Jurnal Pendidikan Keperawatan Indonesia, Volume 12 Issue 1, June 2026 Page 123–138

JURNAL UPI

JURNAL PENDIDIKAN KEPERAWATAN INDONESIA

Journal Homepage: http://ejournal.upi.edu/index.php/JPKI

JPKI

Barriers and Facilitators to Inclusive Healthcare for Children with Developmental Disabilities: A Qualitative Study of Caregiver and Healthcare Provider Perspectives

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ABSTRACT

Introduction: Children with developmental disabilities frequently require long-term, multidisciplinary, and family-centered healthcare services. However, caregivers often encounter structural, logistical, communication, and professional barriers when accessing healthcare services for their children. Understanding both barriers and facilitators from caregiver and healthcare provider perspectives is essential for improving inclusive healthcare. **Objective:** This study aimed to explore barriers and facilitators to inclusive healthcare for children with developmental disabilities from the perspectives of caregivers and healthcare providers. **Methods:** A qualitative descriptive study was conducted using individual semi-structured interviews with 36 participants, consisting of 20 caregivers and 16 healthcare providers. Participants were recruited purposively from hospitals, rehabilitation centers, and community health facilities. Interviews were conducted individually, audio-recorded, transcribed verbatim, and analyzed using inductive thematic analysis. Recruitment continued until thematic saturation was achieved, defined as the point at which no new codes, categories, or themes emerged across consecutive interviews. **Results:** Six themes were identified: structural constraints within healthcare systems, accessibility and logistical barriers, communication dynamics between caregivers and healthcare providers, professional competency and training gaps, caregiver resilience and advocacy, and collaborative community-based support systems. Key barriers included limited specialized services, long waiting times, transportation difficulties, complex referral pathways, and insufficient provider training. Facilitators included caregiver advocacy, interdisciplinary collaboration, peer support networks, and community-based support systems. **Conclusion:** Inclusive healthcare for children with developmental disabilities requires system-level improvements in healthcare infrastructure, referral coordination, provider training, family-centered communication, and community-based support. Strengthening these areas may improve equitable healthcare access, particularly in resource-constrained settings.

ARTICLE INFO

Article History:

Received: March 08th, 2026
Revised: June 29th, 2026
Accepted: June 30th, 2026
First Available Online:
June 30th, 2026
Published: June 30th, 2026

Keywords:
Inclusive healthcare, Developmental disabilities, Children with disabilities, Caregivers, Qualitative research.

1. INTRODUCTION

Children with cognitive impairment, including intellectual disability, developmental delay, and other neurodevelopmental conditions, require continuous and comprehensive healthcare support throughout their development. These conditions often affect multiple aspects of a child's functioning, such as communication abilities, learning capacity, behavioral regulation, and social participation, which may significantly influence their participation in daily life and access to services. As a result, children with cognitive impairment frequently depend on long-term medical care, rehabilitation services, and coordinated support from multidisciplinary healthcare professionals. Globally, developmental and mental health disorders among children and adolescents contribute substantially to disability and long-term health challenges, highlighting the importance of responsive and accessible healthcare systems for this population (Kieling et al., 2024; World Health Organization, 2022).

Despite increasing global attention to disability inclusion, children with disabilities still experience significant inequities in healthcare access. International health agendas emphasize the need for equitable healthcare services as part of universal health coverage, yet many healthcare systems continue to face difficulties in providing inclusive services for individuals with disabilities (World Health Organization, 2022; World Health Organization, 2024). Inclusive healthcare goes beyond simply providing medical services; it involves ensuring that healthcare environments are accessible, healthcare providers are equipped with appropriate knowledge and skills, and services are delivered in ways that respect the dignity and specific needs of people with disabilities (Houtrow et al., 2023). However, achieving this level of inclusivity remains a challenge in many healthcare settings.

