



ISSN: 2644-2957

DOI: 10.33552/OJCAM.2021.06.000639

Online Journal of
Complementary & Alternative Medicine

Iris Publishers

Commentary Article

Copyright © All rights are reserved by Mitzi S Brammer

Adoption of a Medical Model to Address Literacy Deficits in Children and Adolescents

Mitzi S Brammer*

Department of Communication Sciences and Disorders, Saint Louis University, United States of America

***Corresponding author:** Mitzi S Brammer, Mitzi S Brammer, Assistant Professor, Saint Louis University, McGannon Hall, Suite 220, 3750 Lindell Blvd, St. Louis, MO, USA.

Received Date: March 30, 2021

Published Date: May 04, 2021

Abstract

This commentary addresses the significant role of speech-language pathologists in the assessment and treatment of literacy disorders. Given the broad definition of literacy which encompasses reading, writing, speaking and listening, it is important to realize that while these areas may seem academic in nature, especially for educationally-based speech-language pathologists, they indeed have a medical basis to them and should be assessed and treated as such. This is in light of a deep, broad base of multi-disciplinary research known as the science of reading. This commentary explains the relationship between the areas that speech-language pathologists target in literacy and the importance of adopting a medical model rather than a disease model when working with individuals to address literacy deficits. Doing so allows speech-language pathologists to address the whole person and not just their disorder.

Keywords: Speech-language pathologist, Literacy, Science of reading, ICF

Introduction

Speech-language pathologists (SLPs) are skilled professionals who are trained to assess and treat a variety of communication disorders as well as feeding/swallowing disorders. The wide scope of practice afforded to speech-language pathologists allows for a plethora of specialized work environments. There are often misguided assumptions about the work of speech-language pathologists. Those employed in medical settings such as a skilled nursing facilities acute care facility, rehabilitation centers, for example, are assumed to perform tasks that are strictly medical in nature. The flawed logic following this assumption is that those speech-language pathologists who work in educational settings, then, do NOT work on medically related issues. They are strictly related-service providers who address academics. This commentary addresses this flawed logic and explains how the work of school based SLPs indeed has a distinct medical component to it, particularly when addressing literacy.

Speech-language pathologists have known since 2001 about the seminal role they play in literacy instruction. The American Speech-Language-Hearing Association's ad hoc committee on reading and written language disorders issued a position statement to that effect [1]. Many SLPs have accepted this role enthusiastically; others, especially in the era of the Common Core State Standards and high accountability, feel that more weight should be pulled by those addressing the core curriculum in the general education classroom rather than through the interventions provided in the therapy setting.

This author presents a brief rationale for shifting viewpoints via the adoption of a medical model, then links empirical research on literacy from psychology and cognitive science to the work done daily by educationally based SLPs. The intent is for the scientific community to embrace school based SLPs not as "teachers of reading". Rather, these specialists are implementing important strate-



gies aligned with evidence-based practice to address the whole person that will allow students to function optimally in school and eventually, as adults in society.

Shift from a Medical Model to the International Classification of Functioning

To give common language for designating human functioning and disability as well as providing a framework for gathering data and assessing clinical outcomes, the World Health Organization (WHO) published the International Classification of Functioning, Disability and Health, or ICF [2]. The International Classification of Functioning, Disability and Health for children and adolescents (ICF CY) derived from the ICF in 2007 [3]. This framework serves as the international standard professionals use to describe health as well as disability.

In 2016, the American Speech-Language-Hearing Association (ASHA) adopted the ICF as the framework for assessment and intervention in the Scope of Practice [4]. The ICF looks at a person's functioning rather than their disease alone. Westby and Washington believe that language and literacy are a part of a child or adolescent's health because these are vital aspects of mental and social functioning [5]. Reading and writing are complex tasks. As such, it is also important to consider complexity of clinical elements such as co-morbid conditions, cultural background, clinician variables, etc., so as not to over-simplify the application of this framework in assessment and treatment of literacy deficits in youth with language impairment.6

The Role of the SLP in Literacy

Speech-language pathologists typically work as a part of an interprofessional team, regardless of professional setting. In an educational setting, the ICF CY facilitates collaboration amongst team members to provide knowledge of the commonalities of a reading and/or writing disability at each level of functioning. This in turn informs service delivery in the school setting. SLPs and other professionals make informed decisions about which features can be treated universally, commonly, and selectively within a continuum of approaches to intervention [7,8].

The role of the SLP in assessment and treatment of children and adolescents with language impairment that significantly impacts literacy skills is paramount. To understand why this is so requires knowledge of a phrase coined in 2004 and made even more popular in 2018 by journalist Emily Hanford: the science of reading [9,10]. The science of reading understanding represents an extensive body of research conducted across several disciplines including cognitive scientists, psychologists, and linguists, through which we have a deeper understanding of the mechanisms that support skilled reading, how children acquire reading skills and when they do not, we have a better of the reasons why. We also recognize how children become readers during the first years of schooling and the barriers

that prevent success [11].

