

Maternal Determinants and Early Diagnosis of Language Disorders

Emily Appleton

School of Clinical Sciences

Dr. Heather Isaacson

Speech, Language, and Hearing Sciences

Winter 2022

Introduction

A crucial milestone in one's childhood is developing and mastering their native language—a system of communication that unites a group of people. However, not all individuals achieve this milestone at the same rate and some may have underlying factors that prevent them from keeping up with their peers. One common factor that inhibits many children from reaching their language milestones at proper rates is a language disorder (LD)—“an impairment in comprehension and/or use of a spoken, written, and/or other communication symbol system” (ASHA, n.d.). A prominent problem with LDs currently is when they are being diagnosed. To elaborate, these LDs are not being diagnosed early and have the potential to lead to further issues for individuals. Some of these issues include academic difficulties, behavioral changes, and improper labels. (Philadelphia, 2015) A current assumption in regards to this issue is that there is a correlation between maternal determinants—awareness and access to resources—and the early diagnosis of LDs.

Influencing this awareness and access is a group of factors known as the social determinants of health. These factors include social factors, physical environment, people's behavior, and economic factors. All four of these elements revolve around and influence maternal awareness and resources which thus may impact when or even if a child is diagnosed with a language disorder. At large, the first years of one's life are critical due to it being the period during which one's route of lifelong health vulnerability is determined by the interplay of these determinants (Maggi et al., 2010).

Social factors such as education can impact a mother's awareness of language disorders. For example, not a lot is known about Developmental Language Disorder (DLD). Unless the social community the mother is in is knowledgeable on such matters, it is likely that she does not know much or anything about it (McGregor, 2020). On the other hand, the physical environment has more to do with a mother's access to resources. Not everyone lives close to a speech-language pathologist or an occupational therapist, making it difficult for their children to receive help or therapy. Furthermore, people's behavior, specifically a change in people's behavior, can bring awareness of a disorder or push

a mother to get their child evaluated. Lastly, economic factors strongly relate to both a mother's understanding of possible disorders and access to treatment—better finances can lead to better education about subject matters such as language disorders and open more doors for treatment. A proper and early diagnosis relies on these factors being prominent and balanced within a mother's community (Maggi et al., 2010).

Background

Health can be defined as “a state of complete physical, mental, and social well-being” (Crosby et al., 2012). In essence, health goes beyond the absence of disease. In regards to language, there are crucial milestones that individuals have to reach to maintain a healthy developmental status. Outlines of these milestones are provided by health organizations such as the CDC and ASHA. Even before a baby can produce comprehensible words there are goals that they must meet in order to maintain this status. According to the CDC, before a child's first birthday, they should begin to babble, respond to sounds—including the utterance of their own name—and understand the basics of the English language; it is known that a baby comprehends a language before it is able to speak it. At age one, those incoherent strings of letters or babbling turn into proper words. As the years go by, their language abilities should continue to become more and more complex. In particular, they should be gaining a sizable vocabulary and gradually internalizing grammar rules for their native language. By the time the child is five years old, they should be able to speak very clearly, using full sentences (CDC, 2022).

Now, if a child does not meet some of these milestones, it could indicate that there is an issue with their language development. However, this is very much a gray area due to the possibility of the child merely being a late bloomer (ASHA, n.d.) Nonetheless, if there is any suspicion that the child is falling behind developmentally, it is advisable to act early and get them evaluated. The earlier the intervention, the earlier the child can receive extra support, if needed, and learn the language skills necessary to keep up with their peers (Lewis, 2018).

Current Studies and their Contributions

Recent studies have explored the connection between parents and the diagnosis of a language disorder in their children via a mixed-method approach. The main assumption is that parents have a long-lasting impact on their children's language abilities because they have more opportunities to interact with their children on a daily basis (Aydin Uysal, 2019). Due to this heavy interaction, the early detection of possible LDs falls into the laps of parents. The following studies have inspected the obstacles that the parents may have faced and thus prevented early detection.

In 2019, a questionnaire design was utilized to discover the demographics of participants and their awareness and knowledge of speech and language therapy and the profession itself. The majority of the participants were 36 to 40-year-old females who had at least a high school education and held a lower-income status. The study results disclosed that the awareness of speech and language therapy and speech-language pathologists (SLPs) was low. Specifically, it was reported that 85.9% of the participants never were exposed to any information regarding speech and language therapy. Additionally, when participants were asked to make judgments on which disorders that SLPs treat, the participants were collectively undecided on language disorders. Overall, it can be concluded that the reason for this limited knowledge is related to the low socioeconomic status and education level of the participants (Aydin Uysal, 2019).

However, other studies show that limited knowledge due to socioeconomic status and education level is not the only obstacle. Another possible obstacle that parents face is that their concerns and opinions are being dismissed by professionals due to how they construe their child's impairment. Additionally, studies show that the differences between the screening and diagnosis processes that exist throughout the world can have an impact as well (Jensen de López et al., 2021). This is exacerbated by the fact that language disorders are not visible to the naked eye and impact each individual differently. Qualitative reports show that the majority of parents recognize a change in their child's language abilities, but are not sure which specific disorders are present (Jensen de López et al., 2021).

