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Comparative predictive validity of Alberta Infant Motor Scale and Infant Neurological International Battery in Low Birth Weight Infants- A Prospective Longitudinal Study.

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Title: Comparative predictive validity of Alberta Infant Motor Scale and Infant Neurological International Battery in Low Birth Weight Infants- A Prospective Longitudinal Study.

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Keywords: Alberta Infant Motor Scale; Infant Neonatal International Battery; Low birth Weight Infants; Motor Outcomes; Peabody Developmental Motor Scale 2nd Edition, Predictive Validity.

Abstract:

Objective: To compare the predictive validity of two measures Alberta Infant Motor Scale (AIMS) and Infant Neurological International Battery (INFANIB) with Peabody Developmental Motor Scale 2nd edition (PDMS-2) in LBW infants at 4th, 8th and 12th months of age. **Methodology:** Prospective longitudinal psychometric study conducted at immunization clinic and Neuro-sensory Developmental Unit in a Hospital. Trained raters performed motor examination of LBW infants by Alberta Infant Motor Scale (AIMS), Infant Neurological International Battery (INFANIB) and Peabody Developmental Motor Scale 2nd edition (PDMS -2) prospectively at 4th, 8th and 12th months of age. Karl Pearson correlation coefficients used to estimate the validity of AIMS and INFANIB scores with PDMS-2 total raw scores and compared across three age points by Friedman and Wilcoxon signed-rank test. The chi-square test used to estimate predictive correlations at each age points between AIMS and INFANIB with PDMS-2 for normal and abnormal infants. **Results:** Eighteen LBW infants were enrolled and examined for motor development prospectively at 4th, 8th, and 12th month age. Excellent correlations found for AIMS and INFANIB with PDMS-2 at all three age points. The predictive validity of INFANIB was higher than AIMS in LBW infants with respect to PDMS-2. **Conclusion:** The predictive validity of INFANIB is greater than AIMS in LBW infants at 4th , 8th and 12th months of age.