

Dysphagia in the Schools
 **The Role
of the
Speech Language Pathologist**

Nancy L. Sinden, M.S., CCC-SLP

Feeding Team Conference

December 1, 2009

sindenn@ohsu.edu



Education and Feeding

- “Nothing would be more tiresome than eating and drinking if God had not made them a pleasure as well as a necessity.”

Voltaire

- “Education is the greatest need of the people, but first they must be fed.”

Dantons memorial in the Place de l’Odeon, Paris

- “All children need adequate nutrition provided in non-stressed ways so they can maximize their learning potential”

Arvedson and Brodsky (2002)



Education and Feeding

- “No single activity as critical to the health, education, and happiness of children with disabilities as feeding”

Dianne Koontz Lowman, Ed.D. (1999)

- Nourishment means more than feeding the body, it means feeding the heart, the mind, and the spirit as well!

Suzanne Evans Morris (1981)

Goals

- Historical Perspective
- Educational Relevance
- Prevalence of Feeding Disorders in the Schools
- Understanding the Legal System
- Education Relevance
- Best Practice Recommendations
- Team Procedures
- Team Work and Collaboration
- Liability
- SLP Scope of Practice and Role of SLP
- Ethics
- Training and Competencies

Historical Perspective

➤ Just 30 years ago

- There was no medical interest in swallowing
 - The swallow began at the PE segment
- No swallowing therapy
 - No research base for therapy
- No collegial discussion or meetings
 - No one to talk to
 - No one to listen



Historical Perspective

- **Morris, S. E. (1982). *The normal acquisition of oral feeding skills: Implications for assessment and treatment.* Therapeutic Media.**
- **Logemann, J. (1983). *Evaluation and Treatment of Swallowing Disorders.* College-Hill Press, Inc**
- **Morris, S. E. and Klien, M. D. (1987). *Pre-Feeding Skills: A comprehensive resource for feeding development.* Therapy Skill Builders: A Division of Communication Skill Builders, Tucson, Arizona.**
- **Wolf, Lynn S. and Glass, Robin, P. (1992). *Feeding and Swallowing Disorders in Infancy.* Therapy Skill Builders: A Division of Communication Skill Builders. Tucson, Arizona, 1992.**
- **Rosenthal, S. R., Sheppard, J. J., and Lotze, M. (1995). *Dysphagia and the Child with Developmental Disabilities: Medical, Clinical and Family Interventions.* Singular Publishing Group, Inc.**
- **Lowman, D.K. and Murphy, Murphy S. M. (1999). *The Educator's Guide to Feeding Children with Disabilities.* Paul H. Brookes Publishing Co.: Baltimore MD.**

Historical Perspective

- 1987: Role of Speech Language Pathologist in Feeding and Swallowing Disorders: ASHA
- 1990's: Publications
 - Knowledge and Skills Needed by SLPs Providing Services to Dysphagic Patients/Clients (ASHA, 1990)
 - Instrumental Diagnostic Procedures for Swallowing (ASHA, 1992)
 - Graduate Curriculum on Swallowing and Swallowing Disorders (ASHA, Special Interest Division 13, 1997)
 - Guidelines for Roles and Responsibilities for the School Based SLP (ASHA, 1999)
- 2000: First clinical forum on dysphagia in the schools was established
- 2007: Guidelines for SLPs Providing Feeding and Swallowing Services in the Schools (ASHA)

Dysphagia Management in the Schools

➤ Barriers

- Liability
- Lack of experience or expertise in dysphagia
- **Restrictions of a school setting versus a medical setting**
- Difficulty establishing “**educational relevance**” to administrators and colleagues

➤ Priorities

- University level courses/training of dysphagia
- Guidelines and position statements
- Development of basic competencies for SLPs providing dysphagia services

ASHA 2005 Health Care Survey

Education and Feeding

- Teachers emphasized feeding to promote physiological readiness to learn
 - Inadequate nourishment leads to lethargy, decreased energy or stamina, and poor attention span
 - Nutritional deficiencies increase risk for sores, injury, poor oral hygiene, poor skeletal musculature, and gastrointestinal discomfort (constipation, diarrhea, vomiting)
 - Dehydration can cause drowsiness, loss of appetite, flushed skin, sunken eyes, and constipation

Ault, Guy, Rues, Noto, and Guess, 1994

Education and Feeding

- Teachers use mealtimes to practice educational goals such as independence/self-feeding, choice making, communication and interaction, and fine-motor skills
- Teachers assess, manage, and monitor a child's mealtime characteristics on a daily basis

Ault, Guy, Rues, Noto, and Guess, 1994

Prevalence of Feeding Difficulties in the Schools

- The needs of the school population have become more diverse, needy, and exceptional than at any other point in history (Ryan, 2006)
- Ever increasing trend for inclusion of the medically complex child with dysphagia into the schools/classroom: “least restrictive environment”
 - Changing health care coverage for inpatient medical care
 - Medical advances in life saving interventions and technologies: Extreme premies, cardio respiratory conditions, and neurological insults
 - Increasing number of children with autism spectrum disorders and their unique feeding needs
 - Compliance with federal mandates: FAPE, IDEA

Prevalence of Feeding Difficulties in the Schools

- Pediatric dysphagia in the general population: 25%
- Dysphagia in developmental disabilities: 80%
- Dysphagia is a low incidence disorder in the public schools but rising: Low incidence=High risk
 - ASHA 2004: 13.8% treated dysphagia
 - ASHA Health Care Survey 2006: 35% treated dysphagia
- Variation in manifestation of swallowing deficits and more generic feeding difficulties
 - Behavior based feeding problems
 - “Picky” eaters with adequate skills
 - Delayed oral skills without swallowing deficits
 - Dysphagia without oral motor feeding difficulties or developmental deficits

Prevalence of Feeding Difficulties in the Schools

Blackman, J.A. (1990)

➤ Children in Schools

- 25% of children with disabilities had an inadequate diet
- 90% had some type of nutritional problem
- 15-25% had a W:L ratio below the 5th%ile
- 70% with DD had a feeding problem

Understanding the Legal System

- Federal special education statutes and regulations
 - Education of All Handicap Children Act (1975) established the rights of individuals with disabilities a free and appropriate education: FAPE
 - IDEA (1999, 2004) is a funding law providing the right to special education and the **procedural protections** to ensure these rights. States must comply to receive funds.

