



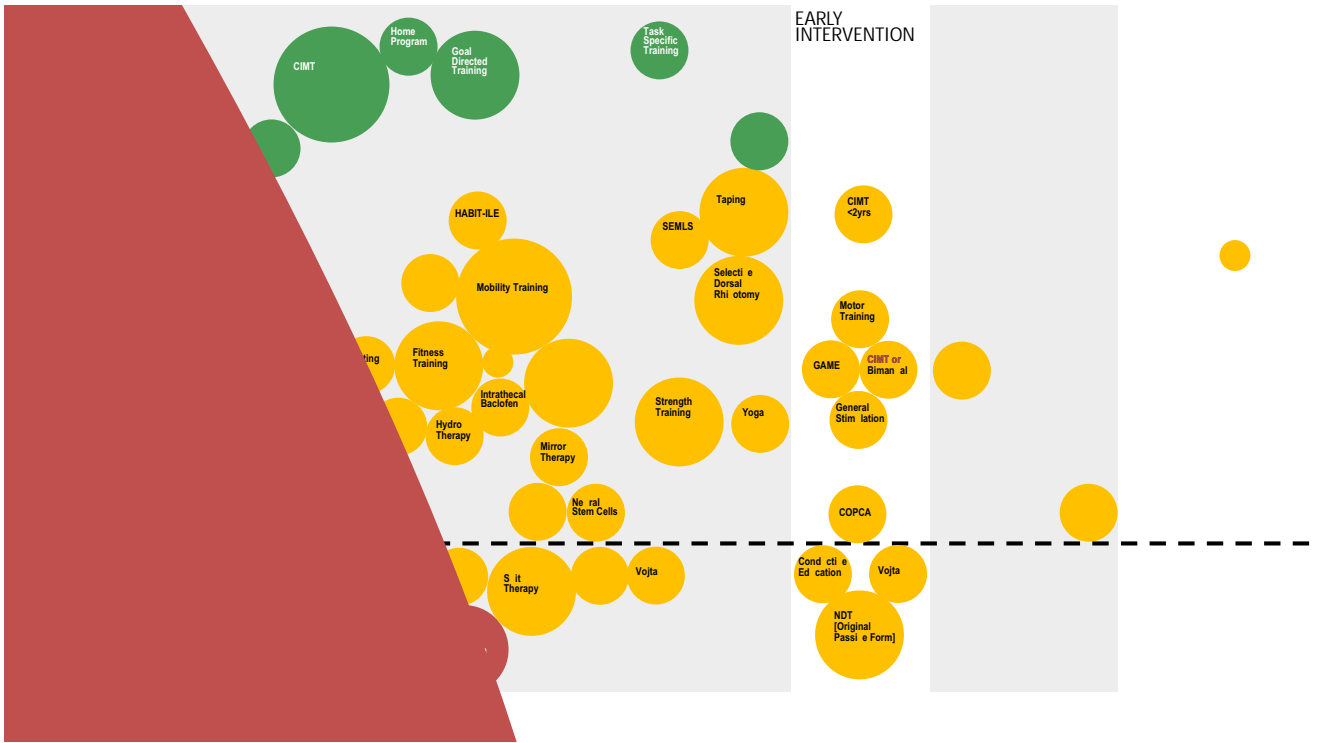
Introduction

Evidence Alert Traffic Light System using two independent raters, with unanimous agreement. GRADE is the evidence rating system endorsed by the World Health Organization [5, 6]. GRADE rates both (1) the of the evidence on a 4-point continuum of High–Moderate–Low–Very Low. Randomized trials start at a score of 4/4 (High) and can be

(15%) were aimed at a combined body structures and activities level; and = 11/383 (3%) were aimed at a combined activities and participation level.

Participants

This study included participants with cerebral palsy, a complex and heterogeneous condition. We included studies involving



The field has also started to critically examine whether repair of a brain injury might be possible using regenerative medicine treatments, paving the way towards finding a cure. Our review found that erythropoietin has promising effects as a neuro-regenerative treatment in the preterm population (yellow light, weak positive) and erythropoietin trials are underway in a population with hypoxic ischemic encephalopathy [11••]. In addition, there is now moderate-quality evidence that umbilical cord blood as a cell therapy, coupled with rehabilitation, is slightly more effective than rehabilitation alone for improving motor skills in children with cerebral palsy (green light) [221, 222]. The lack of legislation allowing access to autologous (patient

interventions, because smaller brain injuries result in improved baseline motor, sensory, and perceptual skills and learning capabilities. Thus, understanding current evidence

and child's age, optimizing the timing of the surgery and minimizing the number of repeat procedures they will need over a

modest benefits above and beyond oral sensorimotor therapy alone, a considered approach is warranted within a pediatric population. (b) A new motor learning–based oral sensorimotor intervention called functional chewing training (FuCT) appeared to improve chewing and reduce tongue thrust and sialorrhea better than traditional oral sensorimotor treatment alone [137] (yellow light), suggesting the direct training component was important. The FuCT findings are consistent with current thinking about motor learning. However, it must be noted that FuCT uses a combination of direct interventions, utilizing food or fluid; indirect interventions, utilizing non-nutritive tools to develop chewing skills; and sensory stimulation such as passive massage. Translation of this principle within the dysphagia management evidence base is becoming more prominent. Further research that compares direct, indirect, sensory, and compensatory interventions would be helpful in determining which approach results in greater skill development.

Early Interventions

Rates of cerebral palsy following prematurity, encephalopathy, and neonatal surgery are well understood. It is now possible to accurately detect and diagnose cerebral palsy as early as three months of age (corrected), enabling much earlier intervention [267]. Previously only 61–64% of infants with cerebral palsy were referred for intervention before 12 months of age due to late diagnosis [267, 268]. This directly affected the

CO-OP improves function at a low dose and low cost with large effect sizes (yellow light, weak positive) [73–76]. The conduct of a definitive trial is warranted.

Parent Interventions

Parenting a child with cerebral palsy is known to be isolating and stressful. Supporting parents is essential both to optimize the child's development and to protect a parent's mental health. We observed that two interventions for parents of children with cerebral palsy, stepping stones triple P and accep-

interpreted the intervention as effective. Fifth, despite our thorough search strategy, there is no guarantee that we retrieved and included all relevant systematic reviews, or important data published after the included reviews that might have changed our confidence in the estimate of the effects. Sixth, as we excluded articles not published in English and adhered to strict inclusion criteria regarding % of participants identified as having cerebral palsy, we may have overlooked important data and/or excluded re-

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