Dysphagia Evaluation and Management : Clinical Training, Clinical Competency and Speciality Recognition*

Bonnie J.W. Martin**

Programme Director: The Evelyn Trammel Voice and Swallowing Center
Director : Rehabilitation Services Department, Saint Joseph's Hospital of Atlanta
Atlanta, Georgia, United States of America

KEY WORDS : dysphagia, swallowing disorders, speech-language pathologist, training, intervention

An increasing number of speech-language pathologists have become involved in the evaluation and management of patients with swallowing disorders. Approximately sixty percent of practicing speech-language pathologists in health care settings throughout the United States are involved in dysphagia intervention according to the 1993 ASHA Omnibus survey (ASHA ,1995). It has been estimated that nearly 15 million Americans suffer from disorders of deglutition that potentially alter their quality of life, rehabilitation potential and survival (Simmons, 1986). In addition to increased patient demand impacting on the growing number of clinicians involved with dysphagic patients, consumers (e.g., patients, families, physicians, etc.) have also begun to recognize dysphagia management as a clinical science and the value added patient care service.

The majority of dysphagic patients seen in hospitals and skilled nursing facilities have concomitant communication problems that may include disorders of voice, motor speech, language or cognition (Martin & Corlew, 1990). From a continuity of care and cost perspective it follows that the speech pathologists, traditionally trained in the function of the neurologic system and vocal tract, also treat the functionally impaired upper aerodigestive tract comprised of structures common to the communication process (Martin & Corlew, 1990). However, speech-language pathologists have met with several challenges in their attempts toward dysphagia intervention with the often medically complex, multisystem involved patient. These challenges include the following:

1. Inadequate educational and clinical preparation at the undergraduate and graduate level;
2. Lack of methods for completing and measuring clinical competency in the areas of dysphagia management;
3 Special patient populations (i.e., pediatric, ventilator dependent, head and neck surgical, tracheotomized) warrant acquisition of specific skills obtained in facilities not available to many student clinicians;
4 Most employment opportunities in medical settings require dysphagia training and experience.

Because only a handful of accredited university programs in the United States offer courses in swallowing function and disorders, clinicians have sought other training alternatives that include conferences and workshops presented by colleagues who have self-acquired clinical experiential expertise, journals and books, or through observation of practicing dysphagia clinicians in medical settings. However, the body of clinicians maintain the sentiment that these methods fail to sufficiently meet the knowledge base and experience required to clinically or instrumentally manage dysphagic patients.

These challenges have not only surfaced in the clinical area of dysphagia, but have also presented in other areas of clinical science with expanding knowledge bases. The end result has been the development of specialty recognition programs in specific areas of clinical practice by the American Medical Association. In addition, health care professions such as dentistry, pharmacy, physical therapy, occupational therapy, and nursing have also implemented specialty recognition programs that encompass competency training, measurement and methods for recognition. The primary incentive of these programs was not to embellish the concept of specialty practice in an age when general practitioners are becoming the preferred health care model, rather to "... ensure the welfare, safety, comfort, and quality of care of the public consumer" (Report on the ASHA Ad Hoc Committee On Specialty Recognition, 1994). Even though the health care reform activities in the United States (e.g., shift to highly managed medical care) has limited the patient's options in their selection of health care providers, specialty recognition provides a vehicle for all consumers, including the individual patient, payers, and in some cases employers to identify clinical professionals with specialty skills that best meet their health care needs.

The American-Speech-Language-Hearing Association is no exception to the professional organizations that have witnessed an expanding scope of practice among its members because of the evolving body of information that has resulted as an outgrowth of clinical research, experience

* Invited paper
** Dr. Bonnie Martin was an invited guest of SASLHA and presented workshops on dysphagia at various venues during 1995

and technological advancements. The Legislative Council (LC) of ASHA approved a position statement explaining that the scope of practice in the profession has expanded and involves a " ... broad range of services offered within the profession" (LC 6-89). Position statements and clinical guidelines were developed for several areas of practice that were also submitted to and adopted by the LC. The clinical areas encompassed in these documents included assessment and management of oral myofunctional disorders (ASHA, 1991a), learning disability (ASHA, 1991b), language learning disorders (ASHA, 1982a), minority language populations (ASHA, 1983b; 1985), mental retardation (ASHA, 1982b), cognitive communication impairments (ASHA, 1988), balance system assessment (ASHA, 1992a), electrical stimulation for cochlear implant selection and rehabilitation (ASHA, 1992b), cerumen management (ASHA, 1992d) and dysphagia (ASHA, 1992e; ASHA 1991a; ASHA 1991b; ASHA 1982a; ASHA 1982b; ASHA 1983b; ASHA 1988; ASHA 1992a; ASHA 1992b; ASHA 1992d; ASHA 1992e). Continued technical advances obviated the need for additional guidelines in the areas of augmentative and alternative communication (ASHA, 1991c), neurophysiologic intraoperative monitoring (ASHA, 1992f), tracheoesophageal fistulization procedures (ASHA, 1992c), and vocal tract visualization and imaging (ASHA, 1992g; ASHA 1991c; ASHA 1992f; ASHA 1992c; ASHA 1992g). Most of the position statements and guidelines describe the range of proficiencies, knowledge bases and competencies required for provision of services by a clinician in the specific area of clinical practice (Report of the ASHA Ad Hoc Committee On Specialty Recognition, 1994).