Understanding the Legal System

- **State special education statutes and regulations**
 - State education agencies have the authority to develop state regulation and policies
 - Few states have dysphagia guidance documents
 - Some of those that do, do not include dysphagia unless it interferes with communication or has an adverse affect on the student's education

Federal Law

- The federal special education law was enacted to “provide a FAPE” in conformance with the student’s IEP
- A federal circuit court case in 1986 (Mark A. v. Grant Wood Area Education Agency 795F 2d 52 [8th circuit 1986] established that FAPE does not require best or optimal services but appropriate services
- Special education focuses on instruction: “specially designed instruction”
- Recent reauthorizations have “raised the academic expectations”

Academic v. Related Services

- The focus on academics made it unlikely that children requiring dysphagia services would receive those services
- However, those who receive Special Education services are eligible to receive related services and supplemental aids and services
- Related services include “transportation, and such developmental, corrective, and other supportive services...as may be required to assist a child with disability to benefit from education”
- Related services include ST, OT, PT, school health services, and medical services
- **“Dysphagia is a related service needed for the child to benefit from specifically designed instruction”**

Power-deFur, L. and Alley, S.N., 2008

“Supplementary aids and services”

- IDEA: “aids, services, and other supports that are provided in regular education classes or other educational-related settings to enable children with disabilities to be educated with non-disabled children to the maximum extent possible” (34 CFR §300.42)
- These include services that the dysphagia impaired child may need as long as the child is found eligible to receive special education services

IDEA: Other Health Impaired

- “having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the education environment, that (i) is due to chronic or acute health problems; and (ii) adversely affects a child’s educational performance. (IDEA, 34 §300.8 © (9))

Other Health Impaired


- Dysphagia is a symptom of an underlying disease process
- Children with dysphagia typically have multiple disabilities, specialized health needs, and medically fragile conditions
- Dysphagia is not a disability category under IDEA but should be considered “other health impaired” as it may cause limitations in strength, vitality and alertness preventing the child from active participation in learning or attending school. (O’Toole, 2000)

Section 504 Rehabilitation Act of 1973

- A **civil rights law** that further protects children with dysphagia and other specialized health needs
- “No qualified individual shall, solely by reasons of his or her disability, be excluded from participation in, be denied benefits of, or be subject to **discrimination** under any program receiving federal financial assistance. (US DOE, 2005)
- Section 504 defines a “person with a disability” as any person who has a physical or mental impairment which substantially limits one or more of life’s major activities”
- Section 504 does not include funding for programs
- Eligibility for children with feeding and swallowing disorders likely to be found eligible under IDEA



American with Disabilities Act

- Federal law that protects the rights of persons with disabilities (U.S. DOE, 1990)
 - National mandate to address discrimination in all sectors, including education
- 

Implications of Case Law

Interpret or clarify statutes and regulations

- Irving Independent School District v. Tatro, 468 U.S. 883 (1984): U.S. Supreme Court questioned whether health care services (CIC for spina bifida) are excluded from medical services or supportive services under IDEA
- Determined that the medical intervention required was not diagnostic or evaluative but a “school health service” provided by a qualified school nurse or other qualified person
- The *Tatro* decision clarifies that children with health care needs (dysphagia) may receive health services as a related service to meet their day-to-day service needs

Implications of Case Law

Interpret or clarify statutes and regulations

- Cedar Rapids Community School District v. Garret F., U. S. 66 (1999). Supreme court case that affirmed the Tatro decision declining a lower court decision saying that “supportive services” are those services that do not need to be performed by a licensed physician and are **necessary for the student to attend school**
- This decision changed the way schools addressed critical non-educational services that keep the child in school

Medical v. School Health Services

- Medical services are those provided by a “licensed physician to determine a child’s medically related disability that results in the child’s need for special education services” Diagnosis and evaluation only!
- School health services and school nurse services are health services that are designed to enable a child with disability to receive FAPE as described in the child’s IEP

Cedar Rapids Community School District v. Garret F., (1999).
Irving Independent School District v. Tatro (1984)

Implications of Case Law

Interpret or clarify statutes and regulations

- New Mexico State-level case in 2003: Parents alleged that the school district failed to perform its obligations under the mediated agreement (i.e. provision of a health plan)
- Hearing officer determined that in order for the child to remain in school the student needed access to a feeding protocol developed at the medical facility (mechanical soft diet, thickened liquids, positioning modifications, and monitoring of s/s of reflux) and that the absence of this plan denied the child FAPE
- Required modification of health plan to ensure proper administration and provide “adequate staff training”

Implications of Case Law

Interpret or clarify statutes and regulations

- New Hampshire 2004 State level case concluded that the district denied the provision of FAPE to a student with multiple disabilities who also had swallowing problems (i.e. silent aspiration) by ignoring the child's safety in it's failure to address the diet and feeding recommendations found in the medical records leading to multiple hospitalizations for aspiration pneumonia
- It was determined that the child was in danger of silent aspiration and her feeding needs were beyond what could be offered in the school's education classroom



Implications of Case Law

Interpret or clarify statutes and regulations

- These cases suggest that a child's feeding and swallowing needs is a health issue that if not addressed can prevent a child from attending school, denying the child FAPE
- A school district's culpability increases if it does not provide for the child's feeding and swallowing safety while at school

Power-deFur, L. and Alley, S.N., 2008



Educational Relevance

School Systems Responsibility Because:

- Students must be **safe** while eating in school. This involves providing appropriate personnel, food, and procedures to **minimize risks** for choking (airway obstruction) and aspiration (entry of food or liquids in the airway below the true vocal folds) during oral feeding.
- Students must be adequately **nourished and hydrated** so that they can attend to and fully **access the school curriculum**.
- Students must be **healthy** (e.g., free from aspiration pneumonia or other illnesses related to malnutrition or dehydration) in order to maximize their **attendance** at school.
- Students must develop **skills for eating** efficiently during meals and snack times so that they can complete these activities with their peers safely and in a timely manner.

(ASHA; 2007, pp. 1-2)

Best Practice Recommendations for School Districts

Based on legal and legislative foundations

- Determine if the **state's education agency has regulations**, policies or guidance documents relating to dysphagia and secure copies
- Create a **team** of professionals to address the needs of children with dysphagia and feeding issues
- Ensure the professionals and paraprofessionals are appropriately **trained** in dysphagia management
- Secure the assistance of a professional with **expertise** in dysphagia, if there is no such expertise within the district
- Obtain results of recent **swallowing assessment (swallow study)**. If there is not one, recommend that one be completed by a qualified pediatric SLP
- Develop an **individual health care plan** as a team and specify the roles and responsibilities of all school personnel who interact with the child during meals and snacks

Power-deFur, L. and Alley, S.N., 2008

Best Practice Recommendations

- Maintain close **communication with the parents** regarding the child's swallowing and feeding issues
- Monitor children's **health and absenteeism** to determine whether there is any relationship between the child's feeding and swallowing issues and absenteeism
- Follow **physician orders** related to nutrition
- If feeding issues are behavioral in nature, ensure the child receives a **behavioral assessment** and the school team develops a behavioral intervention plan
- Maintain detailed **documentation** of communication with physicians and parents; and of interventions and recommendations

