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**A randomised control trial comparing occupational therapy interventions that aim to improve developmental outcomes for HIV-positive children (aged 6 months – 5 years) on ART**

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**Introduction/Rationale:** Children on ART are at increased risk for developmental delays. There is a paucity of evidence detailing the efficacy of occupational therapy interventions in addressing these delays.

**Objectives:** The study determined whether children attending an experimental therapy group (a play-informed, caregiver-implemented, home-based intervention – PICIHBI) would yield similar results in their total developmental quotients – on the Griffiths Mental Development Scales (GMDS) and Paediatric Functional Independence Measure (WeeFIM) when compared to a control group of children receiving conventional, individual occupational therapy intervention.

**Method:** A pragmatic, single-blinded, randomised control trial was used. All children, pre-formal school-going aged (6 months – 5 years) with HIV and on ART attending the Groote Schuur Hospital paediatric HIV clinic at the time of the study were considered the population of this study. Caregiver and child dyads attended their occupational therapy sessions monthly. Scores of the GMDS and WeeFIM were collected at baseline, after 5 and 10 months of intervention and then compared.

**Results:** Thirty-nine recruited participants completed baseline assessments, with 28 (15 – experimental, 13 – control) completing all mid and post assessments. Pre-intervention, participants' mean GMDS quotient scored in the borderline mental retardation category. Post intervention assessments showed that the average total GMDS and WeeFIM scores were similar between the two groups and no significant differences were found at any time point.

**Conclusion:** When compared to conventional, individual occupational therapy intervention, the PICIHBI yielded a non-inferior child development impact. This study thus demonstrates the potential for an alternative intervention in this field with equivalent impact and increased reach.