Roles of Speech-Language Pathologists and Nurses in Providing Communication Intervention for Nonspeaking Adults in Acute Care: A Regional Pilot Study

Le rôle des orthophonistes et des infirmières dans la prestation de services d'intervention en communication en milieu de soins aigus auprès d'adultes n'utilisant pas la communication orale : une étude pilote régionale

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Abstract
This study investigated current practice patterns and opinions of best practice standards of nurses and speech-language pathologists (S-LPs) regarding management of nonspeaking adult patients in acute care. Data was comprised of questionnaires completed by 85 nurses and 34 hospital-based acute care S-LPs. Nurse respondents reported that they frequently facilitate hands-on communication intervention for nonspeaking patients. Most nurses agreed that quality of care would be enhanced if S-LPs were more involved in facilitating communication for acute care patients. Forty-eight percent of S-LPs and 49% of nurses reported that at their facilities, less than half of nonspeaking patients are routinely referred to speech-language pathology (S-LP), whereas 94% of S-LPs and 66% of nurses felt that nonspeaking patients should be referred to S-LP *most of the time*. Results suggest that S-LPs are spending increasing amounts of time in the area of dysphagia management and relatively minimal amounts of time providing communication intervention.

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Abrégé
La présente étude examine les formes de pratique actuelle et les opinions d'infirmières et d'orthophonistes sur les normes de pratique exemplaire touchant la prise en charge de patients adultes n'utilisant pas la communication orale en milieu de soins actifs. Les données proviennent de questionnaires remplis par 85 infirmières et 34 orthophonistes en milieu hospitalier de soins aigus. Les infirmières ont signalé qu'elles facilitaient souvent l'intervention pratique en communication pour ces patients. La plupart des infirmières convenaient que la qualité des soins serait améliorée si des orthophonistes jouaient un plus grand rôle pour faciliter la communication des patients en milieu de soins aigus. Quelque 48 % des orthophonistes et 49 % des infirmières ont signalé que dans leur établissement, moins de la moitié des patients n'utilisant pas la communication orale étaient régulièrement référés vers le service d'orthophonie, tandis que 94 % des orthophonistes et 66 % des infirmières étaient d'avis que ces personnes devraient l'être « la plupart du temps ». Les résultats suggèrent que les orthophonistes consacrent de plus en plus de temps à la prise en charge de la dysphagie et relativement peu de temps à la prestation de services d'intervention en communication.

Key Words: nonspeaking, acute care, speech-language pathology, nursing, augmentative and alternative communication, survey, roles, practice patterns, opinions, dysphagia

Many patients in the acute care setting are either temporarily, or permanently, unable to communicate verbally because of intubation, tracheostomy, head/neck surgery, or other reasons. Studies have demonstrated that the inability to communicate in the acute care setting is associated with feelings of anger, frustration, anxiety, shock, fear, terror, and powerlessness for both patients and caregivers (Bergbom-Engberg & Haljamäe, 1993; Fitch, 1987; Fowler, 1997; Hafsteindóttir, 1996; Happ, 2000; Hemsley et al., 2001; Menzel, 1998; Rotondi et al., 2002). Studies that have investigated communication in the acute care setting are found in both nursing and speech-language pathology (S-LP) literature. However, there is a paucity of published studies that have been done collaboratively by S-LP and nursing, suggesting that dialogue and collaboration between the disciplines working with acute care patients with communication needs may be lacking. For years, speech-language pathologists (S-LPs) working in the authors' acute care facility had anecdotally expressed their concerns regarding the provision of augmentative and alternative communication (AAC) and care for acutely ill patients. Low referral rates to S-LP for communication in the authors' facility led us to question how well other professionals, in particular nurses, understand the role of the S-LP in acute care. Several recent studies in the literature echo the authors' concerns that communication services are possibly being overlooked in the acute care population and that nurses working with nonspeaking patients may be doing so without the benefits of AAC.

The purpose of this study was to determine how nursing and S-LP roles in serving nonspeaking adults in acute care were perceived by both disciplines, as well as to investigate the current practice patterns and opinions of best practice standards regarding management of nonspeaking adult patients in acute care. It was speculated that information regarding these opinions and practice patterns might assist in improving quality of care to this population. Specifically, the study sought to answer the following questions:

1. According to S-LPs and nurses, who **is currently** involved in managing communication needs of nonspeaking adults in acute care?
2. According to S-LPs and nurses, who **should** be involved in managing communication needs of nonspeaking adults in acute care?
3. What are the stated opinions of S-LPs and nurses regarding expertise and knowledge in the management of communication needs of nonspeaking adults in acute care?
4. What are the stated opinions of S-LPs and nurses regarding the importance of communication for acute care patients?
5. Has dysphagia been prioritized over communication needs in acute care settings?

Literature Review

Role of Speech–Language Pathologists

Several studies in the S-LP literature describe the role of S-LPs in providing AAC intervention in the acute care setting (Costello, 2000; Dowden, Beukelman, & Lossing, 1986; Dowden, Honsinger, & Beukelman, 1986; Honsinger, Yorkston, & Dowden, 1987; Rice, 2000). In general, these studies focused on methods of communication output and described intervention approaches used at specific facilities. It is unclear how widespread the use of AAC is in acute care facilities and how routinely S-LPs are involved in facilitating communication for nonspeaking patients in acute care.

A pair of companion articles (Dowden et al., 1986a, 1986b) described a 2-year study that involved evaluating and selecting AAC methods for nonspeaking patients in two acute care facilities. The authors concluded that cognitive status was correlated with the ability to use AAC methods effectively and that patients who used more than one means of alternative communication were more likely to communicate successfully.

Rice (2000) described a protocol for using AAC in the Medical Intensive Care Unit (MICU). A decision tree format was used to assist medical staff in determining when to consult an S-LP and whether the use of AAC may be appropriate for a given patient. Rice provides anecdotal support for the use of AAC in the MICU by staff and patients.

One study in the nursing literature mentions the role of S-LPs working with acute care patients with communication needs. Hemsley et al. (2001) interviewed 20 nurses who cared for patients with severe communication difficulties in adult medical, surgical, and rehabilitation units. Nurses reported that positive communication was dependent on the successful use of AAC. Fourteen nurses stressed the need for inservice training in the area of AAC. All 20 felt that nurses should be responsible for informing S-LP when a patient with severe communication impairment is admitted. The authors highlighted the importance of collaboration between nurses and S-LPs in best serving patients with severe communication impairments.

These studies generally focused on methods of communication output and described intervention approaches used at specific facilities. However, it is unclear how widespread the use of AAC is in acute care facilities and how routinely S-LPs are involved in facilitating communication for nonspeaking patients in acute care. There is evidence that dysphagia has become increasingly dominant in the S-LP workload and that this trend may be associated with a declining emphasis on communication needs in acute care (Armstrong, 2003; Enderby & Petheram, 2002; Lawrie, 1996; McCooey-O'Halloran, Worrall, & Hickson, 2004).

Role of Nurses

The role of nurses in communicating with acute care patients is described in numerous articles in the literature. Key issues that are identified include facilitating communication output, providing psychosocial support, and providing pre-operative and ongoing education regarding medical care and procedures. In their review and analysis of the literature describing communication with ventilator dependant patients, Connolly and Shekleton (1991) highlighted the need for nurses to assess communication, teach communication methods, and encourage multiple communication methods, including the use of devices.

Williams (1992) described an algorithm for nurses to use in selecting communication methods for intubated patients. The author described advantages and disadvantages of a variety of nonverbal communication methods including pencil–paper, hand signals, lip reading, and high tech devices such as computers.

Several articles emphasize the role of nurses and other caregivers in providing psychosocial support for acute care patients (Bergbom-Engberg & Haljamäe, 1989, 1993; Hafsteindóttir, 1996; Holland, Cason, & Prater, 1997; Hupcey & Zimmerman, 2000; Rier, 2000; Turnock, 1991; Urden, 1997; Villaire, 1995). Villaire interviewed a 29-year-old woman with Guillaine-Barré syndrome who had spent several months in an intensive care unit (ICU). The interviewee stressed the importance of human contact, even if communication was one-way (nurse to patient) or involved listening while the nurse talked with someone else.

Bergbom-Engberg and Haljamäe (1989) retrospectively interviewed 158 patients who had been respirator-dependent in an ICU. The inability to talk was cited as the dominant factor related to feelings of anxiety, fear, agony, and panic. The authors stressed the importance of raising nurses' awareness of the relationship between communication difficulties and patients' negative emotional reactions, and providing "informative and supportive communication with the patient even if the patient does not seem to be alert and oriented."

