



## Maternal Iodine Supplementation: Clinical Trials and Assessment of Outcomes

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### PRESENTATION ABSTRACT

#### Assessment of Motor Development

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#### Abstract

Typical assessments of infant motor development focus on summary scores on a screening instrument or skill onset ages relative to norms on a milestone chart. Such assessments are powerful tools for identifying group differences, testing effects of interventions, and diagnosing clinically relevant differences in individuals. However, typical assessments have important conceptual and empirical flaws. Indeed, the term “motor milestone” gives the erroneous impression that motor skills have stage-like trajectories and that ages and stages are universal. Moreover, summary scores and onset ages cannot speak to developmental mechanisms—how infants acquire new motor skills, how skills improve, and how developing motor skills impact other developmental domains. I offer several suggestions: (1) Capitalize on video and other recording tools to describe the proficiency of motor skill in standardized test situations (e.g., standard gait measures). Such descriptions offer a richer basis for understanding what aspects of skill change with age and experience. (2) Use video to describe natural motor behavior in everyday situations (e.g., rate of infant falls). Over-reliance on standardized tests and laboratory paradigms has diverted researchers’ attention from the development we aim to explain and facilitate. (3) Observe children in a variety of cultural groups and at different points in history. Differences in childrearing practices and physical environments lead to differences in the form, proficiency, developmental timing, and mature endpoints of motor skill acquisition. (4) Collect dense longitudinal samples to map the trajectory of motor development in individual children. Smoothing out individual differences in growth leads to misrepresentations of how skills develop. (5) Share videos and other forms of raw data to allow for data reuse and to facilitate integrative analyses.

#### References

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