

Parent's Knowledge, attitudes and perceptions towards children with intellectual disabilities in Kerala

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ABSTRACT

Intellectual disability (ID) is a neurodevelopmental condition characterized by limitations in intellectual functioning and adaptive behaviour that affect communication, learning and daily life skills. The aim of this study was to assess the parental knowledge, attitude and perception regarding language problems and ID among respondents. A close ended questionnaire was developed and data was collected from parents to evaluate the understanding of their Knowledge, Attitudes and Perception toward supporting their children with intellectual disability (CWID). The findings of the current study revealed that respondents had generally positive knowledge, attitudes and particularly in recognizing speech difficulties and supporting interventions such as speech therapy while perception was comparatively lower about the outcomes and abilities of CWID. The study also highlights the important role of Speech-Language Pathologists (SLPs) in the early identification, assessment and management of communication difficulties in CWID as well as in parent counselling, awareness creation and improving communication outcomes through appropriate intervention strategies. Overall, the study concludes that although knowledge and attitudes are adequate, there is a need to improve perception to enhance understanding and support for CWID.

KEYWORDS: Parent's Knowledge, Attitudes and Perceptions, children with Intellectual Disabilities

INTRODUCTION

Every child holds a unique and irreplaceable place in the lives of parents. While many children follow a typical developmental trajectory some are born with or acquire special needs that significantly influence parental expectations, caregiving practices and access to developmental services (Ravindranadan & Raju, 2007). Parents naturally aspire for their children to develop optimally across intellectual, physical, emotional and communicative domains. However, when a child is diagnosed with an intellectual disability (ID) accompanied by language disorders, it often presents emotional, social and practical challenges that affect not only the child but the entire family system (Kumar & Singh, 2012).

ID is widely recognized as a bio-psycho-social condition arising from a complex interaction of genetic, biological, psychological and environmental factors. These interacting forces such as family dynamics, societal attitudes, peer relationships and access to healthcare and educational services play a critical role in shaping the adaptive functioning and quality of life (QoL) of children with intellectual disability. Historically CWID were perceived as incapable of learning and social participation often subjected to neglect, stigma and exclusion from mainstream society (Engel, 1977).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), ID is defined as a neurodevelopmental disorder characterized by significant limitations in both intellectual functioning and adaptive behaviour across conceptual, social and practical domains with onset during the developmental period (American Psychiatric Association [APA], 2013). Intellectual functioning is typically assessed through standardized measures with an intelligence quotient (IQ) of approximately 70 or below while adaptive functioning reflects everyday communication, social participation and independent living skills (Luckasson et al., 2002; Sarason & Sarason, 2005).

Language development is one of the most significantly affected domains in CWID. Language disorders may manifest as delays in speech acquisition, limited vocabulary, poor sentence structure, difficulties in comprehension and impaired pragmatic or social use of language. These communication challenges often persist across childhood and adolescence and directly affect academic achievement, social relationships, emotional regulation and community participation. Since language is the primary medium through which children interact with their environment, impairments in this area may further compound the functional limitations associated with CWID.

Despite increasing awareness of ID in clinical and educational settings, CWID and language disorders frequently face negative societal attitudes. They are often denied equal opportunities, dignity and participation resulting in marginalization and reduced access to inclusive services.

Parental beliefs and societal perceptions play a crucial role in either facilitating or hindering early identification, intervention and rehabilitation. Negative attitudes, stigma and misconceptions surrounding disability may lead to delayed help seeking, reduced engagement with speech-language services and limited stimulation within the home environment.

Parents' knowledge, perceptions and attitudes constitute a critical component of the child's developmental ecology. The attitudes held by parents significantly influence the "handicapping" or enabling nature of the child's environment (Hahn, 1982; Yunker, 1988). Raising CWID and language disorders often places increased demands on parents in terms of time, emotional resilience, financial resources and social adjustment. When combined with societal stigma and lack of adequate support systems these demands may lead to heightened parental stress, emotional distress and social withdrawal which in turn may negatively affect parent child interaction and language stimulation.

Bowlby (1988), through attachment theory emphasized the importance of nurturing and responsive caregiver relationships in fostering optimal emotional and cognitive development. In the context of CWID and language disorders, parental responsiveness, acceptance and understanding become even more crucial. Parents' perceptions of their child's abilities, prognosis and communicative potential influence their interaction patterns, expectations and involvement in therapeutic interventions.