Previous studies have reported that children with disabilities often encounter various obstacles when accessing healthcare services. These challenges may arise from structural limitations within healthcare systems, such as inadequate infrastructure, limited availability of specialized services, and insufficient coordination between healthcare providers (Adugna et al., 2020). In many contexts, healthcare facilities are not fully prepared to accommodate children with complex developmental needs, which may lead to delays in diagnosis, limited access to appropriate treatment, and fragmented care pathways. Similar concerns have also been identified in several low- and middle-income settings, where healthcare resources are often limited and specialized services for children with disabilities are scarce (Harrison et al., 2020).

In addition to structural challenges, financial and logistical barriers also play an important role in limiting access to healthcare. Families caring for children with cognitive impairment frequently face considerable financial burdens associated with healthcare services, including therapy sessions, medications, and transportation costs. These financial pressures may reduce the ability of families to seek timely medical care or maintain regular follow-up appointments (Clemente et al., 2022). Geographic barriers further complicate the situation, particularly for families living in rural or underserved areas where healthcare services are limited and travel to healthcare facilities may require significant time and resources (Harrison et al., 2020).

Healthcare provider-related factors also influence the accessibility and quality of healthcare services for children with cognitive impairment. Research has shown that some healthcare professionals feel insufficiently prepared to address the specific needs of patients with disabilities due to limited training and lack of exposure to disability-inclusive practices (Atnafu et al., 2025). These gaps in knowledge and confidence may affect communication between healthcare providers and patients or caregivers, potentially leading to misunderstandings, delayed interventions, or less effective treatment planning. Another important aspect involves sociocultural factors that shape the experiences of families seeking healthcare. In some communities, stigma and misconceptions about disability remain prevalent, which may influence how families perceive healthcare services and interact with healthcare providers. Experiences of discrimination, negative attitudes, or lack of understanding within healthcare environments can discourage families from seeking or continuing care (Ssemata et al., 2024). Moreover, broader social determinants, such as socioeconomic status and racial or ethnic disparities, may intersect with disability status and further exacerbate inequities in healthcare access (Lindsay et al., 2025).

While many studies have focused on the barriers faced by children with disabilities and their families, there is also growing recognition of factors that may facilitate more inclusive healthcare services. Facilitators identified in previous research include family-centered care approaches, improved communication between healthcare providers and caregivers, and stronger collaboration across healthcare and social service systems (Nelson et al., 2025). When healthcare providers actively engage caregivers in decision-making and acknowledge their role in managing the child's health, healthcare experiences tend to become more supportive and effective.

Caregivers themselves play a crucial role in navigating healthcare systems on behalf of children with cognitive impairment. Parents and family members often take on multiple responsibilities, including coordinating medical appointments, communicating with healthcare providers, and ensuring that treatment recommendations are followed at home. These responsibilities can be demanding and emotionally challenging, particularly when caregivers encounter difficulties in accessing appropriate services. Studies have shown that caregivers frequently report communication barriers, emotional stress, and challenges in coordinating care across multiple healthcare providers (Barnhardt et al., 2024). In addition to caregiver perspectives, the experiences of healthcare providers are also essential for understanding how inclusive healthcare can be improved. Healthcare professionals operate within complex systems where organizational constraints, limited resources, and institutional policies may influence how care is delivered. Exploring the perspectives of healthcare providers alongside those of caregivers can therefore offer a more comprehensive understanding of the challenges and opportunities within healthcare systems (Babalola et al., 2024; Hanson et al., 2023).

