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# PSYCHOEDUCATION: THE ROLE OF PARENTS IN IMPROVING MOTOR SKILLS AND UNDERSTANDING EMOTIONAL STATE OF CEREBRAL PALSY CHILDREN USING FLASH CARDS

## **Bella Ramadhanti, Mary Philia Elisabeth** Universitas Surabaya, Indonesia Email: Bellarmdhnti@gmail.com, melisabeth@staff.ubaya.ac.id

# ABSTRACT

Cerebral Palsy (CP) is a chronic motor disorder resulting from non-progressive damage to brain development, exhibiting various clinical disorders with unknown causes. This research focuses on a severe case of CP in a student named Prisil, investigating the challenges she faces in motor and language skills development. Prisil's parents and teachers play a crucial role in addressing these challenges. The study, employing a qualitative case study approach, utilizes psychological tests and interventions to understand and enhance Prisil's abilities. The intervention plan targets parental knowledge, language improvement, and teacher support. Prisil's developmental history, challenges, and interventions are explored, emphasizing the need for structured learning environments. The findings contribute insights into optimizing motor and language skills in children with CP, enhancing their overall wellbeing and fostering independence.

**KEYWORDS** *Psychoeducation, Role of Parents, Motor Skills, Cerebral Palsy* 

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# **INTRODUCTION**

Cerebral Palsy is a chronic motor disorder caused by non-progressive damage to brain development. Jan, (2006) states that Cerebral Palsy essentially exhibits various clinical disorders, and in most cases, the cause is unknown. However, it poses a high risk for babies born prematurely. Children with CP suffer from various issues and potential disabilities such as mental retardation, epilepsy, feeding difficulties, visual impairment, and hearing disorders (Gulati & Sondhi, 2018).

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Sankar & Mundkur, (2005) also state that cerebral palsy is a condition of permanent and non-progressive brain tissue damage. It occurs at a young age (since birth), hindering normal brain development. Clinical manifestations may change over a person's lifetime, showing abnormalities in posture and movement, accompanied by neurological disorders such as spastic paralysis, disorders of the basal ganglia, and cerebellum, as well as mental disorders (Graham et al., 2016). It can be concluded that CP is fundamentally a disorder affecting body movement and posture.

Cerebral Palsy (CP) is classified into several motor types, namely:

- 1) Spastic, accounting for 85%, which is the most common form, resulting in stiff muscles due to damage to the motor cortex.
- 2) Dyskinesia, accounting for 7%, including dystonia, athetosis, and/or chorea, caused by damage to the Basal Ganglia area of the brain.
- 3) Ataxia, accounting for 4%, characterized by shaky movements that can affect balance and spatial awareness, resulting from damage to the cerebellum area of the brain.
- 4) Mixed type, where a child with cerebral palsy may have two different motor types, such as spastic and dystonia. (Himmelmann, 2016)

Cerebral palsy (CP) can also affect different parts of the body, including:

- 1) Spastic quadriplegia/bilateral, affecting both arms and affected limbs. Muscles of the trunk, face, and mouth are also often affected.
- 2) Spastic diplegia/bilateral, affecting both affected limbs, with arms possibly affected to a lesser extent.
- 3) Spastic hemiplegia/unilateral, affecting one side of the body (one arm and one hand). (Monbaliu et al., 2017)

Cerebral palsy (CP) is often classified based on its severity:

- 1) Spastic quadriplegia/bilateral, affecting both arms and affected limbs. Muscles of the trunk, face, and mouth are also often affected.
- 2) Spastic diplegia/bilateral, affecting both affected limbs, with arms possibly affected to a lesser extent.
- 3) Spastic hemiplegia/unilateral, affecting one side of the body (one arm and one hand). (Wood, 2006)

Based on observations of one student at the YPAC Surabaya Special School, named Prisil (name concealed), Prisil falls into the "severe" category. Children with CP at this level need a wheelchair and face significant challenges in their daily activities. In daily activities, Prisil still requires the assistance of a wheelchair to support her daily activities. Consistent with this, Prisil experiences hindrances in both gross and fine motor skills. Therefore, in self-help activities, Prisil cannot yet perform them independently and still needs assistance from those around her. According to the GMFCS motor function classification, Prisil is classified at level 5, meaning she has limitations in her ability to maintain head and body posture against gravity and control leg and arm movements, thus requiring a wheelchair.