Kagan and Havemann (1980), defined attitude as an organized and enduring set of beliefs and feelings that predisposes an individual to respond in a particular manner. In parents of CWID, attitudes are often shaped by emotional reactions such as shock, denial, guilt, grief, anger, helplessness and shame (Drew et al., 1984; Rangaswamy, 1989; Chandramuki et al., 2012). These emotional responses may influence

parental perceptions of language disorders ranging from viewing them as minor delays to irreversible limitations thereby affecting decisions related to assessment, therapy and educational placement.

CWID are capable of learning functional communication, self-help and social skills when provided with structured training and appropriate support (Hazarika et al., 2014). Language intervention when initiated early and reinforced within the family context significantly enhances adaptive functioning and social participation. However in many parts of India, disability continues to be viewed through a lens of tragedy and social burden often leading to exclusion and diminished QoL for the affected individuals (Girimaji & Srinath, 2010).

Rangaswami (1995) observed 40 parents who had CWID and examined their behavioural difficulties as well as maternal attitudes related to acceptance, education and future expectations, home management and hostility. The findings of the study showed that mothers of children with behaviour problems demonstrated significantly more negative attitudes across these areas compared to mothers of children without behaviour problems. The study concluded that the presence of behavioural difficulties strongly influenced maternal attitudes, highlighting the impact of child behaviour on parental perceptions and responses.

Lakhan and Sharma (2010) conducted a study in Barwani, India on families knowledge, attitude, practice and found that tribal communities had limited knowledge about ID and often attributed it to supernatural causes leading to stigma and delayed care. The study also showed differences between tribal and non-tribal groups in awareness and caregiving practices with attitudes and behaviours largely shaped by cultural beliefs, highlighting the need for community-based awareness and rehabilitation programs.

Olsson and Pettersson (2012) explored the experiences of parents of preschool CWID in Sweden using semi-structured interviews with 13 parents. The study showed that parents navigated both formal and informal support systems including syndrome-specific parental groups to access services for their children. The findings of the study highlighted the importance of tailoring early intervention to the needs of both the child and family and underscore the value of a family-centred approach in providing support for CWID. Hazarika et al. (2019) investigated parents attitudes toward children and adolescents with intellectual developmental disorder (IDD) using a sample of 66 parents whose children were receiving services at daycare centers. A 50-item Likert-scale questionnaire assessed parents' behaviors, perceptions, reactions, values and feelings. The findings revealed that although parents showed love and acceptance toward their children, many also experienced frustration and disappointment and demonstrated overprotective behaviors. This overprotectiveness was identified as a barrier to the development of adaptive functioning and independent living skills in children with IDD highlighting the need for parent support and guidance to promote more adaptive parenting approaches.

Wakeman et al. (2020) studied views of 211 parent perception on literacy instruction for their CWID on reading skills, teaching methods and expectations in U.S schools. Most parents felt learning to read was very important and affected future life outcomes. Barriers differed by grade: elementary students faced behaviour and attention challenges while high school students had less instructional time. Although parents valued reading, listening and vocabulary skills only half reported a strong focus on early reading skills like decoding. The study emphasizes the need to address these barriers and improve literacy instruction for CWID.

Jacob and Pillay (2025) found that parental knowledge, attitude and practice toward inclusive education for CWID are significantly influenced by age and gender with older female parents showing higher knowledge levels. The study highlights that such demographic differences affect acceptance of inclusive education and recommends targeted educational programs to improve parental awareness and attitudes.

Karpati and Miklosi (2026) studied parents' perception and attitudes in supporting the inclusion of children with various disabilities. They assessed 347 Hungarian parents about knowledge, ability to help the classroom and friendship inclusion across nine disability types. Parents generally had positive attitudes but felt unsure about how to help. Greater knowledge increased confidence while concerns about the child's impact sometimes lowered willingness to support inclusion especially for children with ADHD, CWID and speech impairments. The study suggests that providing targeted information and guided experiences can help parents feel more capable and supportive of inclusion.

Speech-Language Pathologists (SLPs) play a key role in the evaluation and management of speech, language and communication difficulties in CWID. They also guide and counsel parents to support communication development at home and social settings. Understanding parental Knowledge, Attitude and Perception can help SLPs and other professionals design effective family-centered intervention programs, parent education strategies and better service delivery systems for CWID in Kerala.