AAC Intervention and Patient Perspectives

The literature suggests that in many facilities AAC intervention is inadequate and that there is a need for increased education of nurses and other caregivers in the area of communication (Albarran, 1991; Fried-Oken, Howard, & Roach Stewart, 1991; Hafsteindóttir, 1996; Hall, 1996; Happ, Tuite, Dobbin, DiVirgilio-Thomas, & Kitutu, 2004; Hemsley et al., 2001; Leathart, 1994; Llenore & Ogle, 1999; Lohmeier & Hoit, 2003; Robillard, 1994; Salyer & Stuart, 1985; Wojnicki-Johansson, 2001). Leathart observed 8 nurse-patient interactions in an intensive therapy unit (ITU). Patients were intubated but alert and able to communicate. Patients' communication was mainly comprised of replying to yes–no questions. Seven of 8 nurses reported difficulty communicating with patients in ITUs. Reasons cited were difficulty lip-reading, lack of patient feedback, preoccupation with technical responsibilities, patients' psychological states, and lack of training in communication with patients.

Hafsteindóttir (1996) described patient frustration with alternative means of communication. The frustrations stemmed from physical weakness, poor vision, and hand tremors (associated with difficulty writing). None of the patients recalled receiving instructions about communication methods.

Over half of ventilated patients who participated in a study by Lohmeier and Hoit (2003) reported that they had no history of speech therapy, and only 5 of the 50 respondents had ever received AAC interventions. Problems or frustrations with speech were reported by 36 participants, suggesting a need for increased communication intervention for this population.

Happ et al. (2004) investigated 36 records of patients who received mechanical ventilation and who died during hospitalization in 8 ICUs during a 12-month period. No uses of picture boards, letter boards, or electrolarynx devices were documented. Their findings indicated that most communication consisted of yes–no responses to caregivers' questions about orientation or pain, suggesting that nurses controlled the communicative interactions.

Wojnicki-Johansson (2001) asked nurses to evaluate the communication of 22 patients who had been mechanically ventilated in the ICU. Nurses reported functional communication in 19 patients, however, this conflicted with the reports of 13 of the patients, who indicated that nurses had failed to understand their needs during their stay in ICU. Six patients reported that no functional communication was achieved, whereas nurses reported this to be the case for only 2 patients. Eight patients reported that nurses were unable to understand their messages. The author suggested that nurses should critically evaluate their communication skills and frequently verify the content of communication with patients.

Fried-Oken et al. (1991) interviewed 5 patients who reported negative emotional responses to the sudden onset of communication difficulties, the most common response being fear. Patients reported that some caregivers and family members did not know how to use their AAC systems and emphasized the need for increased training in this area.

Hall (1996) studied communication by observing interactions between nurses and their patients who were on ventilators. Hall concluded "nurses seemed more concerned about meeting their need to provide specific information to the patient than to discover what the patient might want." The author questioned whether nurses have the skills and knowledge to respond to and/or assess nonverbal communication and felt that this warranted continued investigation.

In a first-person account, Robillard (1994) described the difficulty of communicating without "real-time speech." The author, who was nonverbal and spent several months in an ICU, described various communication problems:

- Nurses were not able to properly use his alphabet board and refused to write the letters down when he spelled his message;
- Nurses refused to use his alphabet board with him;
- Physicians made surgical and other treatment decisions without allowing for more than a yes/no response; and
- There were frequent interruptions and disturbances when he was composing messages.

The literature reviewed suggests that AAC intervention in many acute care facilities is lacking and that nurses and other caregivers may not be receiving adequate training to address the spectrum of communication needs in this population. The nursing literature suggests that nurses are highly involved in facilitating communication output, providing psychosocial support, as well as educating patients regarding their care. However, accounts from the perspective of the patient suggest an overall lack of communication intervention for this population.

Method

This study was part of a larger project that investigated the AAC needs of patients in acute care. The authors developed two surveys to solicit information from nurses and S-LPs who worked with adults in acute care settings. The surveys were piloted with a small group of nurses and S-LPs, respectively. Based on the feedback, modifications were made. When appropriate, identical questions were included on each survey to allow for meaningful comparisons between groups. Questionnaires contained five parts: (a) clinician background and opinions about AAC, (b) AAC in one's facility, (c) issues involving nonspeaking patients in acute care, (d) clinician attitudes and opinions about communication intervention, and (e) demographic information. Respondents were asked to rank their level of agreement with a variety of statements using a 5-point Likert-like scale. In addition, several multiple choice questions relating to demographics were included. Only those questions pertaining to nursing and S-LP roles and attitudes were analysed in this study. Modified copies of the survey are included in Appendices A and B (several questions that did not pertain to this study were omitted).

An accompanying letter introduced the surveys and provided the following definitions:

Nonspeaking refers to patients who cannot use verbal speech to communicate. Some examples include patients who are intubated; patients who are tracheostomized and cuff deflation is not possible; and patients who have had surgery that temporarily or permanently impacts speech (e.g., laryngectomy). Exclusions include comatose or severely reduced levels of alertness; advanced dementia; severe cognitive deficits; and left-sided stroke with severe aphasia.

Augmentative and Alternative Communication (AAC) refers to methods of communication that provide an alternative or that are used in addition to verbal speech. AAC may be high tech or low tech.

Table 1

Sociodemographic characteristics of participant

Characteristic	Number of participants
Nurses' workplace (*n* = 85)	
ICU	30 (35%)
Acute Surgery	29 (29%)
Acute Medicine	24 (28%)
Other	2 (2%)
S-LPs' Workplace (*n* = 34)[a]	
ICU	12 (35%)
Acute Surgery	12 (35%)
Acute Medicine	23 (68%)
Head and Neck Cancer Care	5 (15%)
Other	4 (12%)
Demographics of S-LPs (*n* = 34)	
Manitoba	14 (41%)
Ontario	8 (24%)
Saskatchewan	4 (12%)
Alberta	3 (9%)
Newfoundland and Labrador	3 (9%)
Quebec	1 (3%)
British Columbia	1 (3%)

Note: [a]Many S-LPs reported more than one work setting.

High tech refers to electronic communication devices that produce synthesized speech and/or devices that use pre-programmed recorded messages. Unless specifically referred to in a question, electrolarynx devices are not included in this definition.

Low tech refers to non-electronic alternative communication systems and devices such as gestures, facial expressions, pointing, sign language, eye gaze systems, picture boards, writing/printing, and alphabet boards.

The managers of acute medical-surgery and intensive patient care nursing wards at Health Sciences Centre, Winnipeg, Manitoba, were asked to distribute surveys to nurses on their units. The surveys were completed by 85 nurses. As some managers did not provide information regarding the number of surveys actually distributed, no exact response rate could be calculated. It was estimated that the response rate for the nursing survey was 20%. The surveys were distributed to the 33 hospital-based S-LPs in Manitoba who worked with adults. The return rate for S-LPs in Manitoba was 82%. Surveys were also distributed at a local workshop and emailed to several distribution lists across Canada. Unfortunately, the survey was not designed for electronic completion, and relatively few surveys were returned as a result of email correspondence. Therefore, an overall return rate could not be calculated. A total of 49 hospital-based S-LPs from across Canada completed the survey. Of the S-LPs who completed surveys, 34 indicated

Table 2

Responses to "It is appropriate for nurses to set up communication methods for nonspeaking patients"

Discipline	*Strongly Agree*	*Agree*	*Not sure*	*Disagree*	*Strongly Disagree*
Nurses (*n* = 85)	34 (40%)	36 (42%)	8 (9%)	6 (7%)	1 (1%)
S-LPs (*n* = 34)	2 (6%)	15 (44%)	10 (29%)	5 (15%)	2 (6%)

Note: Differences between nurses and S-LPs were highly significant (x^2 = 19.45, df = 4, p < .001).

