



RN Compliance With SLP Dysphagia Recommendations In Acute Care

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Abstract

The purpose of this study was to examine acute care registered nurses' (RNs') self-reported levels of compliance with speech-language pathologists' (SLPs') recommendations for safe feeding and swallowing techniques and proper oral hygiene care techniques in the care of adult with dysphagia. A survey was distributed to approximately 230 acute care RNs in which they were asked to respond to statements regarding their behaviors when treating adult with dysphagia. Seventy-seven responses were received. Results revealed that RNs report their compliance with SLPs' recommendations to be high. No significant differences between compliance with safe feeding, safe swallowing, and oral hygiene care techniques were observed. However, more than 80% of RNs report a desire for more education regarding dysphagia; the time necessitated to feed individuals with dysphagia was the most common frustration. Disparities between RNs' and SLPs' expectations are addressed, as is the need for multidisciplinary team care, especially as it relates to the care of the frail elderly in acute care settings.

AS the primary caregivers for patients in acute care, registered nurses (RNs) have a great responsibility. Given their holistic knowledge of the patient, they are often the first with the opportunity to observe clinical signs of dysphagia.¹ While it is the job of speech-language pathologists (SLPs) to diagnose and initiate treatment for dysphagia, nurses have the maximum access to hospital patients and spend the most time monitoring their care.² They supervise and assist with meals, chart concerns from the patients and their families, and are the primary caregivers responsible for identifying and maintaining potential compromises to health status.²⁻⁵ Moreover, they are intimately involved not only in feeding but also in the dissemination

of medications and tube feeds, both of which are greatly affected by dysphagia. In some settings, mostly in other countries per literature reports, nurses actively screen for swallowing problems and have even created their own tools for that purpose.⁶⁻⁸ Regardless, it is essential that acute care RNs understand the various signs and symptoms of dysphagia as well as safe feeding and swallowing techniques and proper oral hygiene care. For the frail elderly, who may be admitted with already compromised nutritional status, the need for thorough evaluation regarding swallowing and consistent care regarding feeding and nutritional status is even more important.

Few data are available that report nursing compliance with swallowing, feeding, and oral hygiene recommendations made by SLPs in acute care settings. The majority of the existing research for acute care has focused on patient compliance.^{9,4} Leiter and Windsor⁹ concluded that patient compliance was relatively low, and that this phenomenon has been observed in similar studies where the health threat is not immediately perceived by the patient. Lack of awareness of dysphagia in individuals following the stroke

has also been reported to predict swallowing performance.¹⁰ Low et al⁴ investigated the degree of compliance for individuals who had dysphagia in long-term care facilities and how levels of compliance related to the incidence of chest infections and aspiration pneumonia, cause of death, and hospital readmission. The authors concluded that patient non-compliance with recommendations regarding dysphagia management is associated with adverse outcomes.

Noncompliance of nursing staff with swallowing and feeding recommendations could certainly affect the ability of patients to comply in acute care as well as long-term care settings. Nursing staff compliance has been reported to be low in some long-term care facilities.^{3-5,11-14} Colodny¹¹ reported compliance to be less than 50%. Although no significant relationship between years of experience and compliance was observed, RNs were reportedly less compliant than certified nursing assistants (CNAs) and rated "hassle"¹¹ and lack of knowledge about swallowing and feeding recommendations as greater barriers than did CNAs. RNs and licensed practical nurses both rated lack of knowledge about SLPs' swallowing and feeding recommendations as their main barriers against compliance.¹¹ Pelletier¹⁵ reported lack of knowledge as well as lack of comprehensive information in CNA texts and classrooms about swallowing impairment as challenges for CNAs working with elderly individuals with dysphagia.

The purpose of this study was to examine self-reported ratings of RNs' compliance with SLPs' recommendations for safe feeding and swallowing techniques and proper oral hygiene care techniques in the care of individuals with dysphagia. In other words, this study attempted to determine what RNs perceive themselves to know or do in relationship to SLPs' dysphagia recommendations. This study was not designed to assess actual knowledge levels or to observe actions performed by RNs. The following research questions were posed: (1) Is there a statistically significant difference among RNs' compliance with safe feeding techniques, safe swallow-

ing techniques, and proper oral hygiene care techniques? (2) Are there relationships between RNs' years of experience in acute care, age, or number of patients served and total compliance with SLPs' dysphagia recommendations? and (3) What are the most frequently reported sources of RNs' frustration in working with individuals with dysphagia?

