Down syndrome (DS), the most common congenital chromosomal disorder in the US, affects 1 in 790 children\(^1\). Health conditions associated with DS include hypotonia, delayed gross motor development, heart defects, ligamentous laxity, abnormal compensatory movement patterns, and obesity\(^2,3\). Physical activity (PA) is important for health and well-being, but children with DS may have decreased ability to engage in PA. Government guidelines recommend individuals age 6-17 years should engage in at least 60 min of moderate-vigorous PA (MVPA) each day\(^4\).

**Methods**

Systematic Review:
- Articles in PubMed, Embase, and CINAHL, conducted according to PRISMA guidelines

Inclusion Criteria:
- English full text articles published through July 2017
- Participants ≤21 years of age diagnosed with DS
- Activity monitors used for data capture
- PA reported in terms of frequency, duration, or intensity

Exclusion Criteria:
- Editorials, letters, comments, and case reports

Methodological Quality Assessment:
- Modification of the Downs and Black tool

**Results**

- 8 studies included: 5 cross-sectional, 1 pilot, and 2 longitudinal
- Quality: Good in 2 studies, Fair in 5, and Poor in 1
- 4 studies used typically developing (TD) children as a control group
- Participants ranged from ages 3 months to 20 years with more males than females
- Type of activity tracker and cut points used to determine intensity level varied greatly across studies

**Clinical Relevance**

- Clinicians can play a critical role in encouraging more exercise and movement in children with DS
- Fostering PA as a habit may reduce the risk of movement disorders and secondary illnesses from inactivity as children get older

**Conclusions**

- Children with DS are NOT reaching recommended guidelines of 60 minutes of MVPA each day
- PA (light, moderate-vigorous) tends to decrease with age while sedentary time increases

**Acknowledgements / References**

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