Table 3

Percentage of nurses and S-LPs indicating their level of agreement with the following statements

Statement	Discipline	Level of Agreement				
		Always/ Almost always (> 90%)	Most of the time (50-90%)	Sometimes (10-50%)	Rarely (< 10%)	Never
1a. Nonspeaking patients are referred to speech-language pathology (S-LP).	S-LPs	15%	36%	42%	6%	0
	Nurses	29%	23%	18%	19%	12%
1b. Nonspeaking patients should be referred to S-LP.	S-LPs	71%	24%	6%	0	0
	Nurses	33%	30%	26%	10%	1%
2a. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP is consulted.	S-LPs	18%	52%	27%	3%	0
	Nurses	29%	17%	21%	19%	14%
2b. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP should be consulted.	S-LPs	85%	15%	0	0	0
	Nurses	57%	27%	12%	4%	1%
3a. If patients are expected to be nonspeaking for more than 2-3 days, they are referred to S-LP.	S-LPs	12%	24%	36%	27%	0
	Nurses	13%	16%	26%	22%	23%
3b. If patients are expected to be nonspeaking for more than 2-3 days, they should be referred to S-LP.	S-LPs	68%	21%	12%	0	0
	Nurses	37%	24%	23%	12%	5%
4a. If family and nurses are not able to set up a Yes/No system, S-LP is consulted.	S-LPs	24%	27%	36%	12%	0
	Nurses	21%	12%	28%	19%	20%
4b. If family and nurses are not able to set up a Yes/No system, S-LP should be consulted.	S-LPS	85%	15%	0	0	0
	Nurses	55%	23%	11%	7%	5%

Notes: Responses of nurses and S-LPs were significantly different for all statements. (Statement 1a. p = .003, Statement 2a. p < .001, Statement 3a. p = .04, Statement 4a. p = .03, Statement 1b. p = .002, Statement 2b. p = .04, Statement 3b. p = .02, Statement 4b. p = 0.02).

that they presently worked in an acute care setting; therefore, only the results of these 34 were included in the analysis. Table 1 summarizes sociodemographic information of the respondents. All nursing questionnaires were included in analysis of the data. The 34 questionnaires from S-LPs who worked in an acute care setting were included. In addition, responses between various subcategories within disciplines were examined (years of experience, province, type of ward, level of expertise in AAC, and level of S-LP interest in AAC). Most S-LPs reported that they worked with multiple populations and on more than one ward; therefore, S-LP data could not be subdivided into mutually exclusive categories based on work settings. Numbers in many subcategories were relatively small, and response patterns of subgroups did not generally deviate substantially from the pooled data, therefore, unless stated otherwise, only the pooled data are reported.

To determine whether statistically significant differences existed between opinions and attitudes of nurses and S-LPs, x^2 tests or Wilcoxon signed ranks tests were calculated. Scale choices were usually concatenated from 5 points to 3 or 2 depending on the description in the text. Only significant results are reported and discussed in detail. A probability of $p < .05$ was interpreted as statistically significant in this study.

Results

S-LP and Nursing Involvement in Managing Communication Needs of Nonspeaking Adults in Acute Care

Both nursing and S-LP respondents reported a high level of involvement of their own discipline in setting up communication methods for nonspeaking patients. Most (90%) nurses reported that they were involved in setting up communication methods for nonspeaking patients *almost always* or *most of the time*, whereas only 38% of nurses identified S-LP involvement *almost always* or *most of the time*. Only 37% of S-LPs indicated that nurses were routinely involved in establishing communication systems, however, 82% of S-LPs reported that their own discipline was involved *almost always* or *most of the time*. ICU nurses were more likely than other nurses to report a high level of involvement of their own discipline and were least likely to report S-LP involvement (Figures 1 and 2).

Nursing respondents were asked whether "nonspeaking patients find ways to communicate without help from staff." Forty-six nurses (54%) *disagreed* or *strongly disagreed*; 19 (22%) were *not sure*; 20 (24%) *agreed*; and none *strongly agreed*.

Opinions of S-LPs and Nurses Regarding the Management of Communication Needs of Nonspeaking Adults in Acute Care

Both disciplines were asked to indicate their level of agreement with the following statement: "It is appropriate for nurses to set up communication methods for nonspeaking patients." Most (82%) nurses and 50% of S-LPs *agreed* or *strongly agreed*. Table 2 reports response patterns. Nurses were also asked to indicate agreement level with the statement, "Nurses do not have the background to help nonspeaking patients communicate." Responses of nurses were as follows: 1 (1%) *strongly agreed*; 10 (12%) *agreed*; 17 (20%) were *not sure*; 45 (54%) *disagreed*; and 11 (13%) *strongly disagreed*.

Nurses and S-LPs were queried about referral patterns to S-LP for communication intervention in their facilities. Several statements that included a variety of referral criteria were presented, including length of time nonspeaking status is anticipated; failure of nurses and family in establishing a communication system; and failure of nurses and family in establishing a Yes/No system. Table 3 summarizes responses to four statements regarding current referral practices and corresponding statements reflecting attitudes regarding best practice standards.

Statements regarding referral practices elicited divergent responses from the nursing groups. Of the 10 nurses who indicated that nonspeaking patients were "never" referred to S-LP, 9 worked in an ICU setting. ICU nurses also accounted for 7 of 8 nurses who felt that S-LP referrals for nonspeaking patients should *rarely* or *never* occur. Similar patterns were found with the other three statements. Figure 3 reports the percentage of respondents who agreed with the statements in Table 3. Subgroups or disciplines differed significantly in all cases with x^2 having a $p < .001$ (Figure 3).

The Wilcoxon signed ranks test was used to compare patterns of responses within each subgroup to the paired statements. In all cases, subgroups were more likely to agree with the *A* (*are being referred*) than the corresponding *B* (*should be referred*) statements, although in two instances, the differences did not reach the $p < .05$ level of significance. Mean ranks were calculated by comparing the scale score of the response of statement *A* to the scale score of the response to statement *B*. Table 4 summarizes these comparisons.

Nurses were requested to indicate their level of agreement with the statement: "Quality of care would be better if S-LP was more involved with nonspeaking patients." Nineteen (22%) nurses *strongly agreed*; 34 (40%) *agreed*; 21 (25%) were *not sure*; 7 (8%) *disagreed*; and 4 (5%) *strongly disagreed*. Eight of the 11 nurses who *disagreed* or *strongly disagreed* were ICU nurses.

Opinions of S-LPs and Nurses Regarding the Importance of Communication for Acute Care Patients

Respondents were asked to indicate their level of agreement with the statement: "Acutely ill patients do not feel that communication is important." Responses varied significantly between nurses and S-LPs ($p = .002$). Eighty-one nurses (95%) and 25 (74%) S-LPs *disagreed* or *strongly disagreed*; 2 (2%) nurses and 4 (11%) S-LPs were *not sure*; and 2 (2%) nurses and 5 (15%) S-LPs *agreed* or *strongly agreed*.

Table 4

Comparisons of response patterns to are *and* should *statements regarding referral criteria, reported by mean scores*

Statement[a]	ICU Nurses	Surgery Nurses	Medicine Nurses	S-LPs
1a	4.00	1.83	1.79	2.39
1b	3.17	1.59	1.54	1.35
	$p = .001$	$p = .07$ (ns)[b]	$p = .11$ (ns)	$p < .001$
2a	4.13	1.86	1.87	2.15
2b	2.38	1.31	1.22	1.15
	$p < .001$	$p = .01$	$p = .003$	$p < .001$
3a	4.54	2.66	2.30	2.79
3b	3.38	1.76	1.42	1.44
	$p = .001$	$p = .001$	$p < .001$	$p < .001$
4a	4.46	2.24	2.09	2.36
4b	2.66	1.48	1.25	1.15
	$p < .001$	$p = .002$	$p = .002$	$p < .001$

Notes: Lower scores indicate higher level of agreement. [a]1a. Nonspeaking patients are referred to S-LP; 1b. Nonspeaking patients should be referred to S-LP; 2a. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP is consulted; 2b. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP should be consulted; 3a. If patients are expected to be nonspeaking for more than 2-3 days, they are referred to S-LP; 3b. If patients are expected to be nonspeaking for more than 2-3 days, they should be referred to S-LP; 4a. If family and nurses are not able to set up a Yes/No system, S-LP is consulted; 4b. If family and nurses are not able to set up a Yes/No system, S-LP should be consulted. [b]ns = not significant

Respondents were asked to indicate whether they agreed that "most acutely ill patients communicate only to have their immediate needs met." Forty-nine (58%) nurses and 19 (56%) S-LPs *disagreed* or *strongly disagreed*; 11 (13%) nurses and 4 (12%) S-LPs were *not sure*; and 25 (29%) nurses and 11 (32%) S-LPs *agreed* or *strongly agreed*.

Respondents were asked to indicate how often they could "understand what nonspeaking patients are trying to communicate." The majority responded either *sometimes* (42% nurses, 62% S-LPs) or *most of the time* (46% nurses, 38% S-LPs). Forty-six (54%) nurses and 13 (38%) S-LPs indicated that they "can understand what nonspeaking patients are trying to communicate" *almost always* or *most of the time* ($p = .10$, marginally significant). Figure 4 outlines responses of both disciplines, including several subcategories of nurses.