NEED OF THE STUDY

CWID commonly face difficulties in speech, language and communication which can negatively affect their education, social interaction and daily functioning. Early recognition and timely intervention are important for enhancing their overall development and communication abilities. Parents are often the first to notice developmental concerns and are actively involved in seeking treatment and supporting intervention. Therefore parental knowledge, attitudes and perceptions regarding ID and communication disorders have a significant impact on early identification, treatment-seeking behaviour and rehabilitation outcomes.

Despite the increasing recognition of ID many parents may still have limited knowledge, attitude or negative perceptions about communication disorders and the intervention services available for these children. In districts such as Calicut and Malappuram in Kerala, there is limited research examining parental knowledge, attitude and perception toward CWID. Hence, the present study is important to identify gaps to understand factors that influence access to intervention and rehabilitation services.

METHOD

Aim of the study:

To evaluate the level of Knowledge, Attitude and Perception of parents towards language disorder in CWID from Calicut and Malappuram districts using a close ended yes/no questionnaire.

Participants: A total of 30 parents of CWID in the mental age range of 4-7 years who are currently going to speech therapy for a minimum of 1 year were chosen randomly from Calicut and Malappuram districts in Kerala.

Inclusion criteria

- Parents of CWID
- Parents of CWID undergoing regular speech therapy

Exclusion criteria

- Parents of CWID visual and hearing impairment.
- Parents of CWID with a history of neurological impairment.
- Parents of CWID with other child language disorders.

The research was conducted in two phases:

Phase 1: A close ended questionnaire consisting of 30 items was developed with 10 questions each asses-

sing knowledge, attitude and perception. The questionnaire was validated by five Speech-Language Pathologists (SLPs).

Phase 2: The questionnaire was administered to 30 parents of children with ID from Calicut and Malappuram districts in Kerala.

Statistical analysis:

Categorical variables were summarized using frequencies and percentages. Quantitative variables were presented as mean, standard deviation (SD).

Karl Pearson's correlation coefficient analysis was conducted to ascertain the relationship between the variables.

All statistical analyses were performed using SPSS version 23.0 software. The level of statistical significance was set at 5% ($p < 0.05$).

RESULTS AND DISCUSSION

The present study aims to assess the parents KAP of CWID. The result obtained are discussed below.

Table 1 shows the parental knowledge of CWID.

	Yes		No		Not sure		Total	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Knowledge								
1. Do you know what a language problem is?	27	90.0%	2	6.7%	1	3.3%	30	100.0%
2. Do you know what is Intellectual disability (ID)?	21	70.0%	7	23.3%	2	6.7%	30	100.0%
3. Do you think ID result in language delay?	20	66.7%	2	6.7%	8	26.7%	30	100.0%
4. Does your children often have trouble talking?	28	93.3%	2	6.7%	0	0.0%	30	100.0%
5. Do you think late talking can be a sign of a problem?	25	83.3%	1	3.3%	4	13.3%	30	100.0%
6. Does your child have trouble understanding what others say?	15	50.0%	14	46.7%	1	3.3%	30	100.0%
7. Does your child have trouble expressing their thoughts in words?	27	90.0%	1	3.3%	2	6.7%	30	100.0%
8. Do you know that speech therapy can help ID?	26	86.7%	3	10.0%	1	3.3%	30	100.0%
9. Does ID affect school learning?	25	83.3%	2	6.7%	3	10.0%	30	100.0%
10. Do children improve their talking skills with support?	21	70.0%	5	16.7%	4	13.3%	30	100.0%

Figure 1 shows the percentage of parental knowledge of CWID.