Although research on healthcare access for people with disabilities has expanded considerably in recent years, several gaps remain that limit a comprehensive understanding of inclusive healthcare for children with cognitive impairment. First, much of the existing literature examines disability broadly, often combining different types of physical, sensory, and cognitive conditions within the same analysis (Clemente et al., 2022; Adugna et al., 2020). While this approach provides useful insights into general healthcare inequities, it may overlook the specific healthcare needs of children with cognitive impairment, who frequently require more complex communication strategies, behavioral support, and long-term developmental monitoring (Houtrow et al., 2023). Consequently, the healthcare challenges experienced by this group may not be fully captured when disability is treated as a single, homogeneous category. Second, previous studies often examine healthcare access from a single perspective, typically focusing either on caregivers or on healthcare providers. Caregiver-focused research has highlighted difficulties related to navigating healthcare systems, managing financial burdens, and coordinating multiple services for their children (Barnhardt et al., 2024). In contrast, studies that explore provider perspectives tend to emphasize institutional constraints, limited training, and resource shortages that may influence service delivery (Atnafu et al., 2025; Hanson et al., 2023). Although these studies provide important insights, examining these perspectives separately may limit understanding of how interactions between caregivers and healthcare providers shape healthcare access in practice. Third, while barriers to healthcare access for children with disabilities have been widely documented, fewer studies have explored both barriers and facilitators within the same analytical framework. Existing research tends to emphasize structural obstacles, such as limited service availability, inaccessible facilities, and socioeconomic constraints (Harrison et al., 2020; Ssemata et al., 2024). However, facilitators, such as collaborative care models, effective communication between families and healthcare professionals, and integrated service systems are less frequently explored in depth (Babalola et al., 2024; Nelson et al., 2025). Understanding how these barriers and facilitators interact may provide more practical insights for improving inclusive healthcare systems.

Inclusive healthcare for children with developmental disabilities should be understood not only as the availability of medical services, but also as the interaction between healthcare systems, provider preparedness, family capacity, and community support. Examining barriers and facilitators within a unified framework is important because healthcare access is shaped by multiple interconnected factors rather than by a single obstacle. By integrating caregiver and healthcare provider perspectives, this study seeks to provide a more comprehensive understanding of how inclusive healthcare can be strengthened in real-world service settings.

Understanding these perspectives is essential for improving healthcare systems and ensuring that children with cognitive impairment receive equitable and appropriate care. Therefore, this study aimed to explore barriers and facilitators to inclusive healthcare for children with developmental disabilities by examining the perspectives of caregivers and healthcare providers through a qualitative descriptive approach.

2. METHODS

Study Design

This study used a qualitative descriptive design to explore barriers and facilitators influencing inclusive healthcare for children with developmental disabilities from the perspectives of caregivers and healthcare providers. A qualitative descriptive approach was selected because it allows direct exploration of participants' experiences, perceptions, and contextual factors related to healthcare access. This approach is appropriate for healthcare research that aims to generate practical and experience-based insights into complex service delivery issues.

Participants and Sampling

Participants consisted of caregivers of children with developmental disabilities and healthcare providers involved in pediatric, developmental, rehabilitation, or community-based healthcare services. In this study, developmental disabilities included intellectual disability, developmental delay, autism spectrum disorder, and related neurodevelopmental conditions requiring ongoing healthcare or rehabilitation support.

Caregivers were defined as parents or family members who were primarily responsible for managing the healthcare needs of a child with developmental disabilities. Healthcare providers included pediatric nurses, pediatricians, rehabilitation therapists, psychologists, and community health workers.

Participants were recruited using purposive sampling from hospitals, rehabilitation centers, and community health facilities. Caregivers were eligible if they were at least 18 years old, were the primary caregiver of a child diagnosed with a developmental disability, and had experience accessing healthcare services for the child within the previous 12 months. Healthcare providers were eligible if they had at least one year of professional experience providing services for children with developmental disabilities. Individuals were excluded if they were unable to participate in an interview or declined to provide informed consent.

Recruitment continued until thematic saturation was achieved. Saturation was defined as the point at which additional interviews did not produce new codes, categories, or themes relevant to the research question.

Instrument

Data were collected using a semi-structured interview guide developed based on literature concerning healthcare access, disability-inclusive healthcare, family-centered care, and barriers to healthcare services for children with disabilities. The interview guide contained open-ended questions exploring participants' experiences in accessing or providing healthcare services, perceived barriers within healthcare systems, communication experiences, provider preparedness, caregiver roles, and factors that facilitated inclusive healthcare.

The interview guide was reviewed by members of the research team to ensure relevance, clarity, and alignment with the study objectives. A pilot interview was conducted with five caregivers to assess the clarity and cultural appropriateness of the questions. Minor revisions were made before the main data collection phase.

