

Language Disorders in Children with Down Syndrome

Nandita Wana Putri¹, Sarwiji Suwandi², Andayani³

nanditawana@gmail.com¹, sarwijiswan@staff.uns.ac.id², andayani@staff.uns.ac.id³

Sebelas Maret University
Ir. Sutami Sreet No. 36 Kentingan, Jebres, Semarang, Indonesia^{1,2,3}

Abstract. Children with Down syndrome have language impairments that lead to an inability to produce a good language for communication. This problem was found from the results of early observations in the learning process at school. Children with Down syndrome find it difficult to pronounce the correct articulation when communicating and have difficulty responding or replying conversations. Problems with language disorders in children with Down syndrome can be overcome by providing various media to support language ability of children with Down syndrome in developing their skill. In addition, individual approaches taken by parents and teachers also an important role in practicing the language development of children with Down syndrome. The method used is qualitative by using interview and observation techniques.

Keywords: Language, Children, Down Syndrome

1 Introduction

Every human being is almost equipped with language skills since birth. The ability to speak every human being starts from the stage of children. Language ability is an indicator of the overall success of child development. In its development, language begins with sounds and gestures, then words and sentences. Language development is important to supports various other aspects of development, such as cognitive, social, and literacy. The development of language is important because it supports various other aspects, such as cognitive, social and literacy. In terms of communicating, everyone uses many things, such as verbal and nonverbal expressions. Body languages such as gestures, postures, eye contact, facial expressions, and head and body movements are nonverbal forms that can be used to convey information [3]. The ability to communicate is one of the most important indicators that affect the growth and development of children. However, this ability is vulnerable to delays and damage in other systems because when speaking and language involve cognitive aspects. Even normal children have many factors that cause language disorders, especially children with Down syndrome.

Children with Down syndrome are mentally retarded, which is a condition of retarded physical and mental development caused by abnormalities in chromosomal development [1]. Children with Down Syndrome are the same as other children, which must be able to communicate from

an early age. However, they have several barriers such as physical and cognitive [4] which make spoken language difficult to use in communicating [6]. Children with Down syndrome have difficulty using language and speech in communication. Children with Down syndrome have certain difficulties in producing sounds and understanding linguistic rules as a result of the limitations that occur in their language development. Furthermore, there are several children who are diagnosed with multiple disorders such as autism and hearing loss, which makes effective communication interventions in children with Down syndrome very challenging and interesting to study.

In general, people with Down syndrome experience motor and mental retardation. In people with Down syndrome who have abnormalities in brain function and speech organs will have difficulty in speaking, either for producing or understanding. This is called a language disorder. Language disorders according to the factors are divided into two, namely medical factors and social environment. The medical factors referred to are abnormalities in the function of the brain and speech organs, while social environmental factors are life whose environment is not natural to humans, such as being left out or isolated from the normal environment of human society.

In education, children with Down syndrome have the right to receive a proper education at all levels of education. That is related to person with disabilities have also been regulated in the Law of the Republic of Indonesia Number 8, 2016, concerning person with disabilities which states that person with disabilities have the right to obtain inclusive education to access quality learning at all levels and types of educational facilities. Inclusive education is a system of providing education that provides opportunities for all students who have disabilities to participate in education or learning in an educational environment together, with students in general. The results of initial observations indicate that there are several problems experienced by children with Down syndrome in participating learning at school, namely in terms of communication skills.

Language is a message conveyed in the form of expression as a means of communication in certain situations in various activities [2]. In this case, the expression is related to segmental and suprasegmental elements, so that a sentence can function as a communication tool with a different message if it is conveyed with a different expression. This language ability is implemented with ability in rhetoric, both rhetoric in writing and speaking [8]. Children with Down syndrome have problems in developing their language and a general lack of ability to communicate verbally. Among intelligence, interaction and language ability, the language ability is in the lowest category. This weakness in language development is expressed in the form of a lack of vocabulary, articulation, and the habit of speaking by using separate words [5].

2 Research Methods

This research is a qualitative research, namely research that explores language data obtained naturally according to the language abilities of participants who have Down syndrome, without any intervention from the researcher to the participants. Furthermore, an analysis of language ability in children with Down syndrome is carried out. The data were validated using theoretical triangulation which tested the validity of the data using the perspectives of the theories referred to in discussing the problems studied so that complete and comprehensive conclusions could be

drawn. Then, the analysis technique uses the Flow Analysis Model where in this analysis model the three components of flow analysis are data reduction, data presentation, and drawing conclusions or verification are carried out in a flowing manner with each other with the process of data collection [7].

