

Validity of the Ages and Stages Questionnaires in Term and Preterm Infants.

Luisa Schonhaut, Iván Armijo, Marianne Schönstedt, Jorge Alvarez, Miguel Cordero

Abstract

BACKGROUND: This study assessed the concurrent validity of the parent-completed developmental screening measure Ages and Stages Questionnaires, Third Edition (ASQ-3) compared with the Bayley Scales of Infant and Toddler Development, Third Edition (Bayley-III) in children born term, late preterm, or extremely preterm at 8, 18, or 30 months of corrected gestational ages (CGA).

METHODS: Data were collected from 306 term and preterm children ages 8, 18, and 30 months' CGA recruited from an ambulatory well-child clinic in Santiago, Chile. Parents completed the ASQ-3 in their homes, and afterward a trained professional administered the Bayley-III in a clinic setting. On the ASQ-3, the presence of any domain screened <2 SDs below the mean area score was considered a positive screen (indicating failure or delay). A Bayley-III score less than ≤ 1 SD indicated mild or severe delay.

RESULTS: ASQ-3 showed adequate psychometric properties (75% sensitivity and 81% specificity) and modest agreement with the Bayley-III ($r = 0.56$). Sensitivity, specificity, and correlations between measures improved with testing age and in children who were born extremely preterm.

CONCLUSIONS: Considering its psychometric properties, the ASQ-3 can be recommended for routine use in screening low-risk children at 8, 18, and 30 months' CGA and is advisable to be included in follow-up programs for children with biological risk factors such as those born preterm.