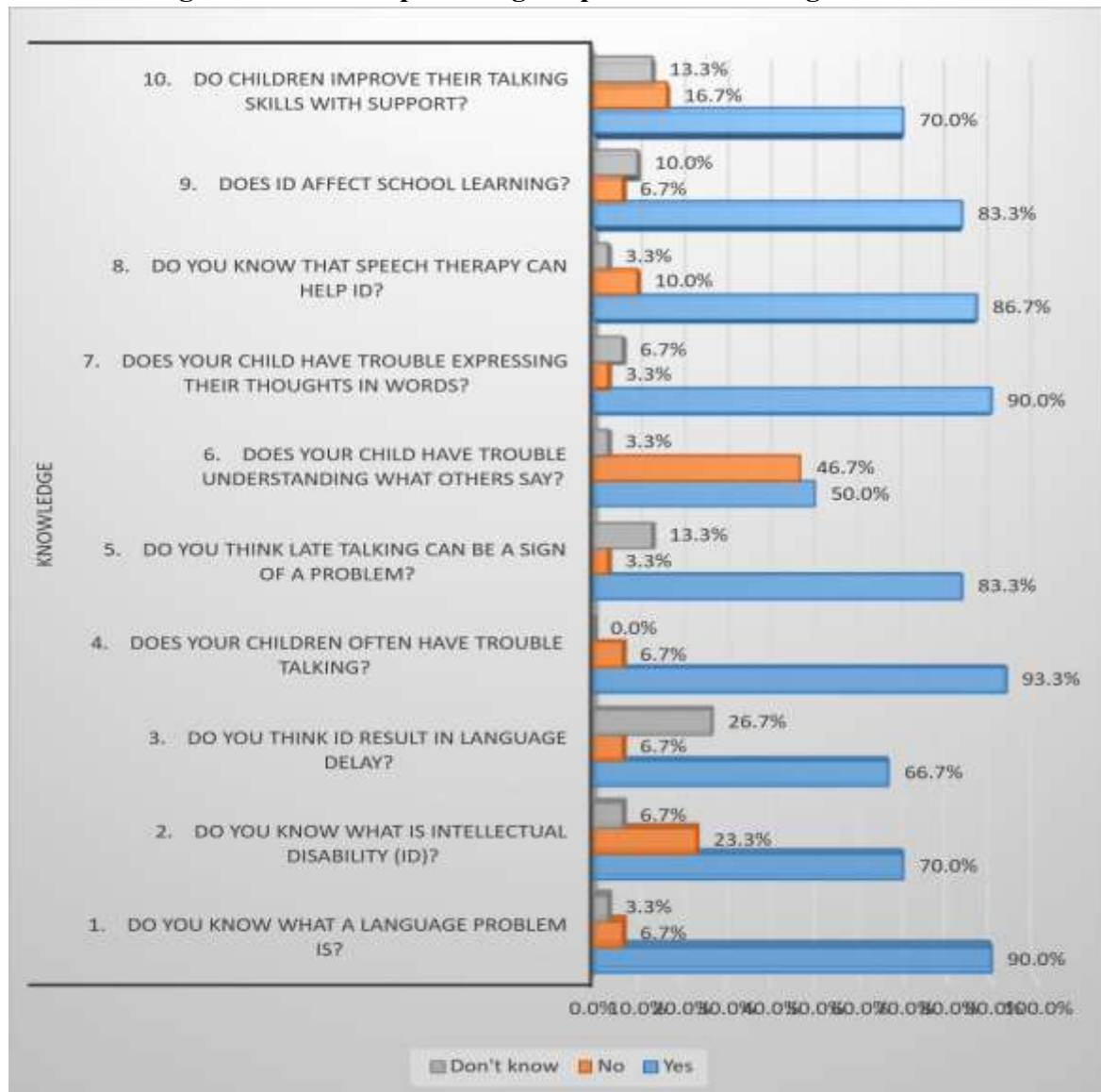


Table 1 and figure 1 indicate the responses and percentage score yielded for each question about knowledge. A large majority of parents (90%) reported that they know what a language problem is, while 70% were aware of ID. About 66.7% believed that ID results in language delay although 26.7% were not sure. Most parents (93.3%) observed their children often having trouble talking and 83.3% considered late talking as a possible sign of a problem. Responses were divided on whether children have difficulty understanding others, with 50% of participants agreeing and 46.7% disagreeing. A high proportion (90%) indicated that children have trouble expressing their thoughts in words. Knowledge of intervention was also evident with 86.7% knowing that speech therapy can help children with ID. Additionally 83.3% of parents believed that ID affects school learning and 70% of them agreed that children's talking skills can improve with appropriate support. Overall the findings suggested that parents have relatively better knowledge though some uncertainty remains in specific areas such as comprehension difficulties and the link between ID and language delay.

Table 2 shows the parental attitude of CWID.