Procedure

Ethical approval for this study was obtained from the Institutional Review Board of the affiliated university prior to data collection. Following approval, permission was sought from healthcare institutions and community health facilities involved in the recruitment process. Potential participants were identified through healthcare providers, caregiver support groups, and healthcare facility networks. Participants who met the eligibility criteria were provided with detailed information about the study objectives, procedures, voluntary nature of participation, and confidentiality measures. Written informed consent was obtained from all participants before interviews were conducted. Semi-structured interviews were carried out either face-to-face or through secure online communication platforms according to participant preference and logistical considerations. Each interview lasted approximately forty to sixty minutes and was audio-recorded with the participant's permission. After each interview, participants were invited to review the key points discussed during the conversation to ensure that their perspectives were accurately represented. This process served as a form of member checking and contributed to the credibility of the qualitative findings. All recordings were transcribed verbatim, and identifying information was removed to maintain participant confidentiality.

Data Analysis

The interview data were analyzed using thematic analysis to identify patterns and themes related to barriers and facilitators of inclusive healthcare. The analytic process began with repeated reading of the interview transcripts to achieve familiarity with the data. Initial codes were then generated to capture meaningful segments of text that reflected participants' experiences and perceptions related to healthcare access. Subsequently, the codes were grouped into broader categories and themes through an inductive analytical process. The analysis involved constant comparison across transcripts to identify similarities and differences between caregiver and healthcare provider perspectives. This iterative process allowed themes to emerge directly from the data rather than being imposed by predetermined theoretical frameworks. Qualitative data management and coding were supported using NVivo software, which facilitated systematic organization and retrieval of coded data. To enhance the rigor and trustworthiness of the analysis, several strategies were implemented, including peer debriefing among members of the research team, triangulation of perspectives between caregivers and healthcare providers, and maintenance of an audit trail documenting analytic decisions throughout the research process.

Data Collection

Data were collected through individual semi-structured interviews. No focus group discussions were conducted because the study aimed to explore personal caregiving experiences and professional perspectives that might not be expressed openly in group settings. Interviews were conducted either face-to-face or through secure online communication platforms according to participant preference and logistical feasibility.

Before the interview, participants received information about the study objectives, procedures, confidentiality, and voluntary nature of participation. Written informed consent was obtained from all participants. Each interview lasted approximately 40–60 minutes and was audio-recorded with participant permission. Field notes were written after each interview to document contextual information and preliminary reflections. Interviews were transcribed verbatim, and identifying information was removed to maintain confidentiality.

Data collection was conducted over a three-month period. After each interview, participants were invited to review key points from the conversation to ensure that their views were accurately represented. This member-checking process contributed to the credibility of the findings.

3. RESULT

A total of 36 participants were included in this study, consisting of 20 caregivers of children with cognitive impairment and 16 healthcare providers. Participants were recruited from hospitals, rehabilitation centers, and community health facilities. The caregivers were primarily parents responsible for coordinating healthcare services for their children, while healthcare providers included pediatric nurses, pediatricians, rehabilitation therapists, psychologists, and community health workers. Caregivers ranged in age from 27 to 49 years, with the majority being mothers. Healthcare providers had professional experience ranging from 2 to 18 years in pediatric or rehabilitation services. Most healthcare providers worked in hospital-based pediatric services or rehabilitation centers (Table 1).