Nurses' responses to the statement, "Quality of care goes down when I cannot understand a patient," were as follows: 21 (25%) indicated *always* or *almost always*; 18 (21%) indicated *most of the time*; 31 (36%) indicated *sometimes*; and 15 (18%) indicated *rarely* or *never*.

Prioritization of Dysphagia Over Communication

S-LPs were asked what percentage of referrals they received for communication (including referrals that specified both communication and swallowing). Seven (21%) reported 10% or fewer, 12 (35%) reported 10-25%, 7 (21%) reported 25-50%, and 8 (24%) reported greater than 50%.

Most (27[88%]) S-LPs *agreed* or *strongly agreed* with the statement: "Many acute care patients with communication and swallowing needs are referred *only* for swallowing." (Fifteen [45%] *strongly agreed*, 14 [42%] *agreed*, 3 [9%] *disagreed*, and 1 [3%] *strongly disagreed*).

Sixty-six percent (24/34) of S-LPs agreed that they could "only minimally address communication needs in the acute care setting." (Six [18%] *strongly agreed*; 16 [48%] *agreed*; 2 [6%] were *not sure*; 8 [24%] *disagreed*; and 1 [3%] *strongly disagreed*). Only 12% (4/34) of S-LPs agreed with the statement: "I have time to provide high tech AAC intervention for nonspeaking patients in the acute care setting." (Six [18%] were *not sure* and 23 [69%] *disagreed* or *strongly disagreed*). One respondent indicated that simple high tech AAC methods were used in the acute care setting *almost always*. It was noted that at this respondent's facility, Occupational Therapy provides swallowing interventions.

Seventy-three percent (24/33) of S-LPs *agreed* or *strongly agreed* with the statement: "I have time to provide low tech AAC intervention for nonspeaking patients in the acute care setting." (Three [9%] were *not sure* and 6 [18%] *disagreed*).

Discussion

S-LP and Nursing Involvement in the Management of Communication Needs of Nonspeaking Adults in Acute Care

The authors acknowledge that the assumptions drawn are based on nursing responses from a single facility and that the data reported here cannot be generalized without a few caveats. Despite the limitations, the findings illustrated interesting trends that warrant discussion and that will hopefully lead to additional investigations.

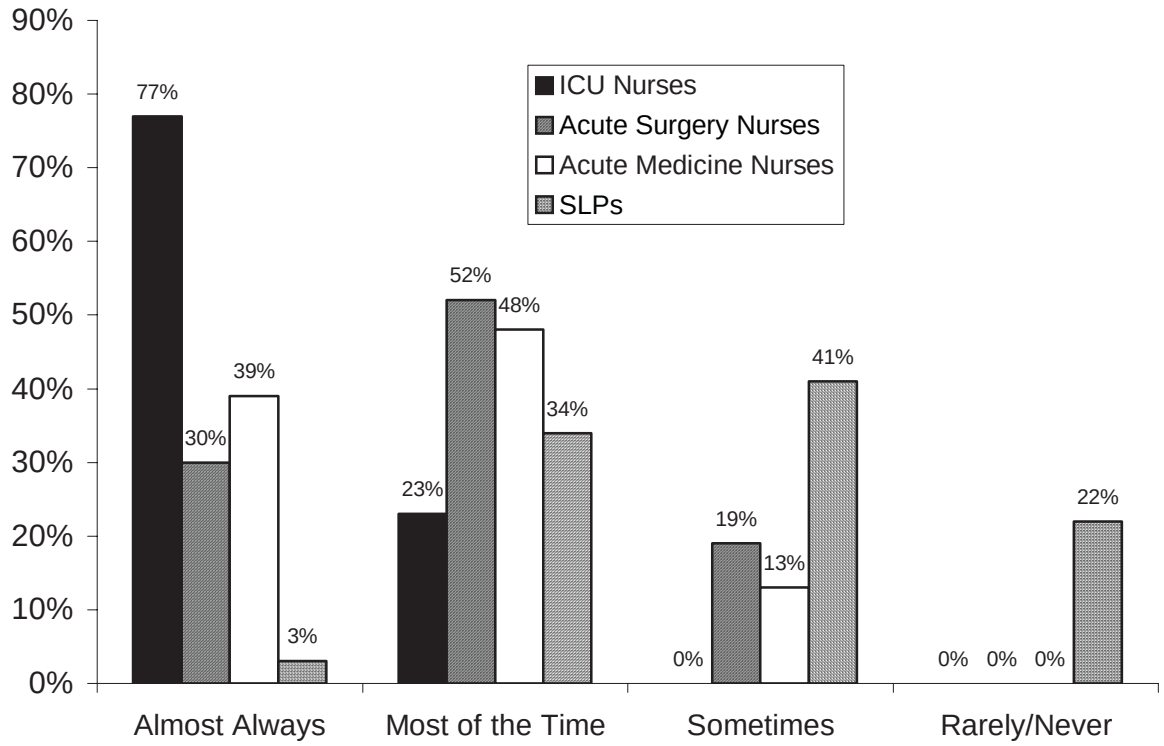

Figure 1. Responses by respective disciplines to: *How often are nurses involved in setting up communication methods for nonspeaking patients?* The levels of both nursing involvement and S-LP involvement differed significantly depending on who was asked (overall x^2 $p < .01$).

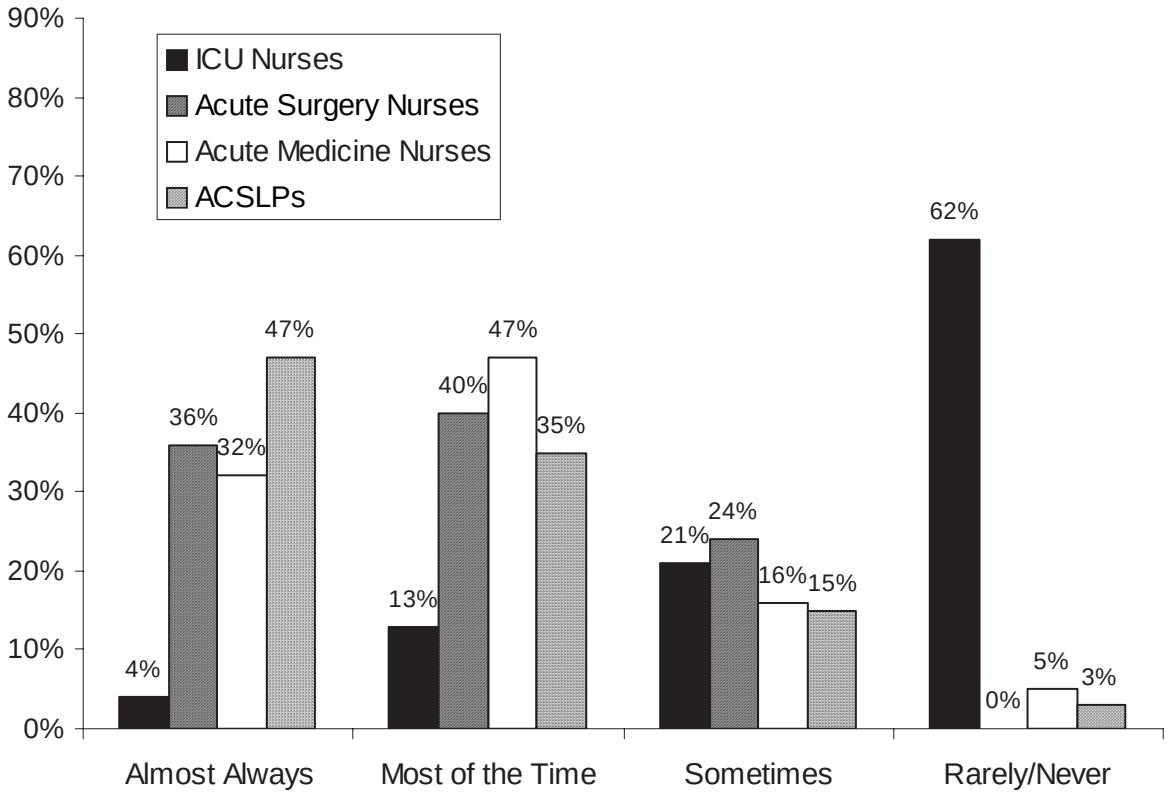

Figure 2. Responses by respective disciplines to: *How often are S-LPs involved in setting up communication methods for nonspeaking patients?* The levels of both nursing involvement and S-LP involvement differed significantly depending on who was asked (overall x^2 $p < .01$).