Attitude	Yes			No		Not Sure		Total
1. Are you willing to take your child to speech therapy?	27	90.0%	3	10.0%	0	0.0%	30	100.0%
2. Does your child attend therapy sessions regularly?	22	73.3%	8	26.7%	0	0.0%	30	100.0%
3. Do you help your child practice speaking at home?	29	96.7%	0	0.0%	1	3.3%	30	100.0%
4. Do you encourage your child to speak with others?	29	96.7%	0	0.0%	1	3.3%	30	100.0%
5. Do you feel confident helping your child communicate?	19	63.3%	3	10.0%	8	26.7%	30	100.0%
6. Do you support your child in social activities?	28	93.3%	2	6.7%	0	0.0%	30	100.0%
7. Do you believe teachers should support children with ID?	23	76.7%	2	6.7%	5	16.7%	30	100.0%
8. Would you attend parent training programs about communication?	18	60.0%	9	30.0%	3	10.0%	30	100.0%
9. Would you recommend speech therapy to other parents?	25	83.3%	3	10.0%	2	6.7%	30	100.0%
10. Do you believe your involvement	26	86.7%	1	3.3%	3	10.0%	30	100.0%

helps your child improve?								
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Figure 2 shows the percentage of parental attitude of CWID.

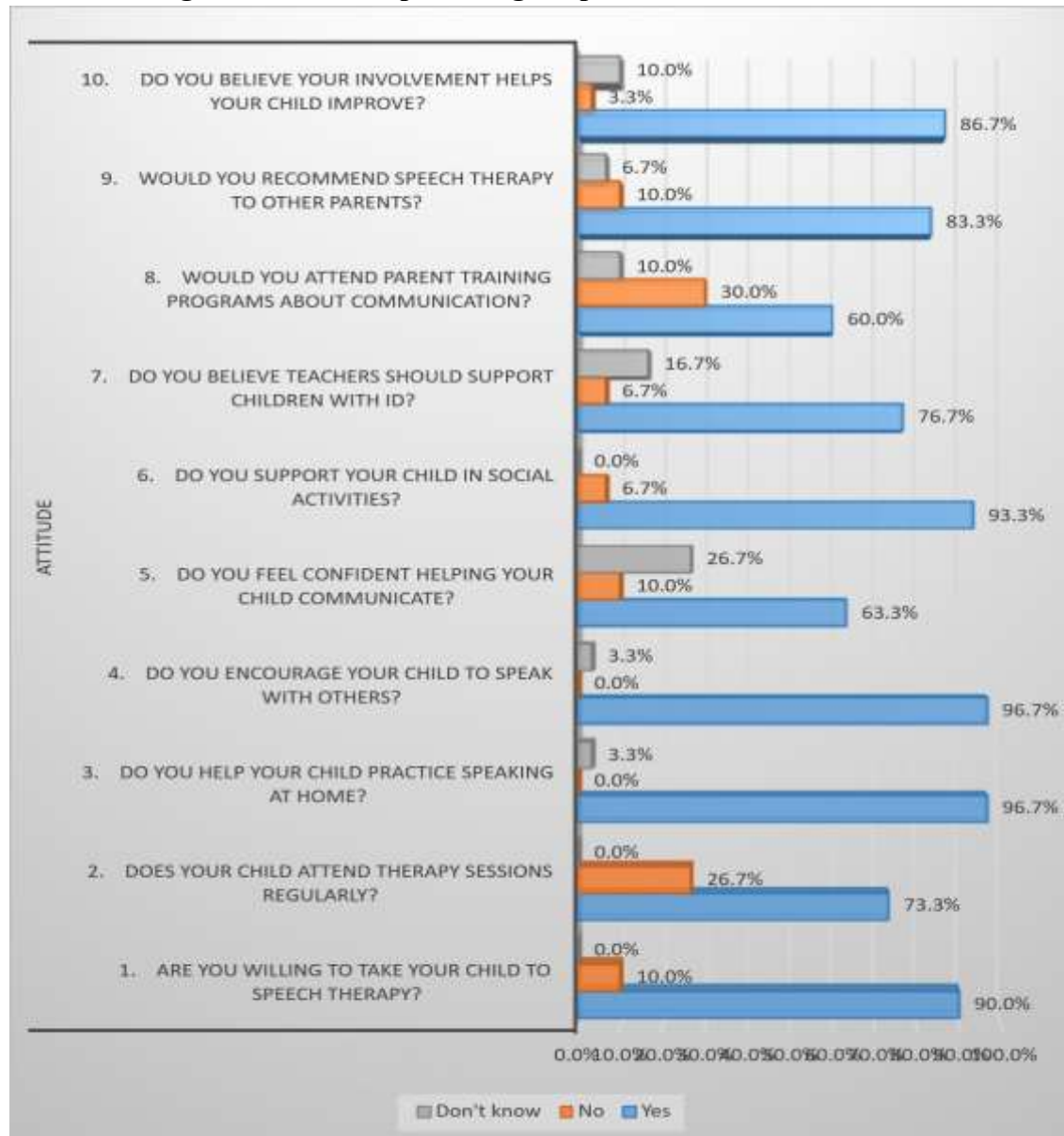


Table 2 and Figure2 presents parents' attitudes toward CWID. A large majority (90%) were willing to take their child to speech therapy and 73.3% reported that their child attends therapy regularly. Almost all parents help their child practice speaking at home (96.7%) and encourage them to communicate with others (96.7%). Most parents (93.3%) also support their child's participation in social activities. About 