Psychometrics of 0-5 Nausea and Vomiting Scales
Angela P. Halpin, RN, MN, CNS
Hoag Memorial Hospital Presbyterian
Loucine M. Huckabay, Aran Levine

Problem: An implemented 0-5 Nausea (N) and 0-5 Vomiting (V) Scale using descriptors in 2008 required psychometric testing. The N/V scales have been applied for over a year, electronic reports demonstrate active use of the scales in patient assessment of N/V symptoms.

Evidence: Satisfaction with tools and content validity as reported by application are not enough to measure the soundness. Measurement tool attributes require study to demonstrate their construct validity and reliability.

Strategy: This methodological study aims to establish psychometric properties of the new nausea and vomiting scales with descriptors (NVWD), measuring their inter-rater reliability, validity, practicality, & sensitivity.

Results: Content validity has been established in two previous studies. In a Post Operative N/V study 172 patients rated their N/V using the 0-5 N/V scales with descriptors. Sixty of sixty five (60/65) or 92% of nurses applying the N/V scales rated them satisfactory. In evaluation of nausea scale study results: nurses preferred significantly more the 0-5 point scale over the 0-10 point scale; results in four areas: (a) nurses understanding (t = 3.61, p = .001), (b) nurse’s communication with the patient (t = 4.23, p = .0003), (c) ability for patients to communicate (t = 5.4, p = .0001) and (d) communication with the physician (t = 5.7, p = .0001).

Evaluation: Psychometric properties is examined on three groups of patients. Group I are admitted with diagnosis of nausea and vomiting. Group II are cancer patients admitted with no reported feelings of nausea and vomiting but meet the predictive criteria or are scheduled for chemotherapy. Group III: the control group.

Results: Pending from two acute care hospitals.

Recommendations: The tools are found effective by nurses & patients in two studies. Use of the scale is practical & useful in communication of intensity of N/V symptoms. Psychometrics are necessary for wider application.

Lessons Learned: Scales are adapted when found to be useful by physicians, nurses and patients. Psychometrics allows for further use in national and international hospitals.

Bibliography


