**CHAPTER 1**

**THE FIELD, THE PROFESSIONALS, AND THE CLIENTS**

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**Learning Outcomes**

*When you have finished this chapter, you should be able to:*

1. Describe communication disorders
2. Discuss the roles of audiologists, speech-language pathologists, and speech, language, and hearing scientists
3. Explain how intervention services change through the lifespan
4. Describe how evidence-based practice (EBP) influences clinical decisions
5. Outline the history of changing attitudes toward individuals with communication disabilities over the centuries and legislation over the past several decades

**Introduction**

Communication is part of what makes us human. Even minor or temporary problems with communication are often frustrating. What if these problems were more lasting? In the first chapter of this text, we introduce the professionals who work with individuals who have communication and feeding and swallowing challenges. In addition, evidence-based practice and a historical perspective of laws that mandate appropriate care of those in need will be discussed. A **holistic** approach to diagnosis and treatment of people with communicative impairments will be used throughout the text. The professionals who work with those who have communication disorders, SLPs and audiologists, often choose these careers because they want to be useful to society, to contribute to the general good.

**Content Outline**

COMMUNICATION DISORDERS

* A **communication disorder** impairs the ability to both receive and send, and also process and comprehend concepts or verbal, nonverbal, and graphic information.
* It may affect hearing, language, and/or speech.
* It may range from mild to profound severity, be developmental or acquired, and may be present in combination with other disorders or disabilities.
* SLPs work primarily with individuals who have communication disorders, but are also involved in feeding and swallowing disorders and nonverbal forms of communication.
* **Speech disorder:** Atypical production of speech sounds, interruption in the flow of speaking, or abnormal production and/or absences of voice quality (pitch, loudness, resonance, and/or duration).
* **Language disorder:** Impairment in comprehension and/or use of spoken, written, and/or other symbol systems.
* **Hearing disorder:** A result of impaired sensitivity of the auditory or hearing system.
* **Central auditory processing disorders:** Deficits in the processing of information from audible signals.
* Communication disorders are NOT differences, such as dialectal differences or speaking another language.
* **Augmentative/alternative communication** systems: Attempts often taught by SLPs to compensate and facilitate for impaired communication using, for example, signing or digital methods.
* Intervention for feeding and swallowing disorders varies from preterm infants with a weak sucking response to adult patients recovering from stroke and slowly regaining the motor control needed to chew and swallow properly.

THE PROFESSIONALS AND THEIR ROLES

* Professionals who serve individuals with communication disorders are employed in early intervention programs, preschools, schools, colleges and universities, hospitals, independent clinics, nursing care facilities, research laboratories, home-based programs, and private practice.
* **Telepractice:** Provision of language assessment and intervention via the Internet.
* **Audiologists:** Measure hearing ability and identify, assess, manage, and prevent disorders of hearing (including **auditory processing disorders**) and balance. They may dispense hearing aids.
* Credentials for Audiologists
	+ - Educational requirements are 3-5 years of professional education beyond the bachelor’s degree.
		- This culminates in a doctoral degree, either an AuD, PhD, or EdD in audiology.
		- ASHA CCC-A: Requires doctorate, professional experience, national exam.
		- State license is often needed and is frequently identical to ASHA CCC.
* **Speech-Language Pathologists:** Identify, assess, treat, and prevent expressive and receptive communication disorders in all modalities. They provide services for swallowing disorders and may be involved in modifying dialects.
* Credentials for SLPs
	+ - Public schools require at least a bachelor’s degree, but most states require a master's degree. Requirements vary from state to state.
		- ASHA CCC-SLP: Requires master's degree or doctorate, professional experience, professional development, national exam.
		- State license often needed and is frequently identical to ASHA CCC. There may also be additional requirements for the state’s department of education school certification.
* Speech, Language, and Hearing Scientists: Extend knowledge of human communication processes and disorders. They usually have doctorate degrees and are employed by universities, government agencies, industry, and research centers. Some may also work clinically.
* What Speech, Language, and Hearing Scientists Do
* Speech scientists may be involved in basic research exploring anatomy, physiology, and physics of speech-sound production.
* Use technology to learn more about typical and pathological communication.
* Development of computer-generated speech.
* Language scientists may investigate the ways children learn language.
* Conduct cross-cultural studies of language and communication.
* Study how languages are changing.
* Examine language disabilities and the nature of language disorders in children and adults.
* Hearing scientists investigate the nature of sound, noise, and hearing.
* They may help develop equipment for hearing assessment.
* Develop techniques for testing infants or those with physical or psychological impairments.
* Develop and improve assistive listening devices.
* Concerned with conservation of hearing and limiting environmental noise.
* Related Professions: A Team Approach:Teams can include family members, regular and special education teachers, psychologists, social workers, physicians and other medical personnel, and occupational, physical, and music therapists. They may collaborate with physicists and engineers.