METHODS

Participants

The sample in this study included RNs from the 5 largest acute care hospitals in central Arkansas, with intensive care units, cardiovascular intensive care units, and/or coronary care units. After obtaining permission from each unit's nursing supervisor and their respective institutional review boards, informed consent and surveys were distributed to approximately 230 acute care RNs. Seventy-seven (34%) surveys were completed and returned.

Description of survey

The survey (Appendix) comprised 2 parts. Section I requested demographic information, including years of experience in acute care, responsibilities in dealing with individuals who have dysphagia, average number of patients with dysphagia served each month, level of frustration or satisfaction with patients who have swallowing impairments, and sources of education regarding feeding and swallowing. Section II was developed from published research findings describing appropriate management methods for patients with dysphagia,^{13,16-22} and comprised statements regarding compliance as measured by behaviors in assessing and managing patients with dysphagia. It was subdivided into 3 areas: feeding issues, swallowing issues, and oral hygiene care. Participants were asked to rate the statements on a 5-point scale: strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree. To account for possible practice and/or fatigue effects, section II of the survey consisted

Table 1. Survey respondents' demographic data (N = 76)

Variable	n (%)	Mean	Range
Gender			
Male	17 (22.4)
Female	59 (77.6)
Age	...	38	23–57
Experience in acute care, y	...	9.5	1–31
Patients with dysphagia (per month)	...	2.5	0–20
Responsible for feeding patients			
Yes	72 (94.7)
No	4 (5.3)

of questions that were both positively and negatively worded. No formal assessment of reliability was conducted. To assess validity of this tool, section II was reviewed extensively by 2 SLPs. Both of these SLPs had a minimum of 10 years experience working with adults with dysphagia. Their comments were incorporated into 2 drafts of the questionnaire, and the final draft is the result of their contribution.

Procedures

A graduate student at the University of Central Arkansas in the Department of Speech-Language Pathology reported to each acute care unit and explained the purpose of the study to unit supervisors and RNs as available. After reviewing the informed consent, each supervisor/nurse was asked to complete the survey and return it to the unit supervisor or to the principal investigator.

RESULTS

Description of survey respondents

The survey sample consisted of 17 men and 59 women. The mean age of participants was 38 years, with a range from 23 to 57 years. The mean number of years of experience in acute care was 9 years 5 months, with a range from 1 to 31 years (Table 1). Although the mean number of patients with dysphagia that each nurse served per month was relatively small (2.5 patients per month, with a range from 0 to 20 patients), 94.7% of nurses surveyed re-

ported that they are responsible for feeding patients who cannot feed themselves in their facilities. In other words, 94.7% of nurses surveyed reported they have duties that include feeding patients, and between 0 and 20 (average = 2.5) of those patients were typically individuals with dysphagia. More than 72% of the RNs reported that they received the majority of their training with feeding and swallowing problems through on-the-job experience (Table 2). Another 15.8% reported receiving experience through a combination of college coursework, professional literature, continuing education and inservices, as well as on-the-job experience. Of the 60 respondents who reported participating in inservices or training for feeding and swallowing disorders, 75% report that they participated in such inservices less than once per year; only 15% reported that they participated annually. One

Table 2. Acute care registered nurses' sources of dysphagia training*

	Frequency (%)
College coursework	5 (6.6)
Professional literature	2 (2.6)
Continuing education/in-services	1 (1.3)
On-the-job training/experience	55 (72.4)
Combination	12 (15.8)
Not specified	1 (1.3)
Total	76 (100)

*One of the 77 respondents did not answer this question on the survey.

hundred percent of the participants reported that their facilities employ SLPs who evaluate and treat dysphagia, but only 47% reported that SLPs provide training on techniques for individuals with feeding and swallowing disorders and/or oral hygiene care. Eighty percent of participants reported a desire for more education in this area.