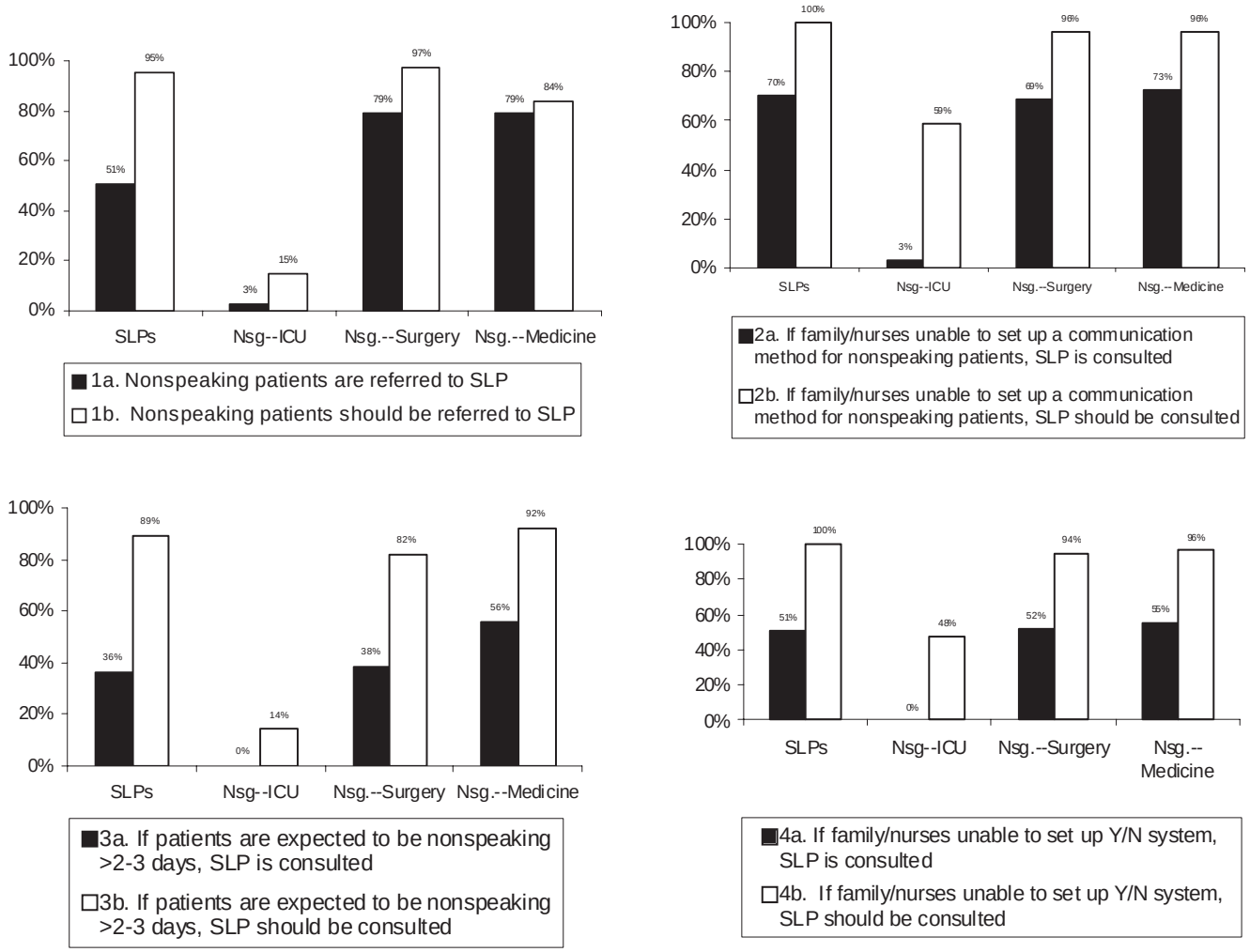

Figure 3. Percentage of respondents who *agreed* or *strongly agreed* with the indicated statements.

The survey responses of both nurses and S-LPs suggest that each feels that their own disciplines were integrally involved in establishing communication methods for nonspeaking patients in the acute care setting. Interestingly, both disciplines perceived their own to be more involved than the other. The discrepancies in reported levels of involvement may reflect a natural tendency to focus on roles within one's own discipline. Alternately, it may be indicative of differences in practice patterns between facilities. It also seems plausible that these data reflect a lack of awareness among both nurses and S-LPs of each other's respective training and scope of practice. Nurses who work weekends, evenings, or nights may have little opportunity to observe and interact with S-LPs. Differences in nursing and S-LP responses regarding patterns of communication intervention may also have resulted from differing interpretations of survey questions. Being "involved in setting up communication methods" may not have been interpreted uniformly across and among disciplines. For example, would providing a patient with a pen and paper be considered "setting up a communication method"? It is possible that S-LPs who are trained in specialized AAC methods may have interpreted the term "communication method" more technically than nurses. There might have been a higher level of agreement had the survey queried the appropriateness of facilitating specific types of communication methods. It is also the authors' sense that it is possible that many S-LPs are unaware of the level of skill that some nurses have in the area of facilitating communication for nonspeaking patients. Clinical experience and the survey responses appear to support that both the nursing and the S-LP groups felt that nonspeaking patients are not referred to S-LP as frequently as they should be. Respondents were in general agreement that nonspeaking patients should be referred to S-LP *almost always* or *most of the time*.

Opinions of S-LPs and Nurses Regarding Expertise and Knowledge in the Management of Communication Needs of Nonspeaking Adults in Acute Care

Some striking differences were noted between the response patterns of ICU nurses and other respondents. ICU nurses reported a higher level of nursing involvement than other groups in setting up communication methods for nonspeaking patients. ICU nurses were in strongest agreement that it is appropriate for nurses to set up communication methods, and they were most likely to report that they had adequate background to help nonspeaking patients communicate. One could speculate that the ICU setting may present unique challenges and opportunities, thus necessitating a high level of direct nursing involvement in establishing communication methods. It may be that many ICU nurses have developed a high level of expertise in communicating with nonspeaking patients.

ICU nurses were more likely to report that they were adept at understanding nonspeaking patients than other groups of nurses or S-LPs. If communication in the ICU is centred on immediate medical needs, then gestures and yes/no questioning may often be sufficient to address such needs. However, if psychosocial needs are to be considered and patients are to be involved in discussions regarding alternate levels of care and end of life issues, then communication will likely be more challenging and a higher level of skill will be required from medical professionals in interacting with patients. Previous studies comparing perspectives of patients and nurses suggest that ICU nurses may frequently be unaware of patients' communication needs and preferences (Stovsky, Rudy & Dragonette, 1988; Wojncki-Johansson, 2001). It is possible that some ICU nurses are better able to communicate with patients because of their training and experience. However, the literature suggests that some ICU nurses may not have adequate skills to address complex communication needs and might benefit from specialized training in this area (Albarran, 1991; Bergbom-Engberg & Haljamäe, 1989, 1993; Fried-Oken et al., 1991; Happ et al., 2004; Leathart, 1994; Salyer & Stuart, 1985; Turnock, 1991).

ICU nurses in this study did not tend to strongly advocate for referral to S-LP. It is unclear whether ICU nurses felt they were better equipped to provide communication intervention in the ICU setting than S-LPs. They may not have been aware of the types of intervention provided by S-LPs. Alternately, it is possible that ICU nurses perceived that the needs of ICU patients would not be well served by S-LP. Twelve S-LPs reported that they worked in an ICU setting, however, none worked exclusively in ICU, suggesting a limited involvement of S-LP in this setting. This is also supported by responses from ICU nurses who reported relatively low levels of S-LP involvement. The available nursing literature on communication issues in the ICU does not stress the need for S-LP involvement. Furthermore, if dysphagia is viewed as a priority, then S-LPs who work in an ICU may have minimal opportunities to address communication needs. In addition, it is possible that the communication needs of nonspeaking patients in an ICU are fewer and more focused than those of patients in other acute care settings. Many patients in ICUs are intubated because of a medical crisis, without time for preoperative education. Reduced alertness and cognitive impairment may further interfere with communication. ICU nurses may feel that S-LPs do not have the skills and/or time to provide effective intervention in these circumstances.