Table 1. Demographic Characteristics of Participants (N = 36)

Characteristic	Category	n	%
Participant Group	Caregivers	20	55.6
	Healthcare providers	16	44.4
Caregiver Gender (n=20)	Female	16	80
	Male	4	20
Caregiver Age	25–34 years	6	30
	35–44 years	9	45
	≥45 years	5	25
Relationship to Child	Mother	14	70
	Father	4	20
	Other family member	2	10
Healthcare Provider Profession (n=16)	Pediatric nurse	6	37.5
	Pediatrician	4	25
	Rehabilitation therapist	3	18.8
	Psychologist	2	12.5
	Community health worker	1	6.2
Years of Professional Experience	1–5 years	5	31.3
	6–10 years	6	37.5
	>10 years	5	31.3

Table 2. Coding Tree: Codes, Categories, and Themes

Theme	Category	Codes
Structural constraints within healthcare systems	Service availability	Limited rehabilitation services
Structural constraints within healthcare systems	Workforce capacity	Shortage of specialists
Structural constraints within healthcare systems	Service efficiency	Long waiting times
Accessibility and logistical barriers	Geographic access	Distance to healthcare facilities
Accessibility and logistical barriers	Financial barriers	Transportation costs
Accessibility and logistical barriers	Administrative challenges	Complex referral systems
Communication dynamics between caregivers and providers	Communication barriers	Difficulty explaining symptoms
Communication dynamics between caregivers and providers	Information gaps	Lack of information from providers; unclear diagnosis explanation
Professional competency and training gaps	Professional preparedness	Limited training in disability care
Professional competency and training gaps	Clinical competency	Lack of interdisciplinary knowledge
Family resilience and caregiver advocacy	Caregiver initiative	Parent seeking information
Family resilience and caregiver advocacy	Family navigation role	Caregiver coordination of services
Collaborative community-based support systems	Social support and care coordination	Parent support groups; interdisciplinary teamwork; community rehabilitation programs

The thematic analysis identified six major themes and thirteen categories describing barriers and facilitators to inclusive healthcare for children with developmental disabilities. These themes reflected structural, logistical, interpersonal, professional, family-level, and community-based factors influencing healthcare access (Table 2).

Theme 1: Structural Constraints within Healthcare Systems

Participants consistently highlighted structural limitations within healthcare systems as a major barrier to inclusive healthcare. These limitations included the limited availability of specialized services, shortages of trained professionals, and long waiting times for therapy or diagnostic assessments.

Caregivers frequently reported that rehabilitation services for children with cognitive impairment were limited and difficult to access.

"When we first found out about our child's condition, we tried to look for therapy services, but the hospital told us that the schedule was already full." (Caregiver 04)

"Sometimes we have to wait three or four months before we can get an appointment with the specialist." (Caregiver 10)

Healthcare providers also acknowledged the challenges caused by limited healthcare resources.

"In our hospital there are only a few therapists who specialize in developmental disorders, but the number of children needing therapy keeps increasing."(Healthcare Provider 02)

"The system is overwhelmed. There are many children who require assessment, but the facilities and personnel are still limited." (Healthcare Provider 08)

These structural constraints illustrate how limited service capacity within healthcare systems may delay early diagnosis and intervention for children with cognitive impairment.

Theme 2: Accessibility and Logistical Barriers

Accessibility barriers emerged as another major theme, particularly regarding geographic distance, transportation difficulties, and financial costs associated with healthcare services. Several caregivers described the challenges of traveling long distances to reach specialized healthcare facilities.

"The rehabilitation center is located in the city, so we have to travel almost two hours each time." (Caregiver 07)

"Sometimes we cancel appointments because transportation is expensive." (Caregiver 15)

Healthcare providers also recognized the impact of logistical barriers on healthcare utilization.

"Families living in rural areas often struggle to attend regular therapy sessions because transportation is difficult." (Healthcare Provider 11)

"Some parents stop coming to therapy because they cannot afford the travel expenses." (Healthcare Provider 06)

These findings highlight how geographic and financial barriers may limit continuity of care for children with developmental conditions.

Theme 3: Communication Dynamics Between Caregivers and Providers

Communication between caregivers and healthcare providers was another important factor influencing healthcare experiences. Many caregivers reported difficulty understanding medical explanations regarding their child's diagnosis or treatment plan.

"Doctors sometimes explain things very quickly, and we are not sure whether we understand everything." (Caregiver 03)

"We want to ask more questions, but sometimes we feel hesitant because the clinic is very busy." (Caregiver 13)

Healthcare providers also acknowledged that communicating complex developmental diagnoses can be challenging.