63.3% felt confident in helping their child communicate though 26.7% were not sure. A majority (76.7%) believed teachers should support CWID. While 60% expressed willingness to attend parent training programs, while 30% were not interested. Additionally 83.3% would recommend speech therapy to others and 86.7% believed their involvement helps improve their child's abilities. Overall the findings indicate a positive parental attitude with some hesitation in areas like training participation and confidence.

Table 3 Shows the parental perception of CWID.

Perception	Yes		No		Not Sure		Total	
1. Do you think ID are serious?	26	86.7%	1	3.3%	3	10.0%	30	100.0%
2. Do you think ID are common in children with language problem?	15	50.0%	8	26.7%	7	23.3%	30	100.0%
3. Do you think ID can affect a child's future?	18	60.0%	7	23.3%	5	16.7%	30	100.0%
4. Do you believe children with ID can improve?	20	66.7%	3	10.0%	7	23.3%	30	100.0%
5. Do you think communication is important for daily life?	30	100.0%	0	0.0%	0	0.0%	30	100.0%
6. Do you think children with ID can succeed in school?	15	50.0%	6	20.0%	9	30.0%	30	100.0%
7. Do you believe early treatment is important?	27	90.0%	1	3.3%	2	6.7%	30	100.0%
8. Do you think professional help is necessary for ID?	26	86.7%	0	0.0%	4	13.3%	30	100.0%
9. Do you think society understands children with ID?	11	36.7%	9	30.0%	10	33.3%	30	100.0%
10. Do you feel ID are often misunderstood by society?	15	50.0%	10	33.3%	5	16.7%	30	100.0%

Figure 3 Shows the percentage of parental perception of CWID.