This condition is the reason the researcher focuses on motor skill development in children with cerebral palsy (Thahir, n.d.). The role of parents is crucial in training a child's motor development. Prisil's parents did not provide her with the opportunity to practice simple things in daily activities, making Prisil still

Psychoeducation: The Role of Parents in Improving Motor Skills and Understanding Emotional State of Cerebral Palsy Children Using Flash Cards dependent on assistance from those around her. Currently, Prisil cannot speak well and clearly, posing a barrier to communication. However, Prisil can grasp information conveyed by her conversation partner. In conveying information, Prisil uses mostly non-verbal language by directly pointing to or indicating the desired object. The limited verbal ability makes it difficult for others to understand the information Prisil wants to convey (Nurihsan & Agustin, 2011).

The challenges faced by Prisil can be developed with support from those around her to optimize her abilities, especially in motor and language/verbal skills. At school, teachers try to understand Prisil's limitations by providing simple instructions during the teaching and learning process. Prisil can understand the instructions given to her, but the learning system provided is not yet structured. Additionally, dealing with students with varying disabilities often confuses Prisil's teacher regarding the teaching approach that would be well-received by Prisil.

Based on the above problems, the researcher is interested in conducting research focusing on "The Role of Parents in Improving Motor Skills and Understanding the Emotional State of Children with Cerebral Palsy Using Flash Cards." The goal of this research is to identify the problems experienced by Prisil by exploring data related to development, daily activities, and any forms of treatment that Prisil has undergone and is currently undergoing.

## **RESEARCH METHOD**

This research employs a qualitative study with a case study approach. A case study focuses on a specific case for in-depth observation and analysis. In this study, the researcher uses a single subject, namely one student with cerebral palsy in grade I at SLB YPAC Surabaya. Data is collected by the researcher through interviews (with parents and teachers), observations, and psychological tests.

The psychological testing tools used include the Stanford Binet (SB), Vineland Social Maturity Scale (VSMS), and Marianne Frostig Developmental Test. The following is an explanation of each testing tool used.

- 1. The Stanford Binet (SB) is used to measure IQ to determine the level of intelligence and whether it corresponds to their physical age. This helps tailor the teaching method to the individual's abilities and provides an overview of areas that need improvement.
- 2. The Vineland Social Maturity Scale (VSMS) is used to determine the level of social maturity of the subject, Prisil. This level of social maturity is assessed based on adaptation abilities and social age, where Prisil experiences developmental delays compared to peers of the same age (8.4 years).
- 3. The Marianne Frostig Developmental Test is used to assess the level of visual abilities in children caused by brain damage, emotional disorders, or developmental delays. This is relevant to children with cerebral palsy, where chronic motor disorders are caused by non-progressive damage to brain development. The test is expected to provide insights into motor development influenced by the limitations experienced.

Based on the data and information obtained, the researcher formulates an intervention plan intended to be beneficial for Prisil, her parents, and teachers in

