. We also included RCTs not

included within the SRs, because they are the gold standard design for measuring the effective-ness of interventions. Lower levels of evidence were only included if: the SR reviewed lower levels of evidence; (ii) Types of interventions: Studies that involved the provision of any type of occupational therapy intervention; and (iii) Types of participants: Studies that explicitly involved humans in which 100% of the participants were children of any childhood disability diagnosis.

Exclusion criteria

Studies about typically developing children or adults; (ii) diagnostic studies OR prognostic studies OR about outcome measure psychometrics OR about theoretical frameworks NOT intervention; (iii) interventions that primarily fall under the skillset of another profession, for example pharmacotherapies, psychotherapy, speech therapies, etc. (iv) a second publication of the same study (Note: RCTs that met inclusion criteria but were also cited within included SRs, were treated as duplicates and not reported on twice); (v) studies were unpublished or non-peer reviewed; and (vi) full-text was not available in English.

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*Corresponding author: Kranthi Merugu, Department of Pharmacology, Osmania University, Hyderabad, India, Tel: 7659845454; E-mail: karthikm@yahoo.com

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