Concurrent with the efforts to detail position statements and practice guidelines in specialty areas of the profession, Special Interest Divisions were approved (LC 35-86) in 1987 and implemented in 1991 in an attempt to provide a structure in which ASHA colleagues with similar clinical and research interests could interact and exchange information. The development of the Special Interest Divisions were one part of a two part initiative established by the Ad Hoc Committee on Specialty Recognition Report in 1986 (LC 35-86). In 1992 the Dysphagia Special Interest Division 13 was formed, and grew to be the largest Division in the Association in 1995. The Division has a Steering Committee that meets periodically, and the entire Division is invited to assemble annually at the national convention of ASHA. A quarterly newsletter is also published that informs the Division members of current clinical and research activities in the area of Dysphagia, and offers a forum for professional interchange.

The second part of the Ad Hoc Committee on Specialty Recognition Report (LC35-86) included development of a plan to recognize individuals demonstrating a particular expertise in an area(s) of clinical practice. Several models were developed and considered by the Association. In 1992 at the Association's Convention in San Antonio, Texas, the Ad Hoc Committee on Specialty Certification consulted with the Special Interest Divisions' Board of Coordinators and with selected SIDs at their membership meetings. The issue of specialty certification was addressed and the study of specialty certification was endorsed. In the context of the Dysphagia Special Interest Division 13 membership meeting, participants expressed verbal support of the specialty certification initiatives, but there continued to be concern regarding the limited educational and clinical opportunities available at the graduate level in university speech pathology programs that would assist clinicians in achieving specialty certification in the area of Dysphagia.

In an attempt to address the issue of limited formal training opportunities raised by the SID 13 members, a Task Force of the Division was formed whose charge was to devise a suggested graduate core curriculum for accredited speech-language pathology programs in colleges and universities throughout the United States. The format of the curriculum includes a basic graduate level lecture course with practical lab and observations, as well as suggestions to instructors for reference materials and clinical practicum. In addition, an advanced level course structured and recommended for individuals who desire further training in swallowing and research in Dysphagia was also included. Recommended clinical contact hours for the post-graduate clinical fellowship year were suggested. The recommended core curriculum will be reviewed by the SID 13 membership and forwarded to the Educational Standards Board (ESB) of ASHA. This initiative represents a critical step forward toward the enhancement of the theoretical and working knowledge of entry level dysphagia clinicians.

In addition to graduate core curriculum and CFY contact hours, the Specialty Task Force also recognized the need for speech pathologists to be able to demonstrate basic clinical competencies in the work setting prior to treating the often medically and behaviourally complex dysphagic patient. Dysphagia management often involves relatively invasive methods that have not been traditionally utilized by clinicians in the field of speech-language pathology. Also, treatment recommendations and methods can impact directly on the medical status, nutrition, and safety of the patient. Further, the health care industry, including third party payers, will demand improved functional outcomes that can only be provided by highly competent dysphagia clinicians. Therefore, the Task Force endorses that the specific work setting establish basic clinical competencies for dysphagia clinicians that may be very specific to the environment and needs of a particular patient population. At the Evelyn Trammell Voice and Swallowing Center of Saint Joseph's Hospital of Atlanta, a model clinical competency training program has been devised and implemented that encompasses training modules, direct observations, supervised and independent contact hours and continuing education vehicles in the areas of swallowing assessment and treatment. In addition, if clinicians will practice in highly specialized areas of the hospital, such as critical care units, the clinician must meet clinical competencies that relate to the medically complex and unstable patient (Martin, Martin & Cobb, 1993).

Dysphagic patients, particularly those in the critical care setting often present with multisystem dysfunction that impact upon their communication and swallowing status. The physiologic implications of 'whole body sick' on communication and swallowing functions, however, are often poorly understood and neglected when evaluating and planning dysphagia treatment. Speech pathologists are traditionally trained in the neurologic and respiratory systems as they relate to speech, voice and language. However, knowledge of body multisystem influences on speech and swallowing abilities is often incomplete. Swallowing and swallowing therapy methods have been shown to produce changes in the respiratory system, and these