This is further proven by studies that used parents as screening measures. When parents showed concern, it was reflected in their child's performance on various language tasks. This shows a relatively strong correlation. Overall, though, results have shown that as of yet, proper identification of LDs using parent-based information is not possible—only correlations can be constructed (Bélanger, n.d.). These findings stress the importance of SLPs partnering up with parents in order to come to a diagnosis as early as possible. To elaborate, each side does not have all the information, simply the parents have the daily experience, yet the SLPs have the expertise.

Conclusion & Significance

Learning one's native language is a process that every child goes through. However, some are put at a disadvantage due to hidden impairments known as language disorders. The main issue at hand is not the disorders themselves, but when they are discovered and diagnosed. As previously stated, the earlier a child is diagnosed, the earlier he/she can receive needed services. It has been found that the time of diagnosis is impacted by a number of factors. First, parents do not have all the information. They may be able to recognize changes in their children but are not necessarily able to connect those changes to a language disorder. Even though parents spend a vast amount of time with their children, they are not professionals in the field of speech, language, and hearing sciences. Additionally, it has been found that as of yet, optimal methods of diagnosis of language disorders do not exist. This makes the task of getting children diagnosed early even more difficult. However, a patient-centered approach is recommended when a child is appropriately diagnosed or even just suspected to have an underlying impairment. This patient-centered approach appeals to the individual and their needs, values, and preferences. The patient is involved in every step of the clinical decision process (*Patient-Centered Care*, n.d.) Finally, it was found that demographics and where a family inhabits may play a role in when a child is diagnosed. Simply, access to higher income and education can assist a parent in getting their child the finest treatment available. Also, there are different methods for diagnosis that exist in the world and even among the 50 states.

These findings are significant because they emphasize the need for parents to be educated. Parents are the advocates for their children. If they are not knowledgeable on impairments such as these, then their children could end up being overlooked. Thus, it is important for information to be spread about LDs and how parents can seek help. This vital information can prevent labels and allow children to not fall behind.

Although significant data has been found, there are still some recognized limitations. The broadest limitation is that there is a lack of data concerning LDs—such as DLD—in general (McGregor, 2020). This absence of research can explain the small number of studies found regarding this topic and the reason for non-optimal treatment methods. It was also noticed that most scientific efforts were focused on deficits LDs can cause and their risk factors and not on the diagnosis process itself. Additionally, the prime focus of several studies was not the time of diagnosis, but the diagnosis itself. Thus, future research should be spent on gathering more data on LDs such as DLD and similar disorders that have not been looked into as much.

Bibliography

- Aydin Uysal, A. (2019). The Views and Knowledge of Parents of Children with Speech/Language Disorders on Speech and Language Therapy in Turkey. *Examines in Physical Medicine & Rehabilitation*, 2. <https://doi.org/10.31031/EPMR.2019.02.000533>
- Bélanger, R. (n.d.). *Parents as Partners: The Early Identification of Children at Risk of Developmental Language Disorders Using Valid Parent Questionnaires*. 11.
- CDC. (2022, March 31). *What is a Developmental Milestone?* Centers for Disease Control and Prevention. <https://www.cdc.gov/ncbddd/actearly/milestones/index.html>
- Crosby, R., Wendel, M., Vanderpool, R., & Casey, B. (Eds.). (2012). *Rural populations and health: Determinants, disparities, and solutions*. Jossey-Bass.
- Jensen de López, K. M., Lyons, R., Novogrodsky, R., Baena, S., Feilberg, J., Harding, S., Kelić, M., Klatte, I. S., Mantel, T. C., Tomazin, M. O., Ulfssdottir, T. S., Zajdó, K., & Rodriguez-Ortiz, I. R. (2021). Exploring Parental Perspectives of Childhood Speech and Language Disorders Across 10 Countries: A Pilot Qualitative Study. *Journal of Speech, Language, and Hearing Research*, 64(5), 1739–1747. https://doi.org/10.1044/2020_JSLHR-20-00415
- Language In Brief*. (n.d.). American Speech-Language-Hearing Association; American Speech-Language-Hearing Association. Retrieved April 7, 2022, from <https://www.asha.org/practice-portal/clinical-topics/spoken-language-disorders/language-in-brief/>
- Late Blooming or Language Problem?* (n.d.). American Speech-Language-Hearing Association; American Speech-Language-Hearing Association. Retrieved April 7, 2022, from <https://www.asha.org/public/speech/disorders/late-blooming-or-language-problem/>
- Lewis, N. (2018, December 15). *Our Role in Early Identification* (world) [Discussion]. The ASHA Leader; American Speech-Language-Hearing Association. <https://doi.org/10.1044/leader.FMP.22012017.6>
- Maggi, S., Irwin, L., Siddiqi, A., & Hertzman, C. (2010, August 25). *The social determinants of early child development: An overview—Maggi—2010—Journal of Paediatrics and Child Health—Wiley Online Library*. <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1440-1754.2010.01817.x>

McGregor, K. K. (2020). How We Fail Children With Developmental Language Disorder. *Language, Speech, and Hearing Services in Schools*, 51(4), 981–992. https://doi.org/10.1044/2020_LSHSS-20-00003

Patient-Centered Care: Elements, Benefits and Examples. (n.d.). Health Leads. Retrieved April 7, 2022, from <https://healthleadsusa.org/resources/patient-centered-care-elements-benefits-and-examples/>

Philadelphia, T. C. H. of. (2015, May 1). *Language Disorders in Children* [Text]. The Children’s Hospital of Philadelphia. <https://www.chop.edu/conditions-diseases/language-disorders-children>