Best Practice

- Dysphagia is a health issue and should be **addressed immediately** and should not wait for determination of SPED eligibility
- The development of an individualized **School Health Care Plan** should be a standard practice and include:
 - Medical history
 - Current medical status
 - Health care needs
 - Medications
 - Feeding and nutritional needs
 - Transportation
 - Restroom management
 - Other necessary specific procedures
 - Roles and responsibility of Feeding Team members in providing special procedures

Best Practice

- The school district should make sure the **IEP/Health Care Plan is adhered to** for all children.
- The **IEP should incorporate the Health Care Plan.**
- **Swallowing and feeding goals** may also be included in the IEP: addressing social and cultural aspects of feeding, eliminating maladaptive eating behaviors
- Districts should **document training** for all personnel who will be feeding the child including substitute teachers and paraprofessionals. The SLP is instrumental in planning and providing training that is individualized to the child with dysphagia.
- **Daily documentation** of feeding activities

Best Practice

- Districts should have written procedures and policies for managing **first aid emergencies**. The SLP should work with school personnel in reviewing these protocols to ensure actions in the event of aspiration
- Maintain **communication with outside medical providers**. The SLP should communicate regarding swallow study results. A physician's order may be required with the school nurse ensuring that they are carried out. District personnel should be careful to follow all recommendations for diet or feeding provided by outside medical providers.

Best Practice

- The dysphagia team and the **district's legal counsel should discuss liability** issues associated with providing dysphagia services
- SLPs serving children with dysphagia should pursue regular **professional development** in this area. Adherence to standards of professional practice is important for reasonable standard of care

An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington, Louisiana, 1996

- **System supported written procedure**
 - Identifying and treating children with dysphagia
 - Delineating roles and responsibilities of school personnel
 - A part of the district's policies and procedures

“Information and suggestions for the logistical management of swallowing and feeding disorders in the schools for school based SLPs”

Homer, 2009

An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington, Louisiana, 1996

➤ Dysphagia Team procedure

- Referral process
- Parent contact
- Clinical evaluation of eating and drinking
- IEP meeting: document medical history, describe feeding and swallowing issues and feeding plan, develop an emergency plan, and make referrals (VFSS)
- Individualized Health Plan: description of emergency plan and staff training
- Staff training on implementing the feeding plan
- Oropharyngeal swallow study referral (MBSS, VFSS)
- Guidelines for monitoring and treating dysphagia

An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington Louisiana, 1996

➤ Parent/Caregiver Cooperation

- They need to feel part of the team
- At the initial visit, provide district policies and procedures for managing safe and efficient eating at school: Brochure or information booklet
- Involve the parents in through participation of a mealtime either at home or at school
- Encourage parents to communicate about family cultures, belief systems, routines, and expectations around mealtimes
- Request communication with the child's medical feeding team with signing of a medical release of information form
- Understand that parents can be very emotional about how their child is fed.
- Avoid alarming parents. Be sensitive to feelings, fears and experiences

An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington Louisiana, 1996

- **Documentation and Paperwork:** Evidence that procedures are followed correctly
 - Referral
 - Swallowing and Feeding Plan
 - Individualized Health Plan
 - Parental Input
 - IEP
 - Training of staff members feeding the child
 - Daily feeding activities
 - Written procedures and policies for managing first aid
 - Documentation that the IEP is adhered to and that the Health Plan is included in the IEP
 - Log activities of feeding team

An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington Louisiana, 1996

➤ Establish School Based Teams

- Team members share a basic foundation of knowledge and philosophy
- Willing to work with others
- Bring their own expertise
- Collaborate with caregivers and health professionals to determine needs and maximize participation in the educational process
- Do not have the benefit from access to immediate medical care to determine whether to treat or not to treat a potential unsafe eater
- Attend swallow studies and feeding clinic appointments
- Monitor high risk children over time

An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington Louisiana, 1996

➤ Collaborate with Medical Based Teams

- Team members share a basic foundation of knowledge and philosophy
- Willing to work with others
- Bring their own expertise
- Collaborate with caregivers, educators, and health professionals
- Rely on colleagues in the schools to monitor progress and report concerns or changes
- May be the only place you can access a pediatric dietician