Icouog	Torgata	Coole	Intervention Forms
Issues	Targets		Intervention Forms
have enough knowledge	Parent	1. Parents gain an understanding of <i>cerebral palsy</i> and the characteristics of the disease.	1. Provision of information on the results of the assessment carried out to
related to training children's independence.		<ol> <li>Parents get a better understanding to train and provide stimulus for children's independence.</li> <li>Parents have an idea of Prisil's potential that can be developed.</li> </ol>	<ul> <li>Prisil.</li> <li>2. Provision of psychoeducation about <i>cerebral palsy</i> and the characteristics of the disease.</li> <li>3. Providing psychoeducation about the obstacles possessed by Prisil.</li> <li>4. Provision of psychoeducation related to potential that can still be</li> </ul>
			developed from Prisil.
Language and verbal skills that need to be improved, especially in the abstract delivery of emotions or desires.	Parent and children	2. Children can convey their wants/needs abstractly to parents.	<ol> <li>Provision of psychoeducation related to skills that parents can do to help children in practicing verbal and language skills.</li> <li>Train Prisil in using <i>flash</i> <i>cards</i> to convey his abstract wants and needs.</li> </ol>
teacher handling for children with <i>cerebral palsy</i> .	Class Teacher	Can meet the needs of children in terms of education such as routinely training writing skills and improving physical movement skills, as well as following lessons in accordance with the existing curriculum but by simplifying according to the abilities of students	Make learning modifications according to the state of <i>cerebral palsy</i> .

optimizing her potential. The intervention plan includes the identified problems, intervention targets, goals, and the form of intervention that has been developed.

# **RESULT AND DISCUSSION**

## **Dynamics of the Problem Chart**

## Predesposing Factors:

Prisil's mother has a history of hypertension and Prisil was born prematurely (one of the factors in the occurrence of CP).

As a child Prisil often had a fever, until at the age of 5 years and 19 days he was diagnosed with CP.

Before being diagnosed with CP, Prisil was taken to the hospital because he had a high fever that reached Precipitating Factors:

Lack of stimulation from parents on the independence of the child.

Lack of parental knowledge to train children's independence.

Parents limit the social sphere of the child.

Limitations in adaptive abilities that trigger a decrease in abilities intelektual.

# Present Problem:

- 1. Limitations in gross and fine motor skills.
- 2. In language and verbal skills, Prisil is quite able to convey his desires concretely, but for something that is still abstraction he is less able, such as when he wants to convey the boredom he feels, etc.
- 3. The existence of intellectual impairment caused by a lack of adaptive abilities possessed.

# Prepetuating Factors:

Parents assume that children cannot do something without the help given.

There is no specific program from the school to meet the needs of the child.

#### Protective Factors:

Parents assume that children cannot do something without the help given.

There is no specific program from the school to meet the needs of the child.

# **Dynamics of Intellectual Disability Problems**

Intellectual Disability - Severe

**Conceptual Aspects** 

- Prisil has an IQ score of 78 (*Borderline Defective*).
- Prisil's mental age is equivalent to that of a 6.5year-old child
- Prisil's vocabulary is still very limited, so for some sentences he has difficulty understanding and needs to be repetition and more detailed explanation.
- Prisil has motor impairments, so she still needs help in writing.

Social Aspects

- Prisil's social maturity is equivalent to that of a 1.9-year-old.
- Prisil is quite capable of good socializing, he can convey his wants and needs through *non-verbal language* or in the form of *gestures* to convey concrete information.
- Prisil is able to respond and respond to the interlocutor when communicating such as nodding and asking simple questions, although his articulation is still very limited.

#### Practical and Adaptive Functions

In daily activities, Prisil is still fully assisted by her parents, such as eating, bathing, changing clothes, and moving from one place to another.

Prisil was born through a normal delivery process when her mother was 8 months and 3 weeks pregnant. Prisil was born prematurely, and her parents were unaware of the cause, although her mother had hypertension, which could be a contributing factor. Prisil's mother mentioned that during her pregnancy, everything seemed fine, and there were no suspicious signs. From a young age, Prisil suffered from a skin condition that required regular doctor visits. After successfully treating the skin condition, Prisil could lead a normal life like other children.

Prisil's parents forgot the exact age when Prisil could start crawling. Before being diagnosed with cerebral palsy, Prisil experienced normal growth similar to other children. However, at the age of 5 years and 19 days, Prisil had a high fever reaching 45.5°C. While Prisil had frequent fevers before, her mother usually treated them with compresses and over-the-counter medications. It was only when Prisil had a fever accompanied by seizures that her parents decided to take her to the hospital.

