Patient Communication Following Head and Neck Cancer Surgery: A Pilot Study Using Electronic Speech-Generating Devices

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**Purpose/Objectives:** To describe the communication of patients who received electronic speech-generating devices (SGDs) following surgical procedures for head or neck cancer.

**Design:** Exploratory, complementary mixed methods.

**Setting:** Otolaryngology surgical inpatient unit of an urban teaching hospital.

**Sample:** 10 purposively selected patients with a mean age of 57.1 years (SD = 12.8 years) and moderately severe illness (Acute Physiology and Chronic Health Evaluation III score X = 27.1 ± 13.2) who had SGD use in their hospital rooms for 9.1 ± 6.2 days.

**Methods:** Observation, interviews, questionnaires, and clinical record review.

**Main Research Variables:** Communication methods, communication content, SGD use, communication quality (i.e., ease and user satisfaction), barriers to SGD use, and patient clinical characteristics.

**Findings:** SGD use was observed in message construction 8 (17%) out of 48 total observed communication events. Writing (31%) and nonverbal communication (46%) were the most frequently observed primary methods of communication used by patients with head and neck cancer postoperatively. Five patients demonstrated occasional SGD use with or without cuing, and one used the SGD as the dominant communication method. Ease of Communication Scale scores showed only slightly less difficulty with communication when compared to a historic control group. Patients initiated communications more often when SGD use was used in message construction. Poor device positioning, staff unfamiliarity with SGD use, and patient preference and ability for writing were barriers to SGD use.

**Conclusions:** Although writing and making gestures were the most common communication methods, SGD use was successful by selected patients and may be particularly beneficial for constructing complex messages during conversation.

**Implications for Nursing:** SGD may be an appropriate assistive communication strategy for postoperative patients with head and neck cancer. Nurses can facilitate effective patient communication with SGD by cuing patients on device options and positioning SGD within easy reach.

**Key Points . . .**

- Writing was the most common communication method used and preferred by nonspeaking patients with head and neck cancer following surgical procedures.
- Electronic speech-generating devices (SGDs) may be most effective when used by patients for complex communications.
- Staff education on cuing patients and proper positioning and repositioning of SGD within easy reach is critical in facilitating SGD use for patient communication.

**Literature Review**

Studies of communication between nurses and nonspeaking, intubated patients in intensive care units (ICUs) have demonstrated that most interactions involve brief, task- or procedure-oriented information, commands, or reassurances (Ashworth, 1980; Hall, 1996; Leathart, 1994; Salyer & Stuart, 2004).

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