Opinions of S-LPs and Nurses Regarding the Importance of Communication for Acute Care Patients

The nurses and S-LP respondents appeared to be in general agreement that communication is important to acutely ill patients. Nurses were more likely than S-LPs to express this. Surprisingly, a sizeable minority (15%) of S-LPs *agreed* or *strongly agreed* that "acutely ill patients do not feel that communication is important" and another 11% were *unsure*. It is troubling that professionals with specialized training in communication should come to this conclusion, especially given that this group is comprised of S-LPs who work in an acute care setting, and this view is at odds with documented patient-perspectives (Bergbom-Engberg & Haljamäe, 1989; Fitch, 1987; Fowler, 1997; Happ, 2000; Holland et al., 1997; Hupcey & Zimmerman, 2000; Menzel, 1998; Rotondi et al., 2002; Stovsky et al., 1988; Wojnicki-Johansson, 2001; Rier, 2000; Robillard, 1994; Urden, 1997; Villaire, 1995). Documentation of patient perspectives regarding communication in the acute care setting appears to be found primarily in the nursing and sociology literature and is comparatively lacking in the S-LP literature. The absence of patient perspective studies in the S-LP literature raises the question of whether S-LPs have a clear understanding of, or an interest in, patient perspectives in this population. Because of large caseloads and an emphasis on dysphagia, the importance of communication with acutely ill patients may have been lost. The results suggest varying opinions within both disciplines as to whether "most acutely ill patients communicate only to have their immediate needs met." Although a majority of respondents in both disciplines disagreed with the statement, a sizable minority (29% nurses, 32% S-LPs) agreed. The literature suggests that although immediate needs are a focus of communication interaction in acute care, the psychosocial aspect is also critical to patients (Albarran, 1991; Costello, 2000; Hall, 1996; Happ et al., 2004; Robillard, 1994; Villaire, 1995). Rier (2000) differentiated between the true "critically ill" experience when life is "hanging in the balance" and acute illness; he argued that communication interactions during the critically ill stage may be quite different from interactions during the acute or chronic stages. The present study did not differentiate between different levels of the illness within acute care. It is possible that the nature of communication output is variable and dependent on factors such as severity of illness, level of alertness, cultural dynamics, and individual differences. Continued investigation in this area is essential.

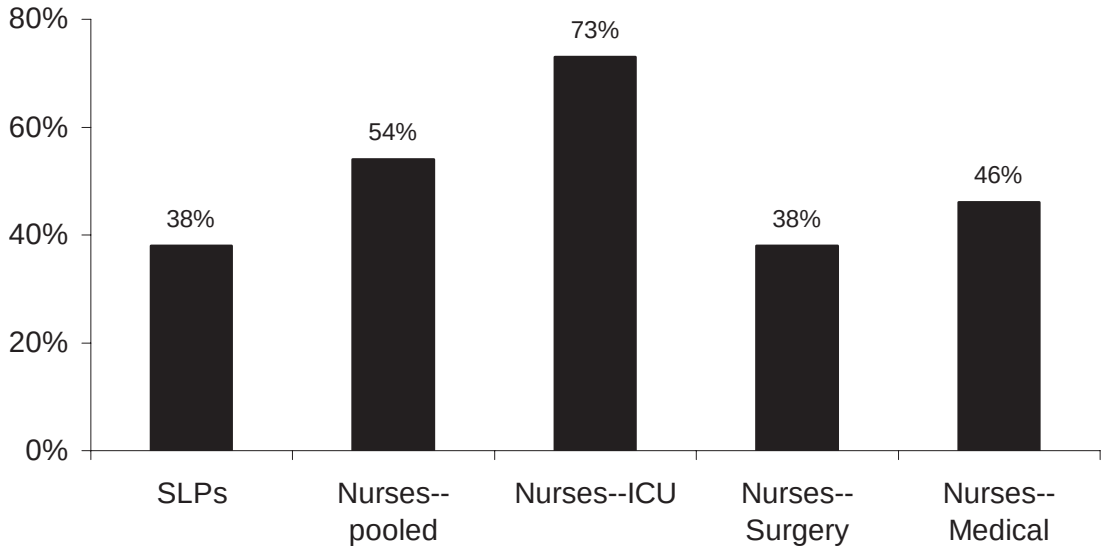

Figure 4. Percentage of respondents who reported that they could understand nonspeaking patients *almost always* or *most of the time*. Differences between subgroups in this table were significant ($p = .04$). Only individual subgroups were tested.

There was considerable variability in the responses from the nurses regarding whether the quality of care decreased when they were unable to understand patients. These responses may reflect the degree to which nurses perceive social interaction with patients to be within their scope of practice. However, considering the strong level of agreement (95%) among nurses that acutely ill patients feel that communication *is* important, it was surprising that 18% of nurses reported that quality of care *rarely* or *never* deteriorated when they were unable to understand patients. An additional 36% reported that quality of care was only *sometimes* reduced. It seems inconceivable that quality of care would not be reduced when caregivers cannot understand their patients. Patient perspectives described in the literature support the view that the ability of patients to communicate is extremely important (Bergbom-Engberg & Haljamäe, 1989; Fitch, 1987; Fowler, 1997; Hafsteindóttir, 1996; Happ, 2000; Holland et al., 1997; Hupcey & Zimmermann, 2000; Menzel, 1998; Rier, 2000; Robillard, 1994; Rotondi et al., 2002; Stovsky et al., 1988; Urden, 1997; Wojnicki-Johansson, 2001; Villaire, 1995). The literature describes varying attitudes and abilities of nurses in communicating with nonspeaking patients, which suggests that some nurses lack adequate awareness and/or skills in communicating effectively with nonspeaking patients (Hall, 1996; Holland et al., 1997; Leathart, 1994; Robillard, 1994; Salyer & Stuart, 1985; Stovsky et al., 1988; Turnock, 1991; Wojnicki-Johansson, 2001).

Responses to the statement "I can understand what nonspeaking patients are trying to communicate" were surprisingly variable. The disparity of responses may suggest that some health care professionals, regardless of discipline, are better at finding ways to communicate with patients than others. Individual characteristics like natural problem-solving abilities, patience, and genuine interest in interacting with patients may play critical roles in communicating with nonspeaking patients. In addition, some health care professionals may have received more training and mentoring in this area. Another possibility is that respondents' perceived levels of communication skills may be at odds with patients' perceptions. This study did not address the impact of nursing versus S-LP services on the quality of care for the acutely ill patient. Further investigation of this issue is warranted.

Prioritization of Dysphagia Over Communication

Acknowledging the relatively small S-LP sample size, results from this study suggest that many S-LPs in acute care settings spend the majority of their time responding to swallowing referrals. Comments of several S-LPs suggest that there is a concern in some facilities that patients with communication needs are not being referred for S-LP service. One clinician indicated "dysphagia is a priority." Another stated, "Daily I wish I had more time and staff to educate nursing about options for nonspeaking patients and generate more timely referrals."

These anecdotal comments from the S-LPs working in acute care appear to be similar to reports in the literature describing trends of increased prioritization of dysphagia referrals with a corresponding decline in communication intervention by S-LP in hospital settings (Armstrong, 2003; Enderby & Petheram, 2002; Lawrie, 1996; McCooey-O'Halloran et al., 2004). In the field of medical speech-language pathology, it is not clear whether the emphasis on swallowing is being driven by referrals from physicians or other health care professionals, and/or whether S-LPs feel

that swallowing is a higher priority than communication in the acute care setting. However, one can speculate that as swallowing has evolved into a larger portion of the S-LP caseload over the past several decades, communication issues may have fallen by the wayside.

Limitations of the Study

All nursing respondents were from the same facility, therefore, the nursing data cannot be interpreted broadly and comparisons between nursing and S-LP responses should be viewed with caution. Almost half of the S-LP questionnaires received were from Manitoba. However, the responses by S-LPs from other provinces demonstrated answer trends similar to those from Manitoba.

The response patterns of the ICU nurses in the study indicated different trends than other nursing subgroups. However, separating the nurses into subgroups resulted in relatively low numbers for each group. Additional research investigating the relationship of S-LPs and ICU nurses in the ICU setting is clearly warranted.

The surveys used in this study did not go through a rigorous validation process. The definition of "nonspeaking" used for this study was fairly narrow and excluded several prominent populations who may be nonverbal. It is possible that some respondents may not have read the definition thoroughly and may not have referred back to it as they completed the survey. It is also possible that questions were not interpreted uniformly or as intended, therefore, the data should be viewed with some caution.