changes must be recognized and considered in planning safe and appropriate dysphagia treatments (Martin, 1991; Martin, Corlew, Wood, Olson, et al., 1993; Martin, Haynes, McConnel, O'Connor, Haring & Bouis, 1994; Martin, Logemann, Shaker & Dodds, 1993a; Martin, Logemann, Shaker & Dodds, 1993b; Nishino, Yonezawa & Honda, 1985; Selly, Flack, Ellis & Brooks, 1986; Smith, Wolkove, Colacone & Kreisman 1987). Further, dysphagia clinicians often evaluate and treat patients in the critical care units who undergo continuous cardiopulmonary monitoring. One purpose of these visual monitoring devices is to allow attending clinicians to modify their treatment plans based on the physiologic responses of the patient during the treatment sessions. This is troubling because the dysphagia clinician typically has not been trained in the basic interpretation of these physiologic visual signals, and leads to intimidation and incompetency in treating the critical care patient. Also, the functional status of critical care patients and their ability to tolerate swallowing therapy will vary linearly with their medical status. Therefore, the dysphagia clinician should become familiar with the clinical significance of relevant laboratory values, vital signs, pharmacological agents, pulmonary and radiographic tests that are typically reported in the patient's medical record. Competency training by dysphagia clinicians in these specialty skill areas has been incorporated into Saint Joseph's model because of the highly specialized tertiary nature of the facility. The competency training has resulted in elevation of the dysphagia clinicians' clinical insight, skill and confidence when providing care to the medically unstable dysphagic patient. This expertise allows the clinician to begin treatment at an early stage in the patient's recovery, and expedites their return to safe oral intake. Demonstration of competency should not only be expected by health care department directors and supervisors, but will be demanded and respected by physicians, patients, family members and other consumers (Martin, Martin & Cobb, 1993).

The Consumer Affairs Division of ASHA also discovered through consumer advocacy group conferences in 1990 and 1992 that consumer groups "strongly supported specialty designations in the professions as guidance for consumers in selecting providers of services", and appeared to uphold ASHA's ongoing exploration of the need for a specialty recognition program that goes beyond demonstration of basic clinical competencies as described above (Report of the ASHA Ad Hoc Committee On Specialty Recognition, 1994). The 1994 Report of the Ad Hoc Committee On Specialty Recognition contains a practitioner-driven model that has been selected as the proposed method for implementing specialty recognition within the ASHA (Report of the ASHA Ad Hoc Committee On Specialty Recognition, 1994). The model includes four salient features that highlight maximum participation by practitioners in the field for the development and maintenance of the specialty recognition program, and minimal participation by the central structure of ASHA:

1. Consumer need for recognition of a specialty area can be well defined and justified;
2. Practitioners involved in the delivery of services can be responsible for defining the knowledge, skills, and experience requisite to the delivery of services in the specialty area;
3. Provides the highest probability that future changes in the clinical services in a particular area can be accommodated in changes in the competency verification mechanisms applied to the discipline;
4. The model places the burden of responsibility for development and maintenance of the recognition program in the hands of the practicing clinicians (Report of the ASHA Ad Hoc Committee On Specialty Recognition, 1994).

The proposed plan as described by the Ad Hoc Committee on Specialty Recognition maintains a firm commitment to a broad-based practice by the majority of membership, and the concept of nonexclusionary specialty recognition is emphasized throughout the proposal. The plan provides a mechanism by which an individual can be recognized for specialty education experience and expertise, yet assumes that most practitioners will continue to provide broad-based clinical services. The specialty recognition plan is degree independent (Report of the ASHA Ad Hoc Committee On Specialty Recognition, 1994).

Because the responsibility for developing the components of the plan has been left to the members of the organization, an additional Specialty Recognition Task Force was formed by the Dysphagia Special Interest Division 13 in 1995, and a proposed specialty recognition program plan was devised. A draft of the Dysphagia proposal will be presented to interested members of ASHA at the national convention in Orlando, Florida in December, 1995. The proposed program is highly competency based, and incorporates objective methods for competency measurement. In the plan proposed by the Ad Hoc Committee on Specialty Recognition, a formal petitioning group submits the final dysphagia specialty certification plan to a Clinical Specialty Board (CSB), and a Commission on Dysphagia would be formed if the group's application has met the Specialty Recognition Standards. The Specialty Commission on Dysphagia would be responsible for maintaining the professional process for accepting, reviewing, maintaining, and renewing applications for recognition by dysphagia clinicians (Report of the ASHA Ad Hoc Committee On Specialty Recognition, 1994).

While the dysphagia specialty certification program is in its infancy proposal stage, it represents a hallmark initiative toward the insurance of exemplary quality dysphagia care by recognized professionals who could potentially serve as clinical competency instructors to novice clinicians in the field. Improved quality of care, patient outcomes and cost containment result from reductions in variability of practice and increases in standardization of specialty patient care. A comprehensive graduate core curriculum, clinical competency training and specialty recognition are modalities that will ultimately lead to improvement in the standard of care for dysphagic individuals provided by speech-language pathologists. The expanding scope of practice in the field of speech-language pathology is not unique to the United States. Professional associations of clinicians from other countries will likely meet similar challenges with the issues of ensuring appropriate education, clinical competency, quality outcomes and specialty recognition. They will need to face these challenges with opportunity by tailoring methods and vehicles to meet the needs of their swallowing practitioners and health care consumers.