Self-reported RNs' compliance

To answer the first research question ("Is there a statistically significant difference among RNs' compliance with safe feeding techniques, safe swallowing techniques, and proper oral hygiene care techniques?"), the scores for the 3 subsections were entered into a 1-way repeated measures analysis of variance. The subsections (safe feeding techniques, safe swallowing techniques, and proper oral hygiene care techniques) served as the independent variables. The 5-point scale responses were weighted for each of the 3 areas so that positively and negatively stated questions were counted the same and each section carried a total weight of 30 (6 questions with a 5-point scale). The analysis of variance revealed no significant differences between subsections (Table 3). Sphericity was assumed (Mauchly's $W = 0.999$, $P = .967$), and the participants in this study reported their compliance to be high in all 3 areas ($\bar{x}_{\text{feeding}} = 25.68$, $\bar{x}_{\text{swallowing}} = 26.24$, $\bar{x}_{\text{oralcare}} = 25.91$, with 30 points possible for each of the 3 subsections). In other words, nurses reported a similarly high level of compliance across these 3 areas of clinical practice.

Table 3. Mean levels of acute care registered nurses' self-reported compliance with speech-language pathologists' dysphagia care recommendations

	Mean	SD	SE
Feeding	25.68	3.26	0.38
Swallowing	26.24	3.63	0.42
Oral hygiene care	25.91	3.89	0.45

Participant relationships

To answer the second research question ("Are there relationships between acute care RNs' years of experience in acute care, age, or number of patients served and total compliance with SLPs' dysphagia recommendations?"), the participants' scores on each of the subsections (feeding, swallowing, and oral hygiene care) were combined to obtain the participants' total compliance scores (30 possible points on each of 3 subtests for a total possible compliance score of 90). Compliance scores were entered into Pearson correlations with age, years of experience, and number of patients served. None of the coefficients between total compliance score and participant characteristics (age, years of experience, number of patients served) were significant. The only correlation that reached significance at the .05 level was between age and years of experience ($r = 0.676$).

Sources of frustration

To answer the third research question ("What are the most frequently reported sources of acute care RNs' frustration in working with patients with dysphagia?"), a frequency count was computed for participants' responses to question 12 on section I of the survey. Of the 77 participants surveyed, 32 reported feeling frustrated when working with patients with feeding and swallowing disorders. The results of their reported sources of frustration in working with patients with dysphagia are provided in Table 4.

Twenty-three of the 32 frustrated RNs reported the source of their frustration to be "other" on the survey, and 16 of those 32 wrote in that their greatest source of frustration was the amount of time it takes to feed patients with dysphagia. Other responses in the "other" category included having too many patients in general, problems communicating with patients, problems with patient noncompliance and frustration, problems receiving proper feeding/dietary orders in the charts, and not having enough staff to serve all the patients. Nurses in the survey sample

Table 4. Acute care registered nurses' sources of frustration in working with patients with dysphagia

	Frequency (%)
Lack of knowledge	4 (12.5)
Disagree with doctors'/SLPs' recommendations	1 (3)
Hassle	4 (12.5)
Other	23 (72)
Total	32 (100)

reported spending an average of 27 minutes feeding patients each mealtime, with a range of 0 to 60 minutes. They report feeding an average of 1 patient per meal, with a range of 0 to 2 patients. Although many of those patients, per nurse report, do not necessarily have dysphagia, feeding large numbers of patients appears to affect overall frustration level with patients who do have dysphagia as well. Because of this frustration, a second Pearson correlation was computed to determine the relationship between compliance scores and total time (in minutes) taken to feed patients (including, as well, in the analysis, once again, age, years of experience, and number of patients served). The correlation between time and total compliance was not significant, nor were the correlations between time and other participant characteristics.

DISCUSSION

The purpose of this study was to examine acute care RNs' self-reported levels of compliance with SLPs' recommendations for safe feeding and swallowing techniques and proper oral hygiene care techniques in the care of adult patients with dysphagia. RN respondents indicated their major source of training in feeding and swallowing disorders to be on-the-job experience, and few reported opportunities for inservices with SLPs. Despite this, RNs reported themselves to have relatively high levels of compliance with feeding, swallowing, and oral hygiene care rec-

ommendations made by SLPs for patients with feeding and swallowing disorders. There were no significant differences between compliance scores for feeding, swallowing, and oral hygiene. In addition, none of the respondent characteristics (participants' years of experience in acute care, age of participants, number of patients diagnosed with dysphagia served per month, and total time—in minutes—taken to feed all patients combined at mealtime) were significantly related to total compliance. Finally, about half of the RNs surveyed reported frustration working with patients who have dysphagia. The greatest source of frustration related to too many patients and not enough time.