Summary and Conclusions

The data in the study, along with current literature, suggest that nurses frequently facilitate hands-on communication intervention for nonspeaking patients. The S-LP respondents in this study did not seem to be aware of the level of involvement of nurses in this area. The survey results suggest that most of the nursing respondents agree that quality of care would be enhanced if S-LP was more involved in facilitating communication systems for patient in acute care.

S-LPs and nurses have distinct roles in the acute care setting. Nurses may spend intensive time with individual patients, particularly in the ICU setting, whereas S-LPs are more likely to play a consultative role, providing assessment and recommendations. Although S-LPs have expertise in developing communication output systems, they may not have a full appreciation of some of the broader communication issues facing patients in acute care. Conversely, nurses working in acute care settings may have a good understanding of the overall communication issues in the acute care setting and provide patients with much needed information and expressions of comfort and reassurance. Patients will be best served if S-LPs and nurses within facilities work collaboratively. As suggested by McCooey-O'Halloran et al. (2004), S-LPs should broaden their role in working with acute care patients in providing psychosocial support to patients, as well as providing education to patients, families, and caregivers on effective communication. This study highlights both the need for interdisciplinary dialogue between nurses and S-LPs and the need for collaborative research investigating issues related to communication needs of nonspeaking patients in acute care.

Clinical experience, information in the literature, and responses to this survey suggest that S-LP staffing levels in acute care facilities may not be adequate to respond to all communication needs in the acute care setting. Hospital-based S-LPs report spending increasing amounts of time in the area of dysphagia management, whereas time spent providing communication intervention appears to be minimal and may in fact be declining. In addition, the authors wonder if some S-LPs working in acute care settings do not fully appreciate the importance of communication to patients. If resources are indeed an issue, then it is imperative that S-LPs look carefully at their resources and priorities in acute care. Dysphagia and speech-language services should be balanced within acute care.

As a final note, practice changes have already occurred at the study facility in Manitoba. S-LPs are taking a more active role in the ICU. Despite persistent resource issues, S-LP time has been dedicated to rounds attendance in the ICUs to identify patients with communication needs, provide enhanced communication intervention, and educate other members of the ICU patient care team regarding S-LP services. The authors hope that this pilot study stimulates discussion and more widespread study of the issues highlighted.

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Appendix A

COMMUNICATION NEEDS IN THE ACUTE CARE SETTING: A SURVEY FOR NURSING STAFF

(To be completed by nurses working .5 FTE or greater)

Part I. Issues involving nonspeaking patients–Practice patterns in your facility

1. Who is involved in setting up communication methods for nonspeaking patients?

	Almost always (> 90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Patient/Family	❍	❍	❍	❍	❍
b. Nursing Staff	❍	❍	❍	❍	❍
c. S-LP	❍	❍	❍	❍	❍
d. OT	❍	❍	❍	❍	❍
e. Other (specify):	❍	❍	❍	❍	❍

2. What percentage of nonspeaking patients use these types communication methods?

	Almost all (> 90%)	*Most* (50-90%)	*Some* (10-50%)	*A few* (< 10%)	*None*
a. Answering Yes/No questions	❍	❍	❍	❍	❍
b. Patient pointing/gesturing	❍	❍	❍	❍	❍
c. Mouthing words	❍	❍	❍	❍	❍
d. Letter board	❍	❍	❍	❍	❍
e. Picture board	❍	❍	❍	❍	❍
f. Writing	❍	❍	❍	❍	❍
g. Electrolarynx devices	❍	❍	❍	❍	❍
h. Electronic speaking devices, other than electrolarynx devices	❍	❍	❍	❍	❍
i. No reliable method is established	❍	❍	❍	❍	❍
j. Other (specify):_____	❍	❍	❍	❍	❍

3. How much time do you have to spend with a speech-language pathologist to learn a communication method for an individual patient?

- ❍ Less than 5 minutes
- ❍ 5-15 minutes
- ❍ 15-30 minutes
- ❍ 30-45 minutes
- ❍ > 45 minutes

4. Please indicate how often the following is true on your unit.

On my unit:	*Always/ Almost always* (> 90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Nonspeaking patients are referred to speech-language pathology (S-LP).	❍	❍	❍	❍	❍
b. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP is consulted.	❍	❍	❍	❍	❍
c. If patients are expected to be nonspeaking for more than 2-3 days, they are referred to SLP.	❍	❍	❍	❍	❍
d. If family and nurses are not able to set up a Yes/No system, S-LP is consulted.	❍	❍	❍	❍	❍
e. Nurses set up communication methods for nonspeaking patients.	❍	❍	❍	❍	❍
f. Consultation to S-LP for communication slows down the discharge process.	❍	❍	❍	❍	❍

5. Please indicate whether you agree or disagree with the following statements.

On my unit	*Strongly agree*	*Agree*	*Not sure*	*Disagree*	*Strongly disagree*
a. Nurses are too busy to help nonspeaking patients communicate.	❍	❍	❍	❍	❍
b. Nonspeaking patients find ways to communicate without help from staff.	❍	❍	❍	❍	❍
c. Communication needs of nonspeaking patients are being met.	❍	❍	❍	❍	❍

Part II. Nursing attitudes and opinions about communication of nonspeaking patients

6. What do you feel is a reasonable time for S-LP to respond to communication referrals in the acute care setting?

❍ Within 1 working day ❍ Within 1 week

❍ 2-3 working days ❍ > 1 week

7. Please indicate your opinions about the following.

	Always/ Almost always (>90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Nonspeaking patients should be referred to S-LP.	❍	❍	❍	❍	❍
b. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP should be consulted.	❍	❍	❍	❍	❍
c. If patients are expected to be nonspeaking for more than 2-3 days, they should be referred to S-LP.	❍	❍	❍	❍	❍
d. If family and nurses are not able to set up a Yes/No system, S-LP should be consulted.	❍	❍	❍	❍	❍
e. I can understand what nonspeaking patients are trying to communicate.	❍	❍	❍	❍	❍
f. Communicating with nonspeaking patients is time-consuming.	❍	❍	❍	❍	❍
g. Quality of care goes down when I cannot understand a patient.	❍	❍	❍	❍	❍

8. Please indicate whether you agree or disagree with the following statements.

I feel that:	*Strongly agree*	*Agree*	*Not sure*	*Disagree*	*Strongly disagree*
a. It is appropriate for nurses to set up communication methods for nonspeaking patients.	❍	❍	❍	❍	❍
b. Nurses do not have the background to help nonspeaking patients communicate.	❍	❍	❍	❍	❍
c. Acutely ill patients do not feel that communication is important.	❍	❍	❍	❍	❍
d. Most acutely ill patients communicate only to have their immediate needs met.	❍	❍	❍	❍	❍
e. Quality of care would be better if S-LP was more involved with nonspeaking patients.	❍	❍	❍	❍	❍

9. If available on the wards, what percentage of nonspeaking patients do you think would use these types of communication methods?

	Almost all (> 90%)	*Most* (50-90%)	*Some* (10-50%)	*A Few* (< 10%)	*None*
a. Electronic devices with recorded messages	❍	❍	❍	❍	❍
b. Electronic "type and speak" devices, similar to a talking computer	❍	❍	❍	❍	❍
c. Electrolarynx devices	❍	❍	❍	❍	❍
d. Picture boards/books	❍	❍	❍	❍	❍
e. Alphabet boards	❍	❍	❍	❍	❍

Part III. Demographic/Biographical Information

10. Please indicate your highest level of education.

- ❍ PhD
- ❍ MSN
- ❍ BSN
- ❍ Diploma
- ❍ LPN
- ❍ Other (please specify:_____)

11. Where do you spend most of your working time?

- ❍ ICU
- ❍ Acute Medicine
- ❍ Acute Surgery
- ❍ Other (please specify:_____)

12. What unit do you work on? (optional)

_____

13. How many years experience do you have working with patients in an acute care setting?

- ❍ < 5 years
- ❍ 5 years or greater

14. Would you be interested in attending a 30-45 minute inservice on the use of different communication methods?

- ❍ Yes
- ❍ Maybe
- ❍ No Thanks

Comments: _____
_____
_____
_____

Appendix B

AUGMENTATIVE/ALTERNATIVE COMMUNICATION NEEDS OF PATIENTS IN THE ACUTE CARE SETTING: A SURVEY FOR SPEECH-LANGUAGE PATHOLOGISTS

Part I. Clinician Background and Opinions about AAC

1. What statement best describes your level of expertise in the field of AAC?

- ❍ Good working knowledge of a variety of low and high tech options. I feel confident in independently conducting assessments and making recommendations, consulting with OT regarding access/mounting issues as necessary.
- ❍ Basic knowledge of some high tech systems. I am able to independently assess and recommend low tech AAC options and often consult with an S-LP with expertise in the field to determine the most appropriate high tech device for patients.
- ❍ I facilitate simple low tech systems for patients as necessary and refer all patients who might benefit from high tech AAC options, or more complex low tech options, to an S-LP with expertise in AAC.
- ❍ I have little or no knowledge of high or low tech AAC methods and systems.