3 Result and Discussion

From the results of early observations in the learning process in schools. Children with Down syndrome find it difficult to pronounce the correct articulation when communicating and have difficulty responding or replying to conversations. This proves that children with Down syndrome experience language disorders because their language skills are very low. Children with Down syndrome are only able to say one word, in terms of linguistic acquisition they have not reached the morphological, syntactic or discourse stages. This is consistent with research conducted by Marder and Cholmain which revealed that children with Down syndrome cannot understand grammar or the structure and speech sound system. Morphological and syntactical development is the biggest problem for children with Down syndrome [6].

In the learning process at school, children with Down syndrome need special attention. The role of the teacher at school is very influential on the success of children with Down syndrome, especially in terms of communication. Teachers have several strategies in communicating with Down syndrome children, this is because children with Down syndrome when communicating is very dependent on their mood or their feeling. Some children with Down syndrome who have a good mood will be able to learn happily and can cooperate well in class. On the other hand, when they are not in a good mood or are uncomfortable, they don't want to do anything, sometimes they get angry and do physical activities such as beating themselves or slamming things around them.

The results of interviews and observations in learning of children with Down syndrome are more focused on self-knowledge and self-care, namely learning material is poured in the form of habits that are always repeated such as knowing letters, so children must be taught continuously about these letters by repeating even spend up to 3 months. Children with Down syndrome tend to remember and respond more to what has become their habit, even though it takes time to train, but when it is successful, the child will remember it in their self. Therefore, each learning process is only carried out with the same method and material and is more likely to repeat the same things and that's it, this is because children with Down syndrome have delays in capturing and recalling what has been learned.

Teaching materials in schools must be adapted to the abilities of each child while still implementing the applicable curriculum. In learning children with Down syndrome are given learning media as a tool, such as model and pictures that must be close to the original shape of the object in question with the aim of instilling strong concepts because they really like pictures and also coloring. In addition, children with Down syndrome tend to use only basic words or single words, such as the words 'car', 'horse', and they cannot reach their subordinate level, such as 'Toyota', 'zebra' even at their superordinate level, such as the word of vehicle and the word of animal.

The individual approach taken by parents and teachers is an important role in training the language development of children with Down syndrome. In carrying out learning tasks properly,

all parties in the school are involved in guiding children with Down syndrome. The teachers as much as possible create comfort, familiarity, and build communication relationships with Down syndrome children outside of class hours or during break. In addition, the teacher should have an active role in providing feedback and correcting the wrong pronunciation of children and always providing consistent motivation for the development of children with Down syndrome.

The role of caring for parents or family in the development of children with Down syndrome is also carried out in the family. Parents who are aware of the importance for children with Down syndrome in obtaining education at school are one of the efforts to improve the development of children with Down syndrome in education, especially in special schools. Parents who are aware of this will send their children to schools that suit the needs of children with Down syndrome and children will receive formal education and learning and provide full support so that the results are much better in aspects of child development, especially language development in communication.

4 Conclusion

Basically, all living things, in this case humans, have the same rights regardless of whether the human condition is normal or not. Children with Down syndrome are part of living beings who also have the right to get a normal life in general, namely going to school and having a good environment. Children with Down syndrome who have physical and mental limitations that cause disturbances in language development can be directed to be good when they are in the right social environment. Collaboration is needed between teachers at school and parents to support the process of language development considering that children with Down syndrome tend to use basic words or single words in communicating and teachers can apply media based learning models in the form of models or pictures because children with Down syndrome prefer visuals that interest them to know or learn something.

5 References

- [1] Clinic, G. *Tanda Gejala Down Syndrome dan Gangguan yang Menyertai*. [Online] Tersedia: 1 [18 November 2014]. (2012).
- [2] Devitt, M. & Hanley, R. *The Blackwell Guide to the Philosophy of Language*. USA: Blackwell Publishing Ltd. (2006).
- [3] Kaiser, A. P., Hester P. P., & McDuffie, A. S. Supporting Communication in Young Children with Developmental Disabilities. *Mental Retardation and Developmental Disabilities Research Reviews*, 7, 143-150. (2001).
- [4] Kumin, L. *Early Communication Skills for Children with Down Syndrome: A guide for parents and professionals*, 2nd ed. Bethesda, MD: Woodbine House. (2003).
- [5] Machmud, Hadi. *Bahasa Komunikasi Anak Down Syndrome dalam Pembelajaran: Sebuah Studi Kasus*. Jurnal Smart Paud, Vol. 5, No. 1., Januari. (2022).
- [6] Marder, L. & Cholmáin, C. N. Promoting Language Development for Children with Down Syndrome. *Currents Paediatrics*, 16, 495-500. (2006).
- [7] Miles, M. B. & Huberman A. M.: *Qualitative Data Analysis*. California: SAGE Publications, Inc. pp. 20. (2014).

- [8] Noermanzah. *Bahasa Sebagai Alat Komunikasi, Citra Pikiran, dan Kepribadian*. Prosiding Seminar Nasional Bulan Bahasa (Semiba), 306-319. (2019).