STAMP

SCREENING TOOL FOR THE ASSESSMENT
OF MALNUTRITION IN PAEDIATRICS

Nutrition screening in children – the validation of a new tool

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Summary

Objective: To demonstrate the validity of a new nutrition screening tool for use with children.

Method: Full ethical approval was obtained from the Salford and Trafford Research Ethics Committee prior to undertaking this study. All children (aged 2–17 years) admitted to the study wards (medical and surgical) of a large paediatric centre in Manchester, UK, were screened using a newly developed, nurse administered paediatric nutrition screening tool (NST). The study consisted on two phases: a development and an evaluation phase. The NST consisted of three elements – clinical diagnosis, nutritional intake and anthropometric measures. Each element was scored and children with an overall score of 4 or more were considered at nutritional risk. Of those screened, a random sample was further assessed for full nutritional status by a registered dietitian. The full nutritional assessment consisted of a face-to-face interview obtaining dietary and social information, anthropometric measurements and retrieval of medical information from case notes. Data was analysed using chi-squared tests to compare groups within the sample.

Results: 112 children participated in the development phase and 238 participated in the evaluation phase of this study. There were not significant differences in prevalence of undernutrition in both phases of the study. The predictive sensitivity and the specificity of the model were calculated as 77% and 91%, respectively, during the development phase, suggesting that the model was valid and would reliably identify children at nutrition risk. During the evaluation phase, the full nutritional assessment by a registered dietitian identified 14% of children as being at nutrition risk, whereas STAMP identified 18% with a score of 4 or greater, therefore at nutrition risk. Kappa statistic was used to determine validity and reliability of STAMP, which indicated a fair to moderate reliability.

Conclusion: The results of this small validation suggest that this new nutrition risk screening tool is valid and reliable for the identification of children requiring further nutritional assessment and appropriate intervention. It demonstrates moderate to substantial agreement with a full nutritional assessment. Further investigation will focus on the malnutrition risk by different clinical conditions and clinical settings. Financial disclosure: This work was supported, in part, by an unrestricted educational grant from Abbott Nutrition Ltd. UK.

Reference
McCarthy H., Dixon M., Crabtree I., Eaton-Evans M. J. & McNulty H. (2012) The development and evaluation of the Screening Tool for the Assessment of Malnutrition in Paediatrics (STAMPª) for use by healthcare staff. J Hum Nutr Diet. 25, 311–318 doi:10.1111/j.1365-277X.2012.01234