After five days of hospitalization, Prisil was diagnosed with cerebral palsy. However, Prisil's parents couldn't recall the cause of her cerebral palsy. At the age

Psychoeducation: The Role of Parents in Improving Motor Skills and Understanding Emotional State of Cerebral Palsy Children Using Flash Cards of 5, Prisil experienced developmental delays. At her current age of 8 years and 4 months, she should have achieved various milestones, including physical skills for daily activities, developing a healthy self-image, socializing with peers, learning social roles, basic reading, writing, and math skills, developing concepts for daily life, emotional and moral development, achieving personal freedom, and developing attitudes towards social groups and institutions.

Despite these expectations, Prisil faces obstacles related to verbal and gross and fine motor skills due to cerebral palsy. This condition involves permanent disorders in movement and posture development, leading to limitations in non-progressive activities associated with fetal or infant brain damage.

The developmental challenges caused by cerebral palsy mean that Prisil cannot move her limbs optimally for daily activities, requiring assistance. Although Prisil has made progress in fine motor skills through therapy, her parents have not actively trained these abilities. Prisil still relies on others for daily activities and struggles with clear speech, resorting to non-verbal communication.

Prisil's challenges can be addressed with support from those around her, especially in optimizing her motor and language skills. In school, teachers try to accommodate Prisil's limitations by providing simple instructions, but the unstructured learning environment and the varying needs of students with different limitations often confuse Prisil's teachers.

Issues: Limitations in gross and fine motor skills				
	External	Internal		
Supportive (Protective)	Prisil's parents (mothers) routinely involve Prisil in	Prisil has attended TENS therapy and is currently actively		
	therapy (physiotherapy and hvdrotherapy)	participating in physiotherapy and hydrotherapy.		
Retardant	Parents (mothers) and	Lack of independence in Prisil over		
(Risk)	teachers assume that children daily activities.			
	cannot do something without			
	the help given.			
Issue: In terms of language and verbal skills, Prisil is quite able to convey his				
wishes concretely, but for something that is still abstract he is less able.				
	External	Internal		
Supportive	Prisil has good social skills,	Prisil is quite active in narrating his		
(Protective)	she easily socializes with	activities when asked, although his		
	people around her. So that he	articulation is still unclear, but he		
	has a place to carry out	continues to repeat previously		
	concrete communication.	spoken words if the listener does not		
		understand enough of what he is		
		saying.		
Retardant	Parents (mothers) limit the	Prisil is used to using non-verbal		
(Risk)	social sphere of children and	language for concrete things and		
	no treatment is given by the	chooses silence or crying for		
	school to train children's	something he cannot express.		
	verbal and language skills.			

#### CONCLUSION

The provision of psychoeducation to parents, especially Prisil's mother, involves obtaining information and understanding about her child's condition, who is affected by cerebral palsy. Before the intervention, parents were unaware of the severity of their child's cerebral palsy and believed that their child was normal, expecting improvement through therapy. Following the intervention, parents now understand that training their child's motor skills is not limited to physiotherapy sessions but can also be conducted at home by encouraging the child to engage in daily activities independently. This intervention has also helped parents become more aware of the importance of support and the role of parents in a child's growth and development.

The intervention for the child focuses on non-verbal communication as an alternative form of communication applicable in daily life. It is hoped that this intervention will assist Prisil in developing her ability to interact with new people. The use of flashcards is expected to make it easier for Prisil to express her desires and needs through images tailored to her daily requirements. Overall, the intervention process aims to promote Prisil's independence and enhance her communication skills.

As for recommendations, based on the research findings and the implemented intervention, the researcher suggests that future researchers should conduct detailed anamnesis. This will enable them to apply interventions that are more tailored to the client's needs, ultimately helping the client improve.

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