"Explaining developmental conditions requires time because parents need to understand what the diagnosis means for their child." (Healthcare Provider 01)

"Sometimes parents feel overwhelmed when they hear about developmental delays." (Healthcare Provider 14)

These communication challenges demonstrate the importance of clear and supportive interactions between healthcare providers and caregivers.

Theme 4: Professional Competency and Training Gaps

Participants also emphasized gaps in healthcare provider training related to disability-inclusive care. Healthcare providers reported limited formal education regarding developmental disorders during their professional training.

"We learn general pediatric care in our training, but managing developmental disorders requires more specialized knowledge." (Healthcare Provider 09)

"Some healthcare workers are still unfamiliar with how to communicate with children who have developmental difficulties." (Healthcare Provider 05)

Caregivers also noticed variations in provider knowledge and expertise.

"Some doctors understand our child's condition very well, but others seem unsure about how to handle it." (Caregiver 17)

These findings indicate that improving healthcare provider training could strengthen inclusive healthcare practices.

Theme 5: Family Resilience and Caregiver Advocacy

Despite facing multiple barriers, caregivers demonstrated strong resilience and advocacy in managing their children's healthcare needs. Many caregivers reported actively seeking information and coordinating services across different healthcare providers.

"As parents we cannot just wait. We search for information online and talk to other parents." (Caregiver 01)

"Sometimes we go to different doctors until we find someone who understands our child's condition." *(Caregiver 19)*

Healthcare providers also recognized the critical role of caregiver involvement.

"Parents who actively follow up with therapy sessions usually help their children progress better." (Healthcare Provider 04)

These findings highlight the importance of caregiver empowerment in navigating healthcare systems.

Theme 6: Collaborative and Community-Based Support Systems

The final theme identified facilitators related to collaboration between healthcare professionals and support networks within the community.

Healthcare providers emphasized the value of interdisciplinary teamwork.

"Children with developmental disorders need support from different professionals, including therapists, psychologists, and pediatricians." (Healthcare Provider 12)

"When we work together as a team, we can provide more comprehensive care." (Healthcare Provider 16)

Caregivers also described the importance of peer support networks.

"Talking to other parents who have similar experiences helps us feel less alone." (Caregiver 09)

"Through the parent support group we learn about therapy programs and available services." (Caregiver 18)

These collaborative networks were perceived as important facilitators that support families in navigating complex healthcare systems.

4. DISCUSSION

This study explored barriers and facilitators to inclusive healthcare for children with cognitive impairment from the perspectives of caregivers and healthcare providers. The findings revealed a complex interplay of systemic, interpersonal, and contextual factors influencing healthcare access. Six major themes emerged, including structural constraints within healthcare systems, accessibility and logistical barriers, communication dynamics between caregivers and providers, professional competency and training gaps, caregiver resilience and advocacy, and collaborative community-based support systems. Together, these findings highlight that inclusive healthcare is shaped not only by healthcare system capacity but also by interpersonal interactions and family engagement within healthcare processes.

One of the most prominent findings of this study was the presence of structural barriers within healthcare systems, including shortages of specialized professionals, limited rehabilitation services, and long waiting times for diagnosis and therapy. Caregivers frequently reported delays in accessing developmental assessments or therapy sessions, while healthcare providers acknowledged the limited capacity of healthcare facilities to meet the growing demand for developmental services. These findings are consistent with previous studies indicating that structural limitations remain a major barrier to healthcare access for children with disabilities. A scoping review by Adugna et al. (2020) reported that limited healthcare infrastructure, insufficient trained professionals, and long waiting times for services are common barriers affecting children with disabilities in many healthcare systems. Similarly, research conducted in rural Malawi demonstrated that limited availability of specialized services significantly delayed access to healthcare for individuals with disabilities (Harrison et al., 2020).