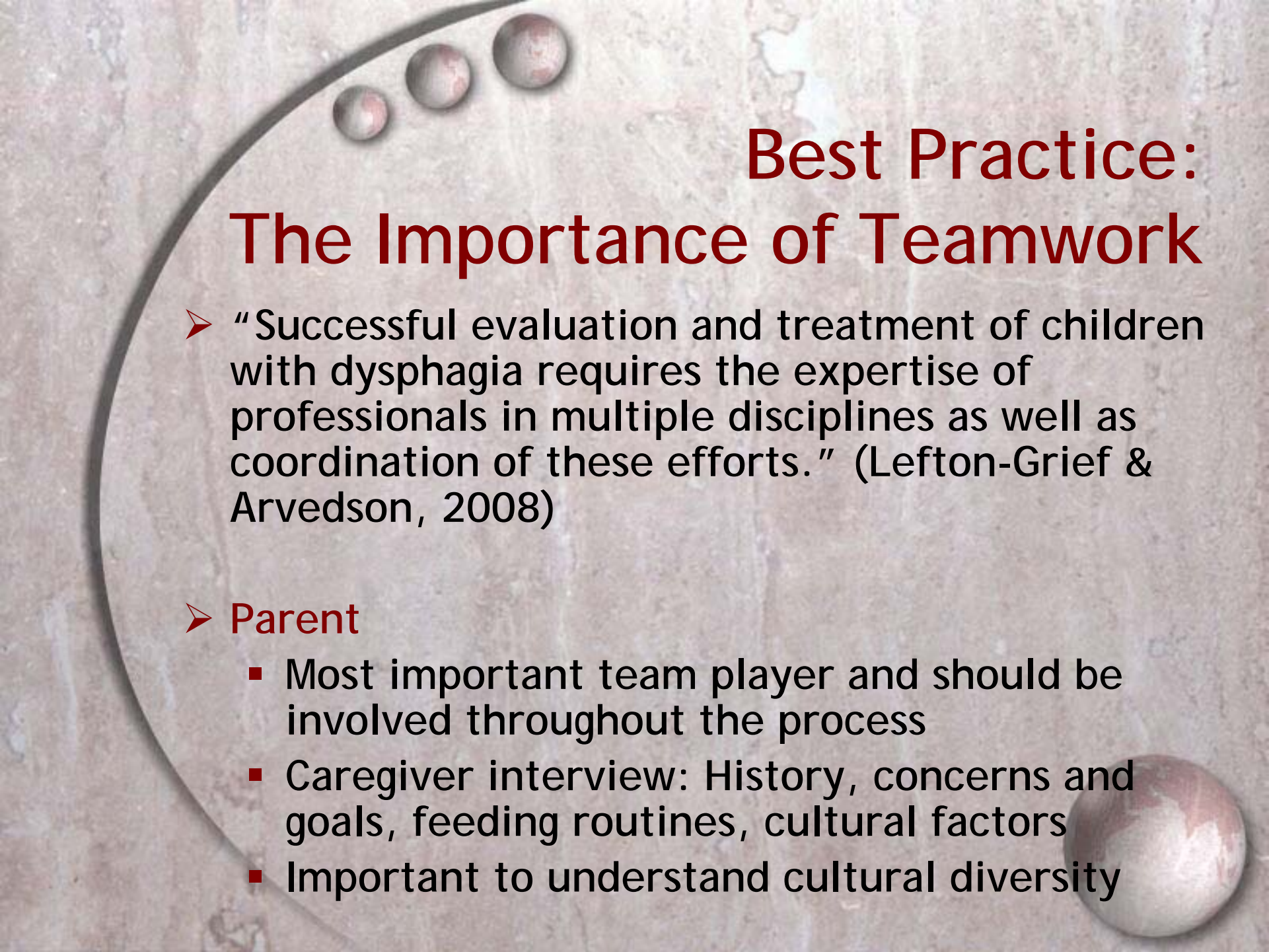


An Interdisciplinary Procedure

St. Tammany Parish School District,
Covington Louisiana, 1996

- **Designate a Dysphagia Case Manager**
 - Ensure that the procedure is followed
 - Ensure that all efforts are documented
 - Notify team members when changes occur
 - Coordinate the child's dysphagia services

- **Develop a Safe Feeding Protocol**
 - Positioning
 - Diet, food preparation, and texture modifications:
Work closely with cafeteria manager
 - Precautions



Best Practice: The Importance of Teamwork

- “Successful evaluation and treatment of children with dysphagia requires the expertise of professionals in multiple disciplines as well as coordination of these efforts.” (Lefton-Grief & Arvedson, 2008)
- **Parent**
 - Most important team player and should be involved throughout the process
 - Caregiver interview: History, concerns and goals, feeding routines, cultural factors
 - Important to understand cultural diversity


Best Practice: The Importance of Teamwork

➤ Classroom teacher

- Spends the most time with the student during the school day
- Carries out the feeding plan, monitors nutritional intake, and follows the emergency plan

➤ Principal

- Ultimately responsible for what happens in the school building
- Acts as mediator to support professionals



Best Practice: The Importance of Teamwork

➤ School Nurse

- Manages the health plan
- Communicates with medical community
- Trains and monitors health issues, medications, and procedures

➤ Speech-Language Pathologist

- Invaluable in their knowledge of the anatomy and physiology of speech and the phases of the swallow across the ages
- Dysphagia specialist

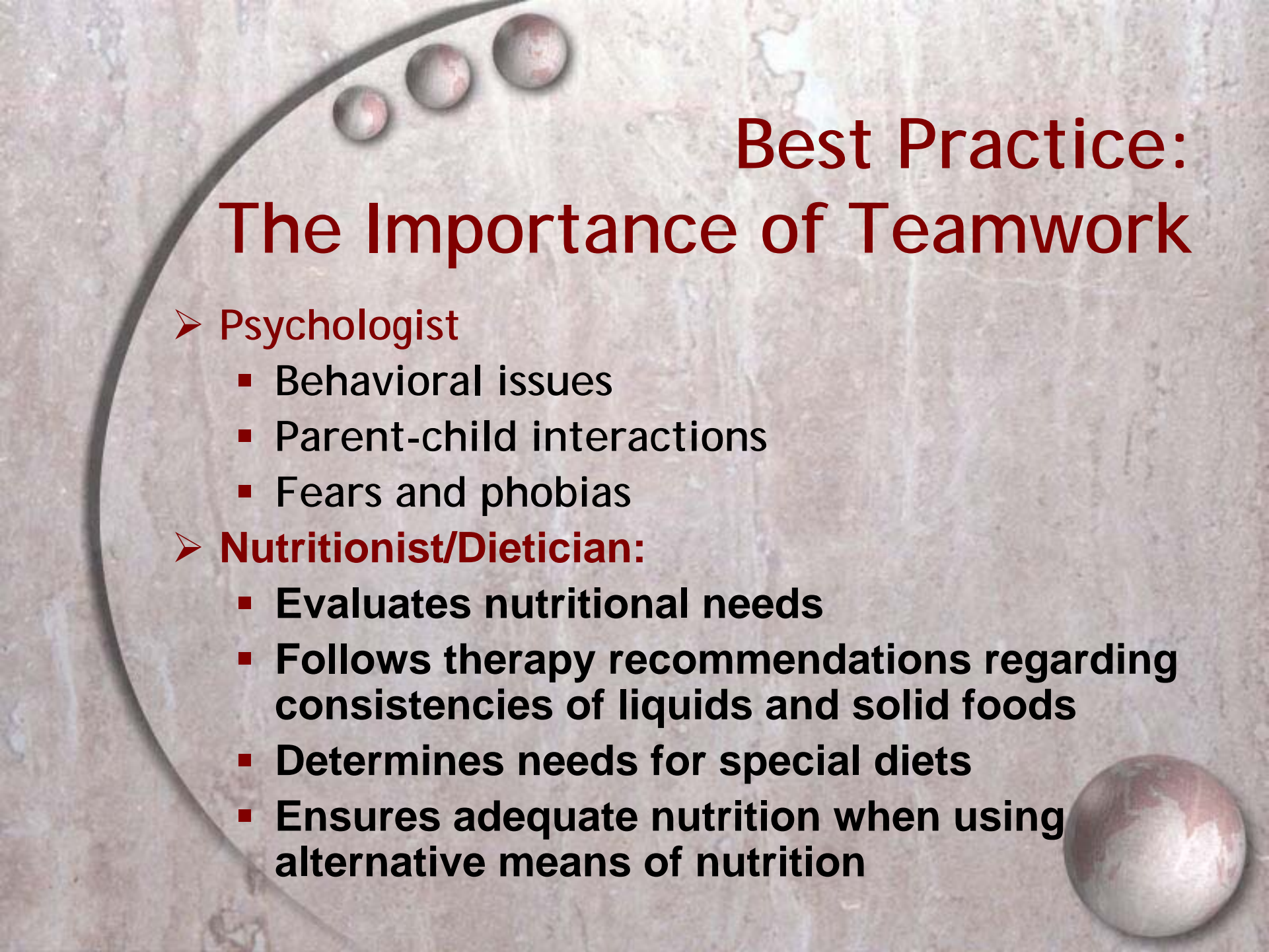
Best Practice: The Importance of Teamwork

