A PSYCHOMETRIC ANALYSIS OF THE AMBULATORY SURGERY INVENTORY OF NAUSEA, VOMITING, AND RETCHING (AS-INVR)

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Introduction: The ambulatory surgery inventory of nausea, vomiting, and retching (AS-INVR) measures nausea, vomiting and retching. The AS-INVR was developed after an evaluation of the Rhodes Index of Nausea and Vomiting in an ambulatory surgery population. Psychometric performance of the AS-INVR has not been demonstrated in an independent population of ambulatory surgery patients.

Purpose: The aims of this study were to investigate the dimensionality of the AS-INVR and examine internal consistency of the AS-INVR.

Methodology: A secondary analysis was performed using data obtained in a descriptive study designed to identify the incidence and management strategies of adult patients after ambulatory surgery. Data were collected on nausea, vomiting, and retching from 203 patients after ambulatory surgery from Day of Surgery and for 5 days. Cronbach’s alpha was used to assess internal consistency. Principal components analysis was used to investigate the instrument’s dimensionality, and correlation analysis was used to investigate construct validity.

Results: Cronbach’s alpha was > .80 for the 7-item AS-INVR and the shortened 6-item version, Ambulatory Surgery Inventory of Nausea and Vomiting (AS-INV). Higher AS-INVR scores were associated with self-reported presence of nausea and vomiting. Higher scores also correlated with lower quality of life scores.

Discussion: Findings support the internal consistency of the modified AS-INVR. The significant associations between the nausea and vomiting score as indicated by the 6 item instrument and scores on a Likert 0-10 scale, as well as quality of life, provided further evidence of the impact of nausea and vomiting.

Conclusion: The AS-INV is an inexpensive and effective instrument to measure nausea and vomiting in adults after ambulatory surgery. The 6 item Ambulatory Surgery-Inventory of Nausea and Vomiting (AS-INV) is valid and reliable.

Implications: This scale provides an alternative method of obtaining measurement of the amount and distress of nausea and vomiting in adult patients after ambulatory surgery. Future large-scale studies should examine the psychometric properties of the AS-INVR and the 6 item AS-INV.