The shortage of specialized professionals, particularly rehabilitation therapists and developmental specialists, has been widely reported in both high-income and low- and middle-income countries. Clemente et al. (2022) noted that healthcare systems often lack sufficient capacity to provide timely services for children with developmental disabilities, resulting in delayed diagnosis and intervention. Delayed access to early intervention services is particularly concerning, as early identification and intervention are critical for improving developmental outcomes and long-term quality of life for children with cognitive impairment.

In addition to structural limitations, the study identified geographic distance, transportation costs, and complex referral procedures as important barriers to accessing healthcare services. Caregivers reported difficulties traveling long distances to reach specialized healthcare facilities, particularly when services were concentrated in urban areas. These findings align with previous studies demonstrating that geographic and financial barriers significantly influence healthcare utilization among families of children with disabilities. Research conducted in Uganda found that families living in rural areas often experience challenges accessing healthcare due to transportation difficulties and financial constraints (Ssemata et al., 2024). Similarly, Lindsay et al. (2025) reported that socioeconomic disparities and geographic inequalities contribute to unequal access to healthcare services for children with disabilities. Logistical barriers such as transportation and travel costs may also affect the continuity of care. Families who face repeated challenges in attending appointments may discontinue therapy sessions or reduce the frequency of follow-up visits. This may ultimately affect developmental outcomes for children with cognitive impairment. Another important finding of this study relates to communication challenges between caregivers and healthcare providers. Many caregivers reported difficulties understanding medical explanations related to diagnosis and treatment plans. At the same time, healthcare providers indicated that explaining developmental diagnoses requires time and careful communication.

Effective communication is a fundamental component of patient-centered healthcare and plays a critical role in improving healthcare experiences for families of children with disabilities. Previous research has shown that caregivers often feel overwhelmed when receiving information about developmental diagnoses, particularly when explanations are delivered using complex medical terminology (Hanson et al., 2023). Communication barriers may also affect caregiver engagement in treatment decisions. When caregivers do not fully understand their child’s condition or treatment plan, they may feel less confident in managing healthcare needs at home. Studies have shown that clear communication and shared decision-making between healthcare providers and families can improve treatment adherence and caregiver satisfaction (Houtrow et al., 2023).

Participants in this study also highlighted gaps in healthcare provider training related to disability-inclusive care. Healthcare providers reported that formal training on developmental disorders was limited during their professional education, which may affect their ability to communicate effectively with families and manage complex developmental conditions. This finding is consistent with previous research indicating that healthcare professionals often receive limited training in disability-inclusive healthcare practices. Babalola et al. (2024) found that healthcare providers frequently report insufficient training on autism and developmental disorders, which may affect their confidence when delivering care to children with developmental disabilities. Similarly, Atnafu et al. (2025) reported that healthcare providers in primary healthcare settings often lack the knowledge and resources needed to support patients with disabilities. Improving healthcare provider training on disability-inclusive care is therefore an important strategy for strengthening inclusive healthcare systems. Training programs that focus on communication skills, developmental assessment, and interdisciplinary care may help healthcare providers better support children with cognitive impairment and their families.

Despite the challenges encountered, caregivers in this study demonstrated strong resilience and proactive advocacy in managing their children's healthcare needs. Many caregivers actively searched for information, consulted multiple healthcare providers, and coordinated services to ensure that their children received appropriate care. These findings reflect the important role of caregivers as advocates and coordinators of care for children with disabilities. Previous research has shown that caregiver involvement plays a critical role in improving healthcare outcomes for children with developmental conditions (Barnhardt et al., 2024). Caregivers often serve as intermediaries between healthcare systems and children, ensuring continuity of care and monitoring developmental progress. However, caregiver advocacy may also reflect gaps within healthcare systems. When families are required to independently navigate complex healthcare systems or seek information from multiple sources, this may indicate that healthcare services are not sufficiently integrated or accessible.

