Validation of a nutrition screening tool: testing the reliability and validity

Michael Pierre
Project Supervisor: Dr. Isabella Granderson
2011

Background: The aim of the study was to investigate whether A Nutrition Screening Tool (NST) developed by Trinidad and Tobago Association of Nutritionist and Dieticians is reliable and valid.

Objectives: In order to evaluate the validity of the NST, the sensitivity, specificity, predictive values and Spearman’s Rank Correlation Coefficient were calculated via statistical methods. The reliability of the NST was calculated using Cohen’s Kappa Statistics.

Design: This Cross –Sectional investigation used Convenience Sampling in order to conduct and acquire data. The validity tests comprised of ten people. The NST scores and a criterion were compared and statistically analysed in order to determine validity. The reliability method included two investigators and 75 participants who were each administered the NST by both investigators. Scores were compared and statistically evaluated.

Results: Sensitivity, specificity, both positive and negative predictive values and Spearman’s Rank Correlation Coefficient are as follow 0.4, 0.6, 0.5, 0.5 and -0.18 therefore it can be stated that the tool is not valid. Cohen’s Kappa statistics of the Overall NST Score was 0.38. Thus the tool is reliable.
**Conclusion:** The NST is reliable however the validity cannot be concluded concretely due to the small sample size.