Although the nurses in the survey sample rated their compliance with SLPs' recommendations for patients with feeding and swallowing disorders to be fairly high, previous studies have questioned nurses' knowledge about dysphagia and their compliance with safe feeding recommendations.^{3,4,9,11,12,14,15,23} Although these studies involved RNs and CNAs in different settings with different methods, a disparity likely exists between nurses' and SLPs' views on compliance. This is not to suggest that one party or the other may be providing misleading information. Rather, the results from this investigation suggest that the disparity exists due to perceptual differences regarding job duties, time constraints, and training.

In addition, it is important to highlight the fact that the number of patients with dysphagia that each nurse served per month was relatively small (2.5 patients per month, with a range from 0 to 20 patients). This is interesting given that this survey sample was collected from RNs who work at 5 of the largest acute care hospitals in the central Arkansas region. Although we did not collect data from the SLPs working in these facilities, it is probable that their dysphagia caseloads were much higher than those reported by the RNs. This potential difference in number of patients on the caseload, again highlights possible disparities that may exist due to perceptual differences regarding job duties, time constraints, and training.

Nearly 95% of nurses surveyed reported that they are responsible for feeding patients in their facilities under difficult time constraints. While not all such patients have dysphagia, all require assistance and time. Thus, while SLPs and others may view problems with patient care relating to dysphagia as resulting from poor compliance of nurses, nurses would more likely view the problem as one of time constraint. RNs in this investigation did report lack of time to feed patients with dysphagia as their greatest source of frustration in working with feeding and swallowing disorders. Although Pearson correlations showed no significant relationship between lack of time and overall compliance scores, the relationship is plausible. After all, lack of time may not be perceived as lack of compliance; it is just lack of time.

Many hospitals are trying to take a multidisciplinary approach to managing patients with feeding and swallowing disorders. In some cases, CNAs or nursing technicians are trained to safely feed patients, thereby reducing some of the RNs' load. Moreover, occupational therapists trained to follow feeding and swallowing plans developed by the SLP could provide therapy during mealtime to address goals for activities of daily living. SLPs can provide swallowing therapy during patients' scheduled mealtimes, as well. Finally, many hospitals form breakfast and lunch clubs where hospital staff can volunteer 1 or 2 times a week to feed patients who simply require feeding. Volunteers with less training could take over the task of feeding the patients who do not have dysphagia, whereas CNAs, occupational therapists, and SLPs with appropriate training could assist with the feeding of the patients with dysphagia. Although inservices are required to initiate such programs, the rewards in time and compliance may well be worth the time spent. All of these are possibilities for reducing the amount of time RNs have to spend feeding patients with dysphagia and may alleviate some of their frustration in working with these patients as well as enhance overall team care for individuals with dysphagia.

Lack of education and training regarding feeding and swallowing recommendations was reported as a barrier to compliance in the current investigation and was reported as the main barrier to compliance in a prior investigation.¹¹ If this is the case, then increasing education and training opportunities for nurses could certainly improve perceived compliance.¹¹ Inservices should specifically address the differences between feeding and swallowing problems and encourage collaboration in developing plans to improve care of patients with both of these problems. While many methods could be employed for training nursing staff to work with patients who have dysphagia, at least one computer-based training program is available and reported in the literature.²⁴ The authors of that investigation reported that training patient care staff with the computer-based program enhanced posttest scores over staff who did not receive the training. SLPs could also periodically assess knowledge deficits of nursing staff in their facilities with this type of computer program or via simple surveys and then provide more targeted inservices tailored to address specific deficits highlighted. Pretests, posttests, and observation coupled with training to document improvement in nurses' knowledge of and compliance with feeding, swallowing, and oral hygiene care recommendations for patients with dysphagia could enhance patient care and count for educational training for both SLPs and nurses.