➤ Occupational Therapists

- Invaluable in their knowledge about sensorimotor functioning, fine-motor skills, self-feeding and adaptive feeding equipment
- Evaluates and treats sensory and motor impairments and assesses prosthetic needs related to self-feeding and swallowing

➤ Physical Therapists

- Invaluable in their knowledge of motor development, stability and mobility as it impacts oral feeding, positioning for feeding, and adaptive equipment



Best Practice: The Importance of Teamwork

➤ **Psychologist**

- Behavioral issues
- Parent-child interactions
- Fears and phobias

➤ **Nutritionist/Dietician:**

- **Evaluates nutritional needs**
- **Follows therapy recommendations regarding consistencies of liquids and solid foods**
- **Determines needs for special diets**
- **Ensures adequate nutrition when using alternative means of nutrition**

Best Practice: The Importance of Teamwork

- Cafeteria Supervisor
 - Adjusts menus to fit dietary needs and consistency modifications
- Case Manager?????
- Medical Team is a part of your School team!!!!!!

- Billing Codes:
 - OT: 97004 (Tx) and 97003(Dx) ? Group
 - Speech: 92610 (Dx); 92611 (MBSS); 92526 (TX)

Dysphagia Management in the Schools

➤ Barriers

- **Liability**
- Lack of experience or expertise in dysphagia
- Restrictions of a school setting versus a medical setting
- Difficulty establishing “educational relevance” to administrators and colleagues

➤ Priorities

- University level courses/training of dysphagia
- **Guidelines and position statements**
- Development of basic competencies for SLPs providing dysphagia services

Liability

- A school system needs to protect itself and its employees
- An individual unintentionally putting a child at risk could become liable if the child should become ill
- An individual may recover from the legal process but not from the emotional trauma

Liability

- Failure to follow procedure and/or to document efforts are the most common actions that result in a school system being liable for damages
- The best defense against liability
 - Procedure in place
 - Follow that procedure
 - Emergency plan in place
- Document, Document, Document
 - Complete all paperwork completely
 - Keep log of all pertinent conversations: Contact log
 - Keep copies
 - Protect yourself and the school system by documenting all interactions and actions
- Greatest liability ensues when there is a high risk procedure done infrequently

Minimizing Liability

➤ Key components

- Legislated scope of practice within school licensure practice
- Published guidelines and practice protocols
- Documented yearly competencies
- Established monitoring of knowledge and skill levels

Virginia Department of Education. (2005). *Speech Pathology in the Schools: Guidelines for best practice.*
Available from www.doe.virginia.gov

5 keys points in avoiding disputes

1. Teams should initiate a push to form a committee to develop **district-supported policies and procedures** related to management of students with dysphagia.
2. All school staff involved with feeding or supervision of self-feeding of students with dysphagia must be **adequately trained on safe feeding strategies**.
3. **Carefully consider all available health, behavior, and academic information** provided by parents, school personnel, and external resources.
4. Include feeding/swallowing information and special dietary modifications on a **student health plan** and/or specialized feeding plan.
5. **Share** all relevant and evaluative information with parents/guardians.

➤ **Consistency, Collaboration, and Communication**

Bailey and Lugg, 2008



The Role of the Speech Language Pathologist on the Feeding Team

ASHA Scope of Practice

- “providing prevention, screening, consultation, assessment and diagnosis, treatment, intervention, management, counseling for disorders ofswallowing or other aerodigestive functions such as infant feeding and aeromechanical events”

Ethical Issues for the SLP

➤ ASHA Code of Ethics

- The SLP can only practice in areas in which they are competent: trained and educated to do so (ASHA, 1994)
- The SLP must take “reasonable” precautions to avoid harm to recipients of their services
- The SLP has a duty to prevent adverse events during meals served in the school environment as well as before and after school
- The SLP is in violation of their code of ethics if they do not provide dysphagia services or engage in professional development to improve skills
- The SLP is in violation of their code of ethics if they train/teach other professionals to do what is in the SLP scope of practice (evaluation, supervision, and implementation of a treatment plan)




SLP as a Preferred Provider

- **Prepared by The Professional Advocacy Committee, Special Interest Division 13 Swallowing and Swallowing Disorders (Dysphagia) American Speech-Language Hearing Association**



SLP as a Preferred Provider

- Overall knowledge and skills acquired through their professional training provides exemplary and essential foundation for successful evaluation and treatment
 - SLPs are educated in dysphagia and receive supervised clinical experience in dysphagia
 - Anatomy and physiology of oral, pharyngeal, and laryngeal function and aerodigestive tract
 - Development of respiratory control, oral, pharyngeal and laryngeal skills in infants and children
 - Swallowing and swallowing disorders across the life span
- 



SLP as a Preferred Provider

- SLPs in collaboration with others are responsible for much of the **research** on normal oropharyngeal swallowing function and dysphagia treatment efficacy and effectiveness conducting programmatic, peer-reviewed grant funded research in all settings
- The **major texts** on oropharyngeal swallowing and swallowing disorders have been written by SLPs
- SLPs have developed and disseminated **best practice and instrumental procedures** for evaluating oropharyngeal and feeding disorders



SLP as a Preferred Provider

- Extensive **experience** in providing dysphagia services
- SLPs already provide services to children with **severe disabilities**
- SLPs provide dysphagia services in **all other employment settings**
- SLPs have the opportunity to **serve as a bridge** between educational, medical and community programs
- ASHA has included swallowing disorders in their **treatment outcome studies** in children and adults (NOMS)



SLP as a Preferred Provider

- ASHA 2005 Health Care Survey:
 - 45% of SLP time spent with adults
 - 16% time spent with children with swallowing and feeding disorders
 - 35% of SLPs in the schools have students with dysphagia on their caseloads
 - 47% of SLPs have <1% of caseload consist of students with dysphagia during the past 3 years
 - 43% report being primary case manager of students with dysphagia

