Disease-Specific Self-Efficacy in Spasmodic Dysphonia Patients

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ABSTRACT

Objective: Self-Efficacy (SE) is an optimistic self-belief that one can perform a specific task. Previous studies have shown a strong correlation between self-efficacy and various outcomes. This concept in psychology explores the emotional functioning, coping ability, and problem-solving skills of an individual. SE has been shown to be a strong predictor of health behaviours. It embodies themes of self-control, empowerment, and the ability to do philosophy. The General Self-Efficacy Scale is a 10-item validated questionnaire that measures self-efficacy if it has been translated into 25 languages. It is self-administered by the patient and completed in 4 minutes.

METHODS AND MATERIALS

Self-efficacy (SE) items were developed through consultation with experts in the field of spasmodic dysphonia. We conducted a pilot study to assess the face validity of our items. Disease-specific SE-SD items were developed through extensive literature review. These items were written in English and were presented to healthcare providers for feedback. Disease-specific SE-SD items were developed through consultation with three laryngologists, one laryngology fellow, three speech therapists with an interest in voice, and two patients with SD. These patients then completed a Voice SE Questionnaire that was developed and validated. The results revealed that: (1) voice SE was negatively correlated with voice-related disability; (2) dysphonic subjects reported significantly lower level of voice SE than controls. The findings supported the need for disease-specific SE-SD items to generate a 10 item disease-specific SE-SD scale.

RESULTS

Any patient with SD who presented to the University of Washington Medical Center for their botulinum toxin injection was eligible for the study. Fifty-one patients (mean age 59.5 \pm 13.6 years) had a disease-specific SE-SD score of 5.2 out of 40 (Cronbach’s \(\alpha\) = 0.894) of 33.4 \pm 5.2 out of 40 (Cronbach’s \(\alpha\) = 0.895). Disease-specific SE-SD score was correlated with VCES (r=-0.31, p=0.008), CAPE-V (r=-0.29, p=0.026), HADS-A (r=-0.49, p<0.001), and HADS-D (r=-0.58, p<0.001).

Statistical analysis was performed using a commercially available software package (SPSS, 2012). Measures of central tendency, factor analysis and Cronbach’s \(\alpha\) were calculated. This study was approved by the Institutional Review Board at the University of Washington.

DISCUSSION

There are two SE studies with voice patients. Gillepsie et al studied the influence of clinical terminology on self-efficacy for voice. Teachers with voice issues were assigned to terms that implied "the possibility" or "the certainty" of voice issues. These patients then completed a Voice SE Questionnaire that was significantly designed by topic. The results revealed that voice patients who asked to rate on a visual analog scale how confident they are in using their voice or having a healthy lifestyle. The results confirmed the term of "self-efficacy" may harm normal increases in self-efficacy for voice.

Wetling et al studied voice self-efficacy and voice-related disability by using a 13-item disease-specific SE scale. The results revealed that voice SE was negatively correlated with voice-related disability, SE aspects negatively correlated with voice-related disability. The findings suggested that voice SE is a valid measure of voice-related disability.

CONCLUSIONS

SD patients established on botulinum toxin injections have a high degree of general SE and disease-specific SE. Patients with higher SE demonstrated increased vocal quality and lower levels of anxiety/depression. A 10-item disease-specific SE-SD scale has been developed.

REFERENCES