It has also been suggested that identifying and training clinical nurse specialists for dysphagia in facilities could prove helpful.²⁵ Not only this would alleviate potential problems with role perceptions but also it would provide someone for nurses to consult with regarding the needs of patients who have dysphagia when SLPs are not available.

When developing multidisciplinary teams to address these problems, dental hygiene professionals should also not be ignored. Again, although RNs may perceive strong compliance with oral hygiene for patients, often the amount and type of oral hygiene

required for individuals with dysphagia exceeds normal oral hygiene. Thus, a disparity can easily exist between SLPs' perception of oral hygiene needs and RNs' perception of those same needs. It has been reported that oral hygiene is more highly correlated with aspiration pneumonia than is aspiration.²⁶ Therefore, including dental hygiene to provide targeted in services specific to individuals with dysphagia may dramatically affect outcomes for patients.

For the frail elderly, the dilemma of feeding and swallowing responsibility and training is especially important. Acute care facilities are constantly admitting and discharging elderly individuals to and from nursing facilities, both skilled and unskilled. During their stay in acute care, which is often quite short, swallowing impairments must be identified and appropriate treatment plans must be initiated in a timely fashion to decrease the risk of malnutrition. In addition, the amount of nutrition as well as type of nutrition needs to be established. Often healthcare teams are forced to strike a balance with weak, elderly patients whereby they take some food by mouth and receive additional nutrition by a feeding tube. Getting this balance correct is essential, as too much through a tube can limit desire for oral intake and too little through a tube can lead to malnutrition, which can further affect swallowing function. Everyone responsible for treating the patient should work to make sure that the patient is always receiving adequate nutrition and hydration. RNs must know how to work with SLPs and dietitians to maintain proper safety and nutri-

tion in such cases. Dietitians could provide information regarding how to ensure adequate nutrition and hydration under adverse conditions. In addition, they could also provide information regarding the signs and symptoms of malnutrition and dehydration, which may be critical for some patients. Annual, if not more frequent, inservices by registered dietitians would be of benefit to SLPs and nursing staff and could also help foster the multidisciplinary effort for working with at-risk patients.

CONCLUSION

Prior investigations have reported poor patient compliance with dysphagia recommendations by RNs and CNAs in long-term care settings. This investigation targeted acute care RNs. While self-reports of compliance were high, so was frustration with time constraints and the desire for increased training. Disparities likely exist between compliance as perceived by RNs working with individuals with dysphagia and compliance as reported by SLPs or other healthcare professionals.^{3,4,9,11,12,14,23} Such perceptions may be influenced by a variety of factors, including defined job responsibilities, time constraints, and training needs. A targeted, multidisciplinary team approach to training staff as well as identifying and remediating swallowing impairments in acute care is essential, especially for the frail elderly, for whom time is of the essence and nutritional compromise is often pending.

REFERENCES

1. Heritage M. A collaborative approach to the assessment and management of dysphagia. *Inter J Lang Commun Dis.* 2001;36(suppl):369-374.
2. Dangerfield L, Sullivan R. Screening for and managing dysphagia after stroke. *Nurs Times.* 1999;95(19):44-45.
3. Kolodny V, Malek AM. Improving feeding skills. *J Gerontol Nurs.* 1991;17(6):20-24.
4. Low J, Wyles C, Wilkinson T, Sainsbury R. The effect of compliance on clinical outcomes for patients with dysphagia on videofluoroscopy. *Dysphagia.* 2001;16:123-127.
5. O'Loughlin G, Shanley C. Swallowing problems in the nursing home: a novel training response. *Dysphagia.* 1998;13(3):172-183.
6. Perry L. Screening swallowing function of patients with acute stroke; part 1: identification, implementation and initial evaluation of a screening tool for use by nurses. *J Clin Nurs.* 2001;10:463-473.
7. Perry L. Screening swallowing function of patients

