Comparison of the Broselow tape, APLS, Luscombe and Owens, Best Guess, Nelson’s, Argall formula and finger counting method in prediction of weight among Filipino children in a tertiary hospital: A prospective cross-sectional study

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The objective of this study was to compare the predictive accuracy of different methods of pediatric weight estimation among Filipino children. This is a prospective, cross-sectional study involving 776 Filipino children, aged 1 month to 14 years whose actual weights were compared to their estimated weights using the Broselow tape, original APLS, updated APLS, Luscombe and Owens, best guess, Nelson’s, Argall formula and the finger counting method. In this study, it was found that the most accurate method of weight estimation for all age groups was the updated APLS formula, with a mean difference of 0.88 kg (95% CI 0.34-1.42 kg). By age group, the updated APLS formula was the most accurate for <1 year, the Finger counting method for 1-5 years and 11-14 years, and the Best Guess formula for 6-10 years. For Filipinos, the updated APLS formula is best used to estimate weight for <1 year and the finger counting method for 1-14 years. All weight estimation methods showed decreasing accuracy as age increased.

Biography
Catherine Ong has completed her PhD from the University of Santo Tomas and Postdoctoral studies from Makati Medical Center Philippines.
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