SLP as a Preferred Provider

➤ ASHA Supported

- Preferred Practice Patterns
 - Position Statement: Roles of Speech-Language Pathologist in Swallowing and Feeding Disorders
<http://www.asha.org/docs/html/PS2002-00109>
 - Technical Report: Roles of Speech-language Pathologists in Swallowing and Feeding Disorders:
<http://www.asha.org/docs/html/TR2001-00150>
 - Knowledge and skills Needed by Speech-Language Pathologists Providing Services to Individuals with Swallowing and/or Feeding Disorders
- Special interest division 13: Swallowing disorders
- Continuing education self-study programs and conferences
- Certificate of Clinical Competence requirements include knowledge and skills in swallowing and swallowing disorders
- Specialty recognition in swallowing and swallowing disorders: BRS-S

Dysphagia Management in the Schools

➤ Barriers

- Liability
- Lack of experience or expertise in dysphagia
- Restrictions of a school setting versus a medical setting
- Difficulty establishing “educational relevance” to administrators and colleagues

➤ Priorities

- University level courses/training of dysphagia
- Guidelines and position statements
- Development of basic competencies for SLPs providing dysphagia services

ASHA 2005 Health Care Survey

Training and Competencies

- ASHA code of ethics: “Individuals shall engage in only those aspects of the profession that are within their competence, considering their level of education, training, and experience.”
- ASHA guidelines suggest competencies beyond possession of the CCC-SLP
- BRS-S signifies extensive knowledge
- “Not everyone can be an expert” and “Not everyone wants to be”

Training and Competencies

- Survey: SLPs (#222) of Virginia, Maryland, North Carolina, Tennessee, and West Virginia were surveyed regarding formal dysphagia education, on-the-job experience, current caseload information, and self-rated confidence level to treat dysphagia
 - Disparity between training and self-confidence to treat dysphagia in the schools
 - Many SLPs reported a low self-confidence suggesting that they are not prepared
 - Those with recent CEU's felt less confident than those with no CEU's: Received enough knowledge to understand their limitations
 - Most concerning were those with little to no previous training who felt confident: Did not recognize their limitations or consequences

Top 10 Services of SLP in Dysphagia Management

- Evaluate and treat (42%)
- Provide inservice training
- Obtain medical information
- Identify and refer to medical team
- Collaborate with other professionals in dysphagia management
- Independent management of dysphagia interventions
- Coordination with medical and school teams to evaluate and establish an intervention plan
- Obtain medical clearance for dysphagia intervention
- Establish accommodations and precautions
- Implement established district wide program and procedures

DeAnne Wellman Owre, Perspectives, October 2006

Roles

- Define normal and abnormal **anatomy and physiology**
- Identify **signs and symptoms** of swallowing disorders
- Perform clinical feeding and swallowing **evaluations**
- Determine indications for, and procedures involved with, **instrumental techniques** used to assist in diagnosis and management
- Analyze and integrate clinical and instrumental information into a formal **diagnosis** of swallowing and feeding disorders with appropriate written documentation

ASHA Position Statement

Roles

- Identify additional **disorders of the upper aerodigestive tract** with appropriate referrals
- Make appropriate **referrals** to medical personnel
- Make decisions regarding basic **management** issues, including how to determine candidacy for intervention
- Develop **treatment plans** including implementation of compensations and habilitative/rehabilitative therapy techniques
- **Provide treatment**, document progress, and determine dismissal criteria

ASHA Position Statement

Roles

- **Teach and counsel** individuals with swallowing and/or feeding problems and their parents, care providers, or other supporting persons
- **Educate** other professionals regarding needs of the individual with dysphagia and SLP's role
- Ability to identify and use appropriate **functional outcome measures**
- Understand **medical issues and etiologies** related to swallowing and feeding disorders
- Serve as an integral part of a **feeding team**
- **Advocate** for services for the individual with dysphagia
- Advance knowledge through **research**

Not everyone can be an expert

Tiered competency or skill level

- **Exposed:** Most school based SLPs
 - Screen and recognize red flags
 - Make referrals to school base or medical teams

- **Competent:** Pool of individual SLPs
 - Those within the school district who can consult, evaluate, and train others in treatment
 - Provide mentored learning opportunities
 - Liaison with medical community
 - May have previous swallow experience at the medical level

Not everyone can be an expert

Tiered competency or skill level

➤ Proficient

- Possible but more probable this person resides in the medical setting
- To maintain proficiency, routine intervention with dysphagia is required
- Adjunct to school team providing instrumental assessment, educational resource, and consultant services

SLP Dysphagia Service Models

➤ Individual School Based Team

- Large system with many SLPs trained in dysphagia
- SLP is the case manager within her school campus
- Team includes staff assigned to the same school
- Facilitates monitoring of student and interaction with other team members
- SLP is on campus should an emergency occur