- with acute stroke; part 2: detailed evaluation of the tool used by nurses. *J Clin Nurs*. 2001;10:474–481.
8. Westergren A. Detection of eating difficulties after stroke: a systematic review. *Inter Nurs Rev*. 2001;53:143–149.
 9. Leiter AE, Windsor J. Compliance of geriatric dysphagic patients with safe-swallowing instructions. *J Med Speech Lang Pathol*. 1996;4:289–300.
 10. Parker C, Power M, Hamby S, Bowen A, Tyrrell P, Thompson DG. Awareness of dysphagia by patients following stroke predicts swallowing performance. *Dysphagia*. 2004;19(1):28–35.
 11. Colodny N. Construction and validation of the mealtime and dysphagia questionnaire: an instrument designed to assess nursing staff reasons for noncompliance with SLP dysphagia and feeding recommendations. *Dysphagia*. 2001;16:263–271.
 12. Kayser-Jones J. Mealtime in nursing homes: the importance of individualized care. *J Gerontol Nurs*. 1996;22(3):26–31.
 13. Shanley C, O'Loughlin G. Dysphagia among nursing home residents: an assessment and management protocol. *J Gerontol Nurs*. 2000;26(8):35–48.
 14. Shaw D, May H. Sharing knowledge with nursing home staff: an objective investigation. *Inter J Lang Commun Dis*. 2001;36(suppl):200–205.
 15. Pelletier C. What do certified nursing assistants actually know about dysphagia and feeding nursing home residents. *Am J Speech Lang Pathol*. 2004;13:99–113.
 16. Fitzpatrick J. Oral health care needs of dependent older people: responsibilities of nurses and care staff. *J Adv Nurs*. 2000;32(6):1325–1332.
 17. Galvan TJ. Dysphagia: going down and staying down. *Am J Nurs*. 2001;101(1):37–43.
 18. Jones GW. *Dysphagia—Swallowing Disorders: A Manual for Use by Families and Caregivers Under the Direction of a Speech-Language Pathologist*. Austin, Tex: Pro-Ed; 1995.
 19. Logemann JA. *Evaluation and Treatment of Swallowing Disorders*. Austin, Tex: Pro-Ed; 1998.
 20. Posner TE, Eckford C. *Dysphagia Resource Manual: Training for Caregivers of Patients With Swallowing Problems*. Rockville, Md: American Occupational Therapy Association; 1991.
 21. Thresher JC, Kehoe EA. *Working With Swallowing Disorders: A Multidisciplinary Approach*. Tucson, Ariz: Communication Skill Builders; 1992.
 22. Travers PL. Poststroke dysphagia: implications for nurses. *Rehabil Nurs*. 1999;24(2):69–73.
 23. McHale JM, Phipps MA, Horvath K, Schmelz J. Expert nursing knowledge in the care of patients at risk of impaired swallowing. *Image: J Nurs Scholarsh*. 1998;30(2):137–141.
 24. Davis L, Copeland K. Effectiveness of computer-based dysphagia training for direct patient care staff. *Dysphagia*. 2005;20(2):141–148.
 25. Werner H. The benefits of the dysphagia clinical nurse specialist role. *J Neurosci Nurs*. 2005;37(4):212–215.
 26. Langmore SE, Terpenning MS, Schork A, et al. Predictors of aspiration pneumonia: how important is dysphagia? *Dysphagia*. 1998;13(2):69–81.

Appendix

FEEDING, SWALLOWING, AND ORAL CARE QUESTIONNAIRE

Section I (demographics and education)

1. What is your gender?

1. Male

2. Female

2. What is your date of birth? _____

3. How many years have you worked in acute care? _____ years

4. Are you responsible for feeding patients who cannot feed themselves?

1. Yes

2. No

If not, who is responsible? _____

5. Are you responsible for training others to feed those who cannot feed themselves?

1. Yes

2. No

If not, who is responsible? _____

6. On average, how many patients diagnosed with dysphagia (feeding and swallowing disorders) do you serve per month? _____