REFERENCES

American Speech-Language-Hearing Association (1982a, November). Language learning disorders. *ASHA*, pp. 937-944.

American Speech-Language-Hearing Association (1982b, August). Serving the communicatively handicapped mentally retarded individual. *ASHA*, pp. 547-553.

American Speech-Language-Hearing Association (1983b, September). Social Dialects (and implications). *ASHA*, pp. 23-27.

American Speech-Language-Hearing Association (1988, March). The role of speech-language pathologists in the identification, diagnosis, and treatment of individuals with cognitive-communicative impairments. *ASHA*, p. 79.

American Speech-Language-Hearing Association (1991a, March). The role of the speech-language pathologist in assessment and management of oral myofunctional disorders, *ASHA (Suppl. 5)*, p. 7.

American Speech-Language-Hearing Association (1991b, March). Learning disabilities: Issues on definition. *ASHA (Suppl. 5)*, pp. 18-20.

American Speech-Language-Hearing Association (1991c, March). Augmentative and alternative communication. *ASHA (Suppl. 5)*, pp. 9-12.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992a, March). Balance system assessment. *ASHA (Suppl. 7)*, pp. 9-12.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992b, March). Electrical stimulation for cochlear implant selection and rehabilitation. *ASHA (Suppl. 7)*, pp. 13-16.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992c, March). Evaluation and treatment for tracheoesophageal fistulization/puncture. *ASHA (Suppl. 7)*, pp. 17-21.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992d, March). External auditory canal examination and cerumen management. *ASHA (Suppl. 7)*, pp. 22-24.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992e, March). Instrumental diagnostic procedures for swallowing. *ASHA (Suppl. 7)*, pp. 25-33.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992f, March). Neurophysiologic intraoperative monitoring. *ASHA (Suppl. 7)*, pp. 34-36.

American Speech-Language-Hearing Association Ad Hoc Committee on Advances in Clinical Practice (1992g, March). Vocal tract visualization and imaging. *ASHA (Suppl. 7)*, pp. 37-40.

ASHA Omnibus Survey, Personal Communication from Herb Bauma, *ASHA*, February 27, 1995.

Martin, B.J.W. (1991). The influence of deglutition on respiration. *Doctoral Dissertation*, Northwestern University.

Martin, B.J.W., & Corlew, M.M. (1990). The incidence of communication disorders in dysphagic patients. *Journal of Speech and Hearing Disorders, 55*, 28-32.

Martin, B.J.W., Corlew, M.M., Wood, H., Olson, D., et al. (1993). The association of swallowing dysfunction and aspiration pneumonia. *Dysphagia*, 9 (1).

Martin, B.J.W., Logemann, J.A., Shaker, R., & Dodds, W.J. (1993a). Normal laryngeal valving maneuvres during three breath hold maneuvres: a pilot investigation. *Dysphagia*, 8, pp. 11-20.

Martin, B.J.W., Haynes, R., McConnel, F.M.S., O'Connor, A., Haring, K., Bouis, H. (1994). Breathing and Swallowing Interrelationships. Dysphagia Research Society Meeting, McLean, Virginia, October 14, 1994.

Martin, B.J.W., Logemann, J.A., Shaker, R., & Dodds, W.J. (1993b). The coordination between respiration and swallow: respiratory phase relationships and temporal integration. *Journal of Applied Physiology*, 76 (2), pp. 714-123.

Martin, B.J.W., Martin, E., Cobb, R. (1993). Critical Care Competencies for Dysphagia Clinicians. Short Course presented at the annual meeting of the American Speech-Language-Hearing Association, Anaheim, California.

Nishino, R., Yonezawa, R., & Honda, Y. (1985). Effects of swallowing on the pattern of continuous respiration in human adults. *American Review of Respiratory Disease*, 132, pp. 1219-1222.

Report of the ASHA Ad Hoc Committee On Specialty Recognition, August, 1994.

Selly, W., Flack, F., Ellis, R. & Brooks, W. (1986). Respiratory patterns associated with swallowing: Part I. The normal adult pattern and changes with age. *Age and Ageing*, 18, pp. 168-172.

Simmons, K. (1986). Dysphagia management means diagnosis, exercise, re-education. *Journal of the American Medical Association, 255*, 3209-3210, 3212.

Smith, J., Wolkove, N., Colacone, A., & Kreisman (1987). Coordination of Eating, Drinking and Breathing in Adults, *Chest, 96*, pp. 578-582.