SLP Dysphagia Service Models

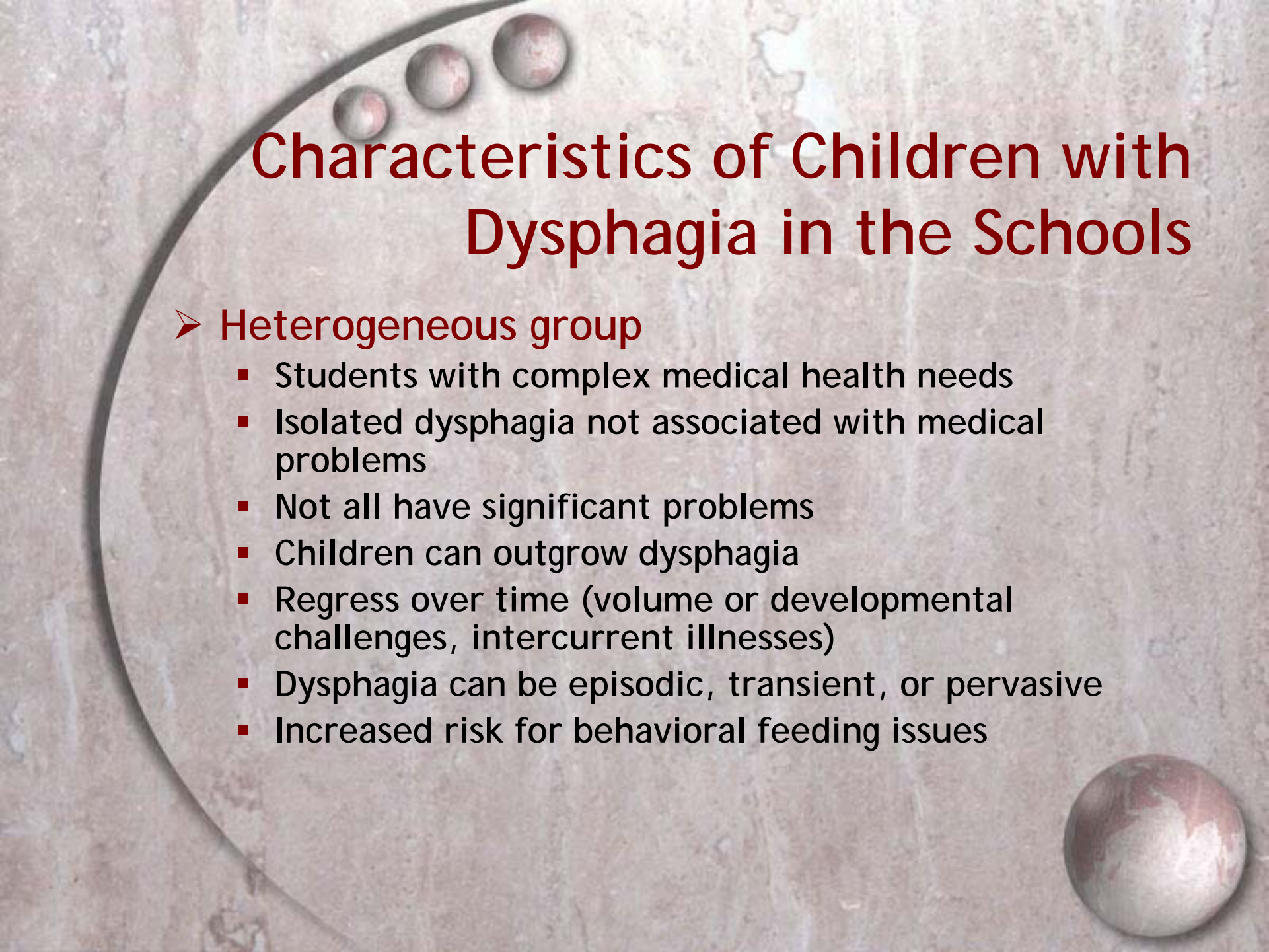
➤ District "Core" Team

- Small systems with few SLPs trained in feeding/dysphagia
- Specialized traveling mini-team (SLP, OT, Nurse)
- Team visits each school on a regular basis
- Teacher or other school staff alert team of changes or concerns
- All other team members are school based (teacher, family, administrator)
- The trained SLP trains the school based SLP

SLP Dysphagia Service Models

➤ Combination Team

- Disproportionate number of SLPs
- Schools with dysphagia trained SLPs would manage their own dysphagia caseload
- Trained SLP closest to the school of the untrained SLP travels to that school to provide the service
- The school based SLP is then trained to monitor the student's dysphagia/feeding plan
- The remaining team members are school based
- As new SLPs are hired with credentials to work with dysphagia the system core team would decrease



Characteristics of Children with Dysphagia in the Schools

➤ Heterogeneous group

- Students with complex medical health needs
- Isolated dysphagia not associated with medical problems
- Not all have significant problems
- Children can outgrow dysphagia
- Regress over time (volume or developmental challenges, intercurrent illnesses)
- Dysphagia can be episodic, transient, or pervasive
- Increased risk for behavioral feeding issues

Prematurity

- **High risk for feeding and swallowing disorders**
 - Experience period of non-oral feeding
 - At least one aspiration event
 - Greater need for alternative feeding methods
 - Increase in preterm delivery rates: 2002 to 2003: more than 1/2 million births (Martin, et al., 2005)
 - School outcomes are inversely related to younger gestational age and lower birth weights
 - School outcomes are directly related to abnormal findings on neuroimaging studies and neurodevelopmental examinations
 - Preterm births account for 40% of all case of CP
 - Comorbidities: Respiratory disease (CLD), neurological involvement, growth deficits, depressed academic performance

Neurological Conditions

- Neurological presentation and dysphagia symptoms determined by site of lesion
- Prognosis determined by acute or chronic nature of condition
 - Static: show developmental gains
 - Progressive: make gains and then lose skills
 - Acquired: CVA, trauma
- Function influenced by growth and developmental changes
- SLPs need to be familiar with major etiologies of dysphagia and the level of nervous system affected



Neurological Conditions

- Cerebral Palsy: Most common disorder: 85 to 90% have dysphagia
 - Spastic (70%): Stiff and weak muscles: More impaired
 - Choreoathetoid (20%): Move spontaneously and slow without control. Can have abrupt and jerky movements.
 - Ataxic (10%): Poor coordination and shaky movements, muscle weakness and trembling
 - Mixed (Spastic and choreoathetoid)
- Characteristics
 - Rarely have seizures
 - Often not diagnosed specifically until 18 months of age
 - Often require supplemental nutrition. Can't meet their nutrition or hydration needs often.
 - Often require alternative feeding methods: Partnerships
 - May regress as they reach puberty
 - Slow feeders

Neurological Conditions

- Progressive Neurological Conditions:
 - Types
 - Spinal muscular atrophy SMA: Type 2
 - Muscular dystrophy
 - Leukodystrophies
 - Ataxia telangiectasia
 - Untreatable brain tumors
 - Characteristics
 - Stabilize and make gains early in their diagnosis
 - Skills deteriorate
 - May be cognitively intact
 - Increased time needed to finish meals
 - Chewing becomes increasingly more difficult

Neurological Conditions

Reilley, Skuse, and Poblete (1996)

- CP children between 12 and 72 months
 - 36% severe oral-motor dysfunction
 - 21% moderate dysfunction
 - 34% mild impairments
 - 9% no feeding difficulties

Respiratory Conditions

- “Neurological impairment and underlying respiratory conditions are likely to coexist, interact, and contribute to respiratory vulnerability” (Lefton-Grief & Arvedson, 2008)
 - Disrupt temporal coordination of breathing and swallowing increasing risk for aspiration
 - Inspiration occurs when bolus adjacent to open airway
 - Decrease tolerance of respiratory and nutritional sequelae associated with dysphagia
 - Increased risk for aspiration of saliva, liquids or solid foods
 - Failure to cough or clear aspirated material (silent) increasing risk for pulmonary infection
 - Hypoxemia, pneumonia, CLD

Respiratory Conditions

- Tolerance to aspiration dependent upon
 - Severity of dysphagia
 - Nutritional status
 - Ability to prepare a swallow safe bolus
 - Airway competency:
 - Presence and productivity of cough reaction
 - Pulmonary toileting or mucociliary clearance
 - Degree of pulmonary reserve
 - Residual CLD or history of respiratory compromise
 - Type of aspirated material

Other Conditions

- Full term infants with congenital anomalies
- Developmental impaired
- Autism spectrum
- Environmental conditions
 - Parent child interaction
 - Parental feeding methods, belief systems, and food choices
 - Cultural influences
 - Parental neglect, food deprivation



Guiding Question
What is best for the child?

Nourishment!
Of the body, heart, mind and spirit!