7. Approximately how many patients do you feed at mealtime? _____

8. How much time does it take you to feed all of your patients combined at mealtime? _____ minutes

9. Are nurses responsible for thickening liquids at your facility?

1. Yes

2. No

If not, who is responsible? _____

10. How are liquids thickened in your facility?

1. Prethickened

2. Powdered thickener

3. Don't know

11. Do you feel frustrated when working with patients who have feeding and/or swallowing disorders?

1. Yes

2. No

12. If so, why?

1. I do not feel knowledgeable in this area.

2. I do not agree with the doctors'/therapists' recommendations.

3. There is too much hassle involved with working with these patients.

4. Other (please specify) _____

13. Where have you received the MOST training about dysphagia?

1. College coursework

2. Professional literature

3. Continuing education/in-services

4. On-the-job training/experience

14. Does your facility provide in-services/education on oral hygiene care for patients?

1. Yes

2. No

15. How often is oral hygiene care provided for patients who cannot care for themselves?
 ___ 1. Three times or more per day
 ___ 2. Twice a day
 ___ 3. Once a day
 ___ 4. Less than once a day
16. How often is oral hygiene care provided for patients with dysphagia?
 ___ 1. Three times or more per day
 ___ 2. Twice a day
 ___ 3. Once a day
 ___ 4. Less than once a day
17. Does your facility employ speech-language pathologists?
 ___ 1. Yes
 ___ 2. No
18. If so, do speech-language pathologists at your facility evaluate and treat patients with feeding and/or swallowing disorders?
 ___ 1. Yes
 ___ 2. No
19. Do speech-language pathologists at your facility provide inservices/education on patients with feeding and/or swallowing disorders?
 ___ 1. Yes
 ___ 2. No
20. If so, how often?
 ___ 1. Monthly
 ___ 2. Bimonthly
 ___ 3. Twice per year
 ___ 4. Once per year
 ___ 5. Less than once per year
21. How often do you participate in inservices/training on patients with feeding and/or swallowing disorders?
 ___ 1. Monthly
 ___ 2. Bimonthly
 ___ 3. Twice per year
 ___ 4. Once per year
 ___ 5. Less than once per year
22. Do you believe you would benefit from more education in this area?
 ___ 1. Yes
 ___ 2. No

Section II (behaviors related to patient feeding, swallowing, and oral hygiene care)

Directions: The following statements describe behaviors commonly associated with working with patients with feeding/swallowing disorders. There are no right or wrong answers. Please indicate how you feel about each statement by circling the number that indicates your feelings about the statements using the coding system below.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

A. Feeding issues

1. I always provide a nondistracting, quiet, comfortable atmosphere during meals for patients who have feeding disorders.	1	2	3	4	5
2. I never position my patients at or near 90 degrees or as otherwise specified by the speech-language pathologist.	1	2	3	4	5
3. I always allow sufficient time for patients with feeding disorders to complete their meals.	1	2	3	4	5
4. I always place food and utensils within my patients' visual fields.	1	2	3	4	5
5. I always make sure my patients are wearing their dentures, glasses, hearing aids, and/or neck supports while eating.	1	2	3	4	5
6. I never read the specific feeding plans of my patients with feeding disorders.	1	2	3	4	5

B. Swallowing issues

1. I never ensure that trays have the food and liquid consistencies that are appropriate for my patients with swallowing disorders.	1	2	3	4	5
2. I always learn the specific swallowing instructions (ie, chin tuck, multiple swallows, alternating consistencies, etc) by reading my patients' swallowing plans.	1	2	3	4	5
3. I always ensure that patients are compliant with their safe swallowing strategies (ie, chin tuck, multiple swallows, alternating consistencies, etc)	1	2	3	4	5
4. I never give small bites to patients with swallowing disorders.	1	2	3	4	5
5. I always administer medication according to my patients' swallowing plans (ie, crushed, with applesauce, liquid, NPO, etc)	1	2	3	4	5
6. I never make sure a suctioning device is readily available when feeding patients with swallowing disorders.	1	2	3	4	5

C. Oral hygiene care

1. I never provide oral hygiene care for my patients with feeding/swallowing disorders after every meal.	1	2	3	4	5
2. I always make sure my patients have the products required for cleaning their mouths.	1	2	3	4	5
3. I always make sure my patients have the products required for preventing/treating dry mouth.	1	2	3	4	5
4. I never check my patients' mouths for residual and pocketed food after meals.	1	2	3	4	5
5. I never monitor my patients who perform oral hygiene care independently.	1	2	3	4	5
6. I always ensure patients who have swallowing disorders do not swallow water when performing oral hygiene care.	1	2	3	4	5