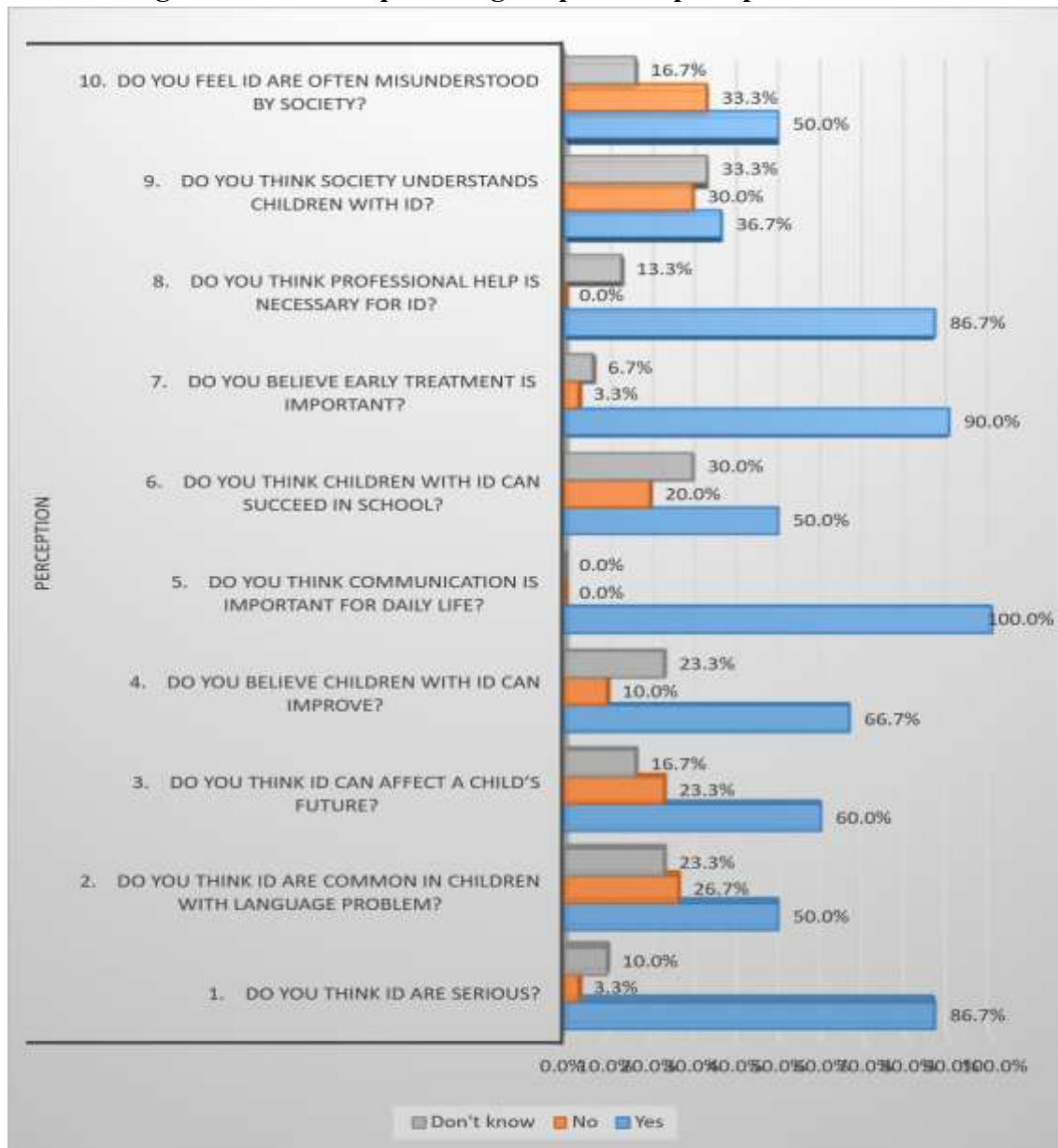


Table 3 and Figure 3 present respondents' perceptions regarding ID. A large majority (86.7%) considered ID to be a serious condition, while 50% believed that ID is common among children with language problems. Most respondents (60%) felt that ID can affect a child's future, and 66.7% believed that children with ID can improve. All participants (100%) agreed that communication is important for daily life and half (50%) believed that CWID can succeed in school. Furthermore, a very high proportion recognized the importance of early treatment (90%) and professional help (86.7%) for CWID. Regarding social awareness 36.7% believed that society understands CWID. In addition 50% felt that ID is often misunderstood by society. Overall the findings indicate generally positive perceptions and awareness about ID particularly concerning the importance of communication, early intervention and professional support, although some uncertainty remains about societal understanding and acceptance of CWID.

Table 4 Shows the overall percentage of Knowledge, Attitudes and Perception among parents of CWID

		Count	Column N %	Mean(out of 10)	Standard Deviation
Knowledge	Poor Knowledge(0 - 4)	2	6.7%	7.83	1.70
	Moderate(5 - 7)	8	26.7%		
	High (8 - 10)	20	66.7%		
	Total	30	100.0%		
Attitudes	Poor Attitude(0 - 4)	2	6.7%	8.20	2.20
	Moderate(5 - 7)	9	30.0%		
	Good (8 - 10)	19	63.3%		
	Total	30	100.0%		
Perception	Low Perception(0 - 4)	5	16.7%	6.77	2.49
	Moderate(5 - 7)	10	33.3%		
	High(8 - 10)	15	50.0%		