SERVICE THROUGH THE LIFESPAN

* Individuals with communication disorders may be of any age.
* 1 in 5 people has a disability, and the likelihood increases as we age.
* Approximately 2% of all children born in the U.S. have some existing disabling condition.
* Infants are screened for hearing loss and other disabilities as soon as they are born.
* Babies and toddlers may exhibit developmental delay.
* An interdisciplinary approach is necessary in the assessment and treatment of young children, and an IFSP is developed for each child, which is directed to the entire family.
* Early intervention is highly valuable and may prevent later difficulties.
* Preschoolers may attend a special school where professionals can address the child’s needs.
* Almost half of all SLPs are employed in school systems.
* School-age children with communication difficulties often experience academic and social difficulties.
* 1.5 to 2 million Americans sustain a traumatic brain injury each year and may have subsequent cognitive and/or motor problems that interfere with their ability to communicate and/or eat.
* In those over age 65, stroke, neurological disorders, and cognitive impairments may interfere with communication and swallowing.
* Hearing loss may affect at least one quarter of older adults.

EVIDENCE-BASED PRACTICE

* SLPs and audiologists must provide the most effective intervention based on available evidence.
* Clinical decision-making: Combination of scientific evidence, clinical experience, and client needs.
* Assumptions of EBP:
	+ - Clinical skill grows from experience and current available data.
		- The SLP or audiologist seeks new therapeutic information to improve efficacy.
* Professional, peer-reviewed journals are the best source of clinical evidence.
* **Efficacy**: The probability of benefit from an intervention under ideal conditions. There are three key elements:
* It refers to an identified population, not specific individuals.
* The treatment should be focused and the population should be clearly identified.
* The research should be conducted under optimal intervention conditions, although actual clinical conditions may be less than ideal.
* **Effectiveness**: The probability of benefit from an intervention method under average conditions. It is what works in real-world application of intervention.
* **Efficiency**: The quickest and least effortful method resulting in the greatest positive benefit.
* Additional factors affecting clinical decision making include the clinician’s expertise, experience, attitude, and motivation, client/family values and characteristics, and service delivery variables.
* Providing the best intervention possible is of foremost concern. Intervention options and supporting evidence should be discussed with clients and/or family members.

COMMUNICATION DISORDERS IN HISTORICAL PERSPECTIVE

* Disorders are not new but attitudes toward them have changed throughout the centuries.
* By the late 1700s, special residences were designed for individuals with specific disorders.
* The first U.S. “speech correctionists” were educators and others who took an interest in speech problems.
* The first professional journal related to communication, *The Voice*, was established in 1879.
* Early interest groups included teachers within the National Education Association and the National Association of Teachers of Speech.
* The American Academy of Speech Correction was formed in 1925, a precursor to ASHA.
* Audiology became a profession in the 1920s and experienced a boom in the 1940s due to World War II veterans who were experiencing noise-induced hearing loss.
* The American Coalition of Citizens with Disabilities was created in 1974.
* Select federal mandates affecting people with communication disabilities:
* 1975: Education for All Handicapped Children Act (EAHCA) (Public Law 94-142)
* Mandated that a free and appropriate public education (FAPE) must be provided for all handicapped children between ages 5 and 21.
* 1986: Education of the Handicapped Amendments (Public Law 99-457)
* Extended age of those served to cover children between the ages of birth and 5 years.
* 1990: Individuals with Disabilities Education Act (IDEA)
* Addressed the multicultural nature of the U.S.
* 2004: Reauthorization of IDEA
* Established birth-to-6 programs as well as new early intervention services.

**Summary**

SLPs, audiologists, and other specialists work to assist individuals with communication impairments. They work in a variety of settings and with people throughout the lifespan. Clinicians have a master’s or doctoral degree and supervised clinical experience, and generally have the ASHA CCCs. ASHA is the largest organization of professionals working with communication disorders. ASHA’s missions include the scientific study of human communication, provision of clinical service in speech-language pathology and audiology, maintenance of ethical standards, and advocacy for individuals with communication disabilities. Federal legislation currently mandates services for people with disabilities.

**Video Examples**

**Video Example 1.1: Becoming an audiologist or speech-language pathologist**

Activity suggestion: This video is over 13 minutes long. You may assign this video to be viewed before class. Have students pair up at the beginning of the class period and talk about why they may or may not be considering a profession in speech-language pathology or audiology and what information in the video was reinforcing one way or another.

**Video Example 1.2: Audiology services for children**

Activity suggestion: In the video, it is stated that “It’s not only hearing development, it’s brain development.” Have students discuss what this statement means. Briefly introduce which areas of the brain are most involved in the perception of sound and the processing of the meaning of sound.

**Video Example 1.3: Exploring the SLP’s scope of practice**

Activity suggestion: This video is over 12 minutes long. Ask students to take notes on what parts of the scope of practice were surprising to them (whether viewed as an assignment outside of class or viewed in class), and then discuss as a group.

**Thought Questions**

**1.1:** Were you surprised by the scope of possible interventions for SLPs and audiologists? Did you begin reading thinking only of speech and hearing? What surprised you the most, and why?

**1.2:** As you think about intervention across the lifespan and working as a member of a team, think about variations in this arrangement. Are there ages of clients or severities of disorders in which you as an SLP might consult with other specialists, and still other times when you might serve as a member of a team?