2. Please indicate whether you agree or disagree with the following statements:

	Strongly agree	*Agree*	*Not sure*	*Disagree*	*Strongly disagree*
a. I have a particular interest in the area of AAC.	❍	❍	❍	❍	❍
b. All S-LPs should be able to recommend and implement low tech, non-electronic AAC options.	❍	❍	❍	❍	❍
c. All S-LPs should be able to recommend and implement high and low tech AAC options.	❍	❍	❍	❍	❍
d. All AAC intervention should be done by specialists in the field.	❍	❍	❍	❍	❍
e. Given my current caseload, learning and programming high tech devices is not an effective use of my time.	❍	❍	❍	❍	❍

Part II. AAC in your Facility

3. Do you have a dedicated AAC clinician at your facility?

❍ Yes ❍ No

4. Please indicate whether you agree or disagree with the following statements:

In my facility:	*Strongly agree*	*Agree*	*Not sure*	*Disagree*	*Strongly disagree*
a. I have access to low tech AAC devices/equipment.	❍	❍	❍	❍	❍
b. I have access to high tech AAC devices/equipment.	❍	❍	❍	❍	❍
c. I avoid recommending high tech AAC devices because of lack of access to equipment.	❍	❍	❍	❍	❍

IF YOU DO NOT WORK IN AN ACUTE CARE SETTING, PLEASE OMIT PART III, AND PROCEED TO PART IV, QUESTION NUMBER 12.

Part III. Issues involving nonspeaking patients in the acute care setting–Practice patterns in your facility.

5. What is your average response time for acute care communication referrals?

❍ Within 1 working day ❍ Within 1 week

❍ 2-3 working days ❍ > 1 week

6. What percentage of acute care referrals you receive are for communication? (Include referrals that specify both communication and swallowing).

❍ 10% or less ❍ 25-50%

❍ 10-25% ❍ Greater that 50%

7. Who is involved in setting up communication methods for nonspeaking acute care patients?

	Almost always (> 90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Patient/Family	❍	❍	❍	❍	❍
b. Nursing Staff	❍	❍	❍	❍	❍
c. S-LP	❍	❍	❍	❍	❍
d. OT	❍	❍	❍	❍	❍
e. Other (specify):	❍	❍	❍	❍	❍

8. What percentage of nonspeaking patients in the acute care setting use these types of communication methods?

	Almost all (> 90%)	*Most* (50-90%)	*Some* (10-50%)	*A few* (< 10%)	*None*
a. Answering Yes/No questions	❍	❍	❍	❍	❍
b. Patient pointing/gesturing	❍	❍	❍	❍	❍
c. Mouthing words	❍	❍	❍	❍	❍
d. Letter board	❍	❍	❍	❍	❍
e. Picture board	❍	❍	❍	❍	❍
f. Writing	❍	❍	❍	❍	❍
g. Electrolarynx devices	❍	❍	❍	❍	❍
h. Electronic speaking devices other than electro-larynx devices	❍	❍	❍	❍	❍
i. No reliable method is established	❍	❍	❍	❍	❍
j. Other (specify):_____	❍	❍	❍	❍	❍

9. How often do you implement or facilitate these types of communication methods for nonspeaking acute care patients?

	Almost always (> 90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Answering Yes/No questions	❍	❍	❍	❍	❍
b. Patient pointing/gesturing	❍	❍	❍	❍	❍
c. Mouthing words	❍	❍	❍	❍	❍
d. Letter board	❍	❍	❍	❍	❍
e. Picture board	❍	❍	❍	❍	❍
f. Writing	❍	❍	❍	❍	❍
g. Electrolarynx devices	❍	❍	❍	❍	❍
h. Electronic speaking devices other than electrolarynx devices	❍	❍	❍	❍	❍
i. Other (specify):_____	❍	❍	❍	❍	❍

10. Please indicate how often the following is true on acute care wards in your facility.

In my facility:	*Always/ almost always* (> 90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Nonspeaking patients are referred to speech-language pathology (S-LP).	❍	❍	❍	❍	❍
b. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP is consulted.	❍	❍	❍	❍	❍
c. If patients are expected to be nonspeaking for more than 2-3 days, they are referred to S-LP.	❍	❍	❍	❍	❍
d. If family and nurses are not able to set up a Yes/No system, S-LP is consulted.	❍	❍	❍	❍	❍

11. Please indicate whether you agree or disagree with the following statements.

In my facility:	*Strongly agree*	*Agree*	*Not sure*	*Disagree*	*Strongly disagree*
a. With my current caseload, I can only minimally address communication needs in the acute care setting.	❍	❍	❍	❍	❍
b. I have time to provide low tech AAC intervention for nonspeaking patients in the acute care setting.	❍	❍	❍	❍	❍
c. I have time to provide high tech AAC intervention for nonspeaking patients in the acute care setting.	❍	❍	❍	❍	❍
d. Many acute care patients with communication and swallowing needs, are referred only for swallowing.	❍	❍	❍	❍	❍

Part IV. Clinician attitudes and opinions about communication intervention for nonspeaking patients in the acute care setting

12. What do you feel is a reasonable time to respond to communication referrals in the acute care setting?

- ❍ Within 1 working day
- ❍ 2-3 working days
- ❍ Within 1 week
- ❍ > 1 week

13. Please indicate your opinions about the following.

	Always/Almost always (> 90%)	*Most of the time* (50-90%)	*Sometimes* (10-50%)	*Rarely* (< 10%)	*Never*
a. Nonspeaking patients should be referred to S-LP.	❍	❍	❍	❍	❍
b. If family and nurses are not able to set up a communication method for nonspeaking patients, S-LP should be consulted.	❍	❍	❍	❍	❍
c. If patients are expected to be nonspeaking for more than 2-3 days, they should be referred to S-LP.	❍	❍	❍	❍	❍
d. If family and nurses are not able to set up a Yes/No system, S-LP should be consulted.	❍	❍	❍	❍	❍
e. If a patient's nonspeaking status is expected to be temporary (3 days or less) AND attempts by family or nurses at setting up a communication method have been unsuccessful, S-LP should be consulted.	❍	❍	❍	❍	❍
f. I can understand what nonspeaking patients are trying to communicate.	❍	❍	❍	❍	❍

14. Please indicate whether you agree or disagree with the following statements.

I feel that:	*Strongly agree*	*Agree*	*Not sure*	*Disagree*	*Strongly disagree*
a. It is appropriate for nurses to set up communication methods for nonspeaking patients.	❍	❍	❍	❍	❍
b. Electrolarynx devices should rarely be considered in the acute care setting.	❍	❍	❍	❍	❍
c. High tech AAC methods, other than electrolarynx devices, should rarely be considered in the acute care setting.	❍	❍	❍	❍	❍
d. I would be more likely to consider high tech AAC options if a dedicated clinician could provide comprehensive assessment and intervention.	❍	❍	❍	❍	❍
e. Acutely ill patients do not feel that communication is important.	❍	❍	❍	❍	❍
f. Most acutely ill patients communicate only to have their immediate needs met.	❍	❍	❍	❍	❍

15. If available on the wards, what percentage of nonspeaking patients do you think would use these types of communication methods?

	Almost all (> 90%)	*Most* (50-90%)	*Some* (10-50%)	*A Few* (< 10%)	*None*
a. Electronic devices with recorded messages	❍	❍	❍	❍	❍
b. Electronic "type and speak" devices, similar to a talking computer	❍	❍	❍	❍	❍
c. Electrolarynx devices	❍	❍	❍	❍	❍
d. Picture boards/book	❍	❍	❍	❍	❍
e. Alphabet boards	❍	❍	❍	❍	❍

Part V. Demographic/Biographical Information

16. What province are you from? _____

17. How many years have you worked as a Speech-Language Pathologist?

❍ < 5 years ❍ 5 years or greater

18. With which populations do you currently spend the majority of your working time? (Check all that apply).

❍ ICU ❍ Rehab

❍ Acute Medicine ❍ Head and Neck cancer care

❍ Acute Surgery ❍ Other. Please Specify:_____

Comments: _____

_____

_____

_____