Figure 4 Shows overall Knowledge, Attitude and Perception of CWID

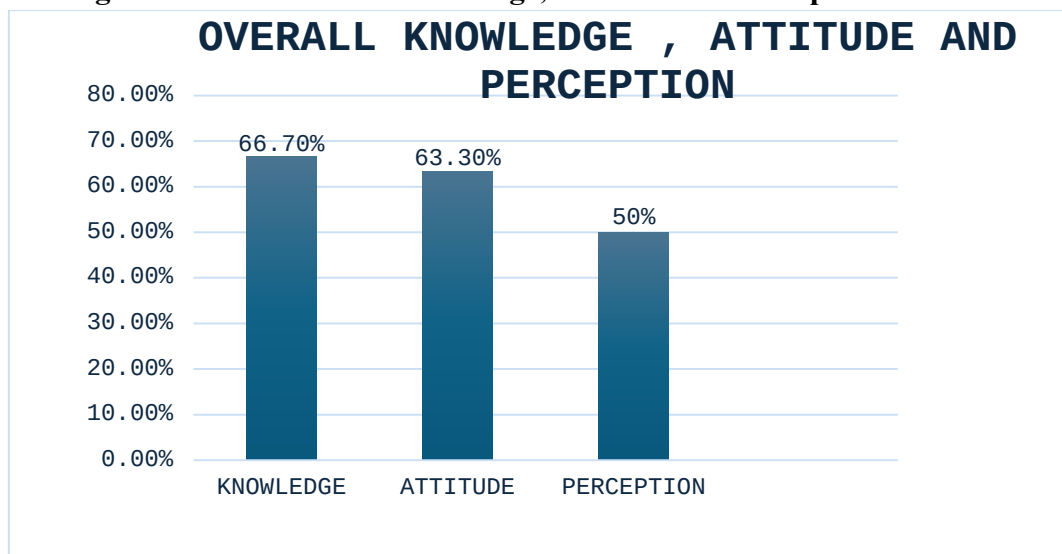


Table 4 and Figure 4 revealed that parents of CWID had an overall knowledge (66.7%), positive attitude (63.3%) and perception (50%) respectively.

Table 5 shows the Correlations between Knowledge, Attitude and Perception

		N	Karl Pearson Correlation	p	
	Knowledge & Attitudes	30	.615	.000	Sig
	Knowledge & Perception	30	.267	.153	NS
	Attitudes & Perception	30	.135	.478	NS

- Sig- Significant
- NS-No significant

Table 5 revealed that significant differences are noticed in the knowledge & attitude of parents towards CWID. However no differences were noticed on their knowledge & perception and attitude & perception.

DISCUSSION

ID is a neurodevelopmental condition marked by significant limitations in intellectual functioning and adaptive behavior with onset during the developmental period (APA, 2023). Parents of CWID frequently face multiple challenges including emotional strain, social pressure and the demand for long-term care and support. In addition, their Knowledge, Attitude and Perception toward ID strongly influence how they understand, accept and support their child's needs. Based on the findings of the current study, it can be inferred that parents of CWID have approximately moderate levels of knowledge, perception and positive attitudes toward ID. It was found that the level of knowledge was about 66.7% among the parents. The results of the current study are in accordance with the study by Alhossyan (2025), who reported that parents possessed positive knowledge regarding inclusive education for CWID. The present study also revealed that parents demonstrated positive attitudes (63.3%) toward CWID, similar findings were reported by Mushtaq et al. (2015), who observed that parents generally demonstrated positive attitudes toward managing the behavioral problems of CWID. However, perception scores in the current study were comparatively lower (50%), indicating that parents may still have limited understanding and mixed interpretations regarding disability-related issues. This finding is consistent with Bhattacharya and Paul (2018), who reported mixed parental perceptions toward CWID and emphasized the need for greater awareness and inclusive support.

Overall, the findings indicate that while many parents are reasonably knowledgeable about ID and tend to hold positive attitudes, their deeper understanding and interpretation of disability-related issues remain limited. Therefore, structured educational and awareness programs are necessary to strengthen parental understanding, reinforce positive attitudes and improve overall caregiving practices for CWID.

SUMMARY AND CONCLUSION

The current study aimed to assess the knowledge, attitudes and perception of parents of CWID and to compare the correlation among the objectives. The chosen participants were 30 parents of CWID who were randomly selected from Calicut and Malappuram districts and were provided with a questionnaire of 30 closed end questions that were developed and verified by 5 SLPs. Based on the questionnaire response, it appears that most of the parents hold moderate knowledge and positive attitudes towards CWID, language disorders and the importance of speech therapy and parental involvement. However, perceptions were comparatively lower, particularly concerning societal understanding, future outcomes and abilities of CWID. Most parents recognized the importance of early intervention, communication and professional support, while some uncertainty remained in areas related to comprehension difficulties, inclusive participation and social acceptance. Correlation analysis showed a significant relationship between knowledge and attitudes, indicating that better knowledge contributes to more positive parental attitudes. Overall, the study concludes that parents possess moderate knowledge and supportive attitudes toward CWID.

Limitations of the study

- Limited sample size
- Study was conducted only in Calicut and Malappuram districts of Kerala

Future Directions

- Include a larger sample size.
- Study can be expanded to other districts and states.
- Study can be also including teachers, caregivers and health professionals.
- Study can be done in parents of other children with language disorder.

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