**Thank-you so much for
your time and
attention!**

Nancy Sinden



References

- Arvedson J. and Brodsky, L. Pediatric Swallowing and Feeding : Assessment and Management, rev. ed. San Diego, CA: Singular 2002
- Arvedson, J. (2000). Evaluation of children with feeding and swallowing problems. *Language, Speech, and Hearing Services in Schools*, 31, 28-41
- Arvedson, J. and Lefton-Greif, M. Pediatric Videofluoroscopic Swallow Studies: A Professional Manual with Caregiver Guidelines. San Antonio, TX: Communication Skill Builders; 1998
- Arvedson, J. C., & Homer, E. M. (2006, September 26). Managing dysphagia in the schools. *The ASHA Leader*, 11(13), 8-30.
- Ault, M.M., Guy, B., Rues, J., Noto, L., and Guess, D. Mental Retardation. Some Educational Implications for Students with Profound Disabilities at Risk for Inadequate Nutrition and Nontherapeutic Effects of Medication. Vol. 32, Nov. 3, 200-205, June 1994.

References

- Banotai, A. (2003). Taking the fear out of feeding: Ethical considerations in school-based programs. *Advance*, 13(45), 8-27.
- Blackman, J.A (1990). *Medical Aspects of developmental disabilities in children birth to three*. Gaithersburg, MD: Aspen Publishers
- Horner, Emily M. (2003). An interdisciplinary team approach to providing dysphagia treatment in the school. *Seminars in Speech and Language*. Vol. 24, # 3, 215-227.
- Homer, E. (2004). Dysphagia in the schools: One school district's proactive approach to providing services to children. *Perspectives on Swallowing and Swallowing Disorders (Dysphagia)*, 13(1), 7-9.
- Isakson, C., & Richards, D. (2006). *Guidelines for feeding and swallowing programs in schools and birth to three settings*. Hartford, CT: Connecticut State Departments of Education and Mental Retardation.

References

- Horsley, J.W. (1988). Nutrition services for children with special health care needs within the public school system. *Topics in Clinical Nutrition*. 3 (3), 55-60.
- Ichord, R. N. (1994). Neurology of deglutition. In D. N. Tuchman (Ed.), *Disorders of feeding and swallowing in infants and children: Pathophysiology, diagnosis, and treatment* (pp. 37-52). San Diego, CA: Singular.
- Individuals with Disabilities Education Act (IDEA) Amendments of 1997
- Klein M, Delaney T. *Feeding and Nutrition for the Child with Special Needs*, San Antonio, TX: Therapeutic Skill Builders, 1994
- Kurjan, R. M. (2000). The role of the school-based speech-language pathologist serving preschool children with dysphagia: A personal perspective. *Language, Speech, and Hearing Services in Schools*, 31, 42-49.

References

- Lefton-Greif, M. (2001). Ethical decision making for infants and children with dysphagia. *Swallowing and Swallowing Disorders (Dysphagia)*, 10(2), 27-30. *Language, Speech, and Hearing Services in the Schools*, April 1 2008, Volume 39, Issue 2. Managing Dysphagia in the Schools.
- Lefton-Grief, M.A. and Arvedson, J. C. Schoolchildren with Dysphagia Associated with medically Complex Conditions. *Language Speech and Hearing in Schools*, Vol 39 237-248, April 2008
- Logeman, J. Therapy of children with swallowing disorders in the educational setting. *Language Speech and Hearing Services in the Schools*, 2000;31:50-5
- Lowman, D. K and Murphy, S.M. *The Educators Guide to Feeding Children with Disabilities*, Paul H. Brookes Publishing Co., Inc. Baltimore, MD. 1999.

References

- O'Donoghue, C.R., and Dean-Claytor, A., Training and Self-Reported Confidence for Dysphagia management Among Speech Language Pathologists in the Schools, *Language Speech and Hearing Services in the Schools*, Vol. 39, 192-198, April 2008
- Power-deFur, L. and Alley, S.N. LSHSS, *Legal and Financial Issues Associated with Providing Services in Schools to Children with Swallowing and Feeding Disorders*, Vol 39, 160-166 April 2008
- Reilley, S, Skuse, D., and Poblete, X. (1996). Prevalence of feeding problems and oral motor dysfunction in children with cerebral palsy: A community survey. *Journal of Pediatrics*, 129, 877-882.
- Roberts, S., Siegel-Causey, E., Guess, D., and Rues, J. (1999). Etiological and medical characteristics of students with profound disabilities. Unpublished manuscript, University of Kansas, Department of Special Education, Lawrence.

Resources

- www.rsoi.org
 - Regional Services

- <http://www.fairfield.edu/fleitas/sitemap.html>
 - Band-Aides and Blackboards: When Chronic Illness...Or Some Other Medical Problem...Goes to School.

- <http://www.brookespublishing.com>
 - Children and Youth Assisted by Medical Technology in Educational Settings

Resources

- <http://www.professional.asha.org/members/slp/clinical/dysphagia>
 - ASHA Special Interest Division 13
 - Code of Ethics. ASHA Supplement 2002;22:37-39
 - Ad Hoc Committee on Scope of Practice. 2001;1-25
 - ASHA Guidelines for Role of SLP, 2006b
 - Roles of Speech-Language Pathologist in Swallowing and Feeding Disorders
 - Guidelines for Speech-Language Pathologists Providing Dysphagia Services in the Schools, 2007 Technical Report:
 - Roles of Speech-language Pathologists in Swallowing and Feeding Disorders
 - Knowledge and skills Needed by Speech-Language Pathologists Providing Services to Individuals with Swallowing and/or Feeding Disorders (2002)

ASHA Resources for SLP's

- ASHA policy documents:

<http://www.asha.org/members/slp/clinical/dysphagia/>

- Special Interest Division 13 Swallowing and Swallowing Disorders:

http://www.asha.org/about/Membership-Certification/divs/div_13.htm

- Current policies and ethical issues: ASHA's Action Center

- actioncenter@asha.org

- 800-498-2071

- Board Recognition for Swallowing and Swallowing Disorders

<http://www.swallowingdisorders.org/>

References Added

- Homer, E.. M. Establishing a Public School Dysaphgai Program: A Model for Administration and Service Provision. *Language Speech and Hearing Services in the Schools, Vol 39 177-191, April 2008*
- Krueger, W. and Conlon, B. (2006, November). *Comparison of Dysphagia Competency Procedures in Medical and School Settings*. Paper presented at the national AHSA convention, Miami FL.
- Miller, K.M. Optimizing Collaboration Between Medical and School Based Speech-Language Pathologists Managing Pediatric Dysphagia. *Perspectives on Swallowing and Swallowing Disorders (Dysphagia)*. 18 91-96, October 2009, ASHA