The final theme identified facilitators related to interdisciplinary collaboration and community-based support networks. Participants emphasized the importance of teamwork among healthcare professionals, including pediatricians, therapists, psychologists, and community health workers. Collaborative care models have been widely recognized as an effective approach to managing complex developmental conditions. Nelson et al. (2025) found that interdisciplinary collaboration among healthcare professionals improves coordination of care and enhances healthcare outcomes for children with developmental disabilities. Community-based support networks also played an important role in helping families navigate healthcare systems. Peer support groups allow caregivers to share experiences, exchange information, and learn about available services. These networks may reduce caregiver stress and enhance social support for families caring for children with cognitive impairment.

The six themes identified in this study should not be understood as isolated findings. Rather, they appear to interact dynamically within the healthcare system. Structural constraints, such as limited specialized services and long waiting times, increase the burden on healthcare providers and reduce the time available for effective communication with caregivers. Limited provider preparedness may further contribute to unclear explanations, caregiver confusion, and reduced confidence in care planning. In response, caregivers often assume greater responsibility for navigating services, seeking information, and coordinating care. Community-based support systems may partially compensate for these gaps, but they cannot replace the need for accessible, well-coordinated, and disability-inclusive healthcare services. This interaction suggests that inclusive healthcare requires system-level interventions rather than isolated improvements in individual behavior or provider communication alone.

Clinical Implications

The findings of this study have important implications for healthcare practice, administration, and policy. Healthcare administrators should strengthen developmental and rehabilitation services by improving referral coordination, reducing waiting times, and expanding access to interdisciplinary care. Healthcare institutions should provide regular training on disability-inclusive communication, developmental assessment, and family-centered care for healthcare providers. At the community level, integration between hospitals, rehabilitation centers, community health facilities, and caregiver support groups may improve continuity of care. Policymakers should prioritize the development of community-based rehabilitation programs and ensure that children with developmental disabilities are included in broader health equity and universal health coverage agendas.

Study Limitations

This study has several limitations that should be considered when interpreting the findings. First, the study involved participants from a limited number of healthcare facilities, which may affect the generalizability of the findings to other healthcare contexts. Second, the study relied on self-reported experiences from caregivers and healthcare providers, which may be influenced by recall bias or subjective perceptions. Third, although the study included both caregiver and healthcare provider perspectives, additional perspectives from policymakers or healthcare administrators may provide further insights into systemic barriers affecting inclusive healthcare.

Future research may consider larger multi-site studies or mixed-method approaches to further explore healthcare accessibility for children with cognitive impairment across different healthcare systems.

5. CONCLUSION

This study highlights the complex barriers and facilitators influencing inclusive healthcare for children with developmental disabilities. Structural limitations, logistical barriers, communication challenges, and gaps in professional training continue to affect healthcare accessibility. However, caregiver advocacy, interdisciplinary collaboration, and community-based support networks serve as important facilitators that help families navigate healthcare systems.

Addressing these challenges requires coordinated system-level efforts to strengthen healthcare infrastructure, improve referral pathways, expand community-based rehabilitation services, and enhance disability-inclusive training for healthcare providers. Policymakers should prioritize equitable distribution of developmental healthcare services, while healthcare administrators should develop integrated models of care that reduce the burden placed on families. Professional training institutions should also incorporate disability-inclusive healthcare competencies into health professional education. These strategies are essential for translating inclusive healthcare principles into practice, particularly in resource-constrained settings.

6. ACKNOWLEDGEMENTS

The authors would like to thank all caregivers and healthcare providers who participated in this study, as well as the healthcare institutions that supported the data collection process.

7. FUNDING STATEMENT

This research received no external funding.

8. AUTHOR CONTRIBUTIONS

MM: Conceptualization, methodology, investigation, formal analysis, and writing – original draft preparation. **DAN:** Investigation, validation, and writing – review and editing. **ER:** Supervision, project administration, validation, and writing – review and editing. All authors have read and approved the final version of the manuscript.

9. CONFLICT OF INTEREST DISCLOSURE

The authors declare no conflict of interest.

10. DATA AVAILABILITY STATEMENT

The datasets generated and analyzed during the current study are not publicly available due to confidentiality considerations but are available from the corresponding author upon reasonable request.

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