Going further back, the National Reading Panel's meta-analysis and subsequent report [12] set in motion numerous changes in the way reading was taught. Some of the major recommendations from the National Reading Panel included the following: 1) Explicit instruction in phonemic awareness; 2) systematic phonics instruction; 3) methods to improve reading fluency; and 4) enhancing comprehension. However, these recommendations did not always lead to fruitful reading outcomes for students. Many districts adopted curricula that was termed "balanced literacy". No one seemed to know how to operationally define balanced literacy, though. While balanced literacy curricula claimed to address the components recommended by the National Reading Panel, what was often missing was explicit and systematic instruction in these areas. The inherent problem was that teachers were still teaching reading in a way that they believed children learned to speak. One of the positive outcomes of the science of reading is that it shed light on the difference between the way children learn to speak vs. how they learn to read and write [13]. Speech-language pathologists engage in therapy every day with this scientific knowledge.

Information gleaned from the science of reading as well as the National Reading Panel's report align with a research-validated idea that should be the foundation in the design of reading instruction. This is known as the Simple View of Reading [14]. It states that reading comprehension is the product of word recognition and language comprehension. Without strong skills in either area, an individual's reading comprehension will be significantly impacted.

Speech-language pathologists spend years acquiring knowledge about the phonological system, how it develops, as well as what a disordered system looks like. They also have depth and breadth of knowledge of the other language skills needed for successful reading that include vocabulary development in typically developing children and what to do therapeutically when vocabulary is not developing typically. They possess understanding of the development of syntax and its importance to comprehending language. Given this abundance of knowledge about the language underpinnings of reading and the fact that children in the United States continue to fall behind in reading and writing, speech-language pathologists should be asking the question: If quality instruction is not occurring in the core curriculum, is it my responsibility to teach children to read? It is this author's belief that while it may not be SLPs' sole responsibility, research and science would tell us that they play an integral part in supporting literacy development, not just because they have the requisite training and skills to therapeutically address literacy issues, but also because they have an ethical responsibility to inform colleagues about their role in literacy development, one that is based on science and not merely on beliefs.

Conclusion

This commentary has addressed the importance of recognizing the role that the science of reading plays in shifting from a disease model to a medical model of assessment and prevention related to literacy deficits in children and adolescents. Moreover, the role that speech-language pathologists play in the planning and implementation of effective therapy to address literacy deficits of children and adolescents is vital. The elements discussed in the science of reading are highly aligned to language in the areas of phonology, morphology, semantics, and syntax. In their pre-professional programs, SLPs are highly trained to understand how each of these areas of language work and intersect to derive meaning from spoken and written expression. Finally, the commentary highlighted the importance of the ethical responsibility of the SLP to inform colleagues on interprofessional teams about their work and its potential for use in a transdisciplinary model by all team members.

Acknowledgement

None.

Conflict of Interest

The Author declares that there is no conflict of interest.

References

- (2001) American Speech-Language-Hearing Association. Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents.
- (2001) World Health Organization. International classification of functioning, disability and health ICF.
- (2007) World Health Organization. International classification of function, disability and health: Children and youth version ICF-CY.
- (2016) American Speech-Language-Hearing Association. Scope of practice in speech-language pathology.
- Westby C, Washington KN (2017) Using the International Classification of Functioning, Disability and Health in assessment and intervention of school-aged children with language impairments. *Lang Speech Hear Serv Sch* 48(3): 137-152.
- Berger M (2005) The NSF mental health standard 9: The devil is in the delivery. *Child Adolesc Ment Health* 10(3): 123-126.
- Riva S, Antonietti A (2010) The application of the ICF CY model in specific learning difficulties: A case study. *Psychol Lang Commun* 14: 37-58.
- Moats LC (2020) Teaching reading is rocket science: What expert teachers of reading should know and be able to do. *Am Educ*.
- Lyon GR, Chhabra V (2004) The science of reading research. *Educ Leadersh* 61: 12-17.
- Hanford E (2018) Hard words: Why aren't kids being taught to read? *APM Reports*.
- Seidenberg MS (2018) *Language at the Speed of Sight: How We Read, Why so Many Can't, and What Can Be Done about It*. Basic Books an imprint of Perseus Books: New York.
- (2000) Report of the National Reading Panel: Teaching Children to Read: Reports of the Subgroups. NICHHD- Eunice Kennedy Shriver National Institute of Child Health and Human Development.
- Hanford E (2018) Hard words: Why aren't kids being taught to read? *APM Reports*.
- Catts HW, Adlof SM, Weismer, SE (2006) Language Deficits in Poor Comprehenders: A Case for the Simple View of Reading. *J Speech Lang Hear Res* 49(2): 278-293.