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Range and Nature of Social Services for Children With Disabilities and Their Families: A Descriptive Study

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ABSTRACT

Objective: Children with disabilities and their families continue to face challenges in social inclusion and accessing resources. This study aimed to evaluate the availability and associated challenges of using services for these children and their families.**Methods:** A descriptive study was conducted to analyze social services for children with disabilities. Data were collected from the official websites of both public and private institutions across three regions in South Korea. These data included information on the service contents and the characteristics of the target beneficiaries.**Results:** A total of 12,841 service units were analyzed and grouped into 10 domains and 35 categories of social services. The most frequently identified service content was “Healthcare,” followed by “Child and family care” and “Community services.” The most frequently used characteristic of target beneficiaries was “Residential area,” followed by “Income level,” “Benefit,” and “Type of disability.”**Conclusion:** The current services are limited in meeting the needs of children with disabilities, particularly in terms of selection criteria, service content, and the integration of policies and delivery systems, contributing to a lack of social inclusion and lower quality of life. Constructing a national scheme to expand eligibility and support tailored to individual circumstances and needs is necessary.

1 | Background

In South Korea, it is estimated that 1.04% of children under the age of 18 have more than one type of disability, as defined by the Child Welfare Act. Although the child population has declined by more than 2.5 million in the past decade, the number and percentage of children with disabilities are increasing (Kim et al. 2022). Disability is a significant factor contributing to complex care needs. Children with disabilities may require ongoing healthcare management, specialized care, and educational support, as well as physical, occupational, or speech therapy to address their

underlying conditions and limitations in their abilities. Additionally, they may need continuous assistance addressing emotional, developmental, or behavioral challenges (Ricci, Kyle, and Carman 2020). Additionally, parents and families of children with disabilities are fully responsible for their care and developmental needs and experience psychological, emotional, and economic burdens, role and family conflicts, and health problems resulting in a lower quality of life (QoL) (Kang 2016; Whiting 2012). The issues of QoL and the care burden of children with disabilities in families are constantly highlighted, but the lack of social understanding of disabilities as well as a lack of material and

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human resources continue to be challenges (Kang 2016; Kim and Kim 2015).

Children with disabilities are frequently subjected to double discrimination in terms of social inclusion because of their status as disabled and being children, placing a heavy burden on their parents and families (Fairfax et al. 2019). Such a challenge is recognized universally, transcending cultural and social boundaries. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) underscores the importance of full and effective social participation and inclusion for persons with disabilities as fundamental rights (Hendriks 2007). Social inclusion, stemming from the principle of normalization (Kumar 2020), is defined as “the process of improving the terms on which individuals and groups take part in society—improving the ability, opportunity, and dignity of those disadvantaged based on their identity” (World Bank 2013). When children with disabilities and their families have access to proper services for social inclusion, the psychological burden and stress decrease, and their family competencies and QoL improve (Iacob et al. 2020; Seo, Yoon, and Kim 2016). The UNCRPD clearly stated the importance of the government’s responsibility for social inclusion, and many countries have ratified it and adhered to it while developing their policies (United Nations 2024; Office of the United Nations High Commissioner for Human Rights, 2014).

Particularly, families of children with disabilities in Asian countries, including Korea, which share a collectivist culture, are more influenced by a sense of social inclusion and belonging compared to those in Western cultural contexts (Fong, Gardiner, and Iarocci 2021; Smith et al. 2021). Therefore, they aim to integrate individuals with disabilities into communities for the benefit of their families and the community by reducing discrimination against them (Kayama and Haight 2022). Due to the historical reluctance to stigmatize disabilities and exclude people with disabilities, the government of South Korea has developed policies from the perspective of social support and solidarity in caregiving, ensuring that children with disabilities and their families are respected and afforded social inclusion (Kim et al. 2017; Ryu 2009). In addition, there have been recent developments concerning the social services for children with disabilities and their families. These developments have included implementing various institutional and legislative initiatives designed to protect their rights and QoL, as well as expanding social services and resources (Kim et al. 2015).

Despite the international and domestic efforts to share understanding and establish effective policies and programs for promoting social participation and inclusion, children with disabilities and their families continue to feel excluded, have limited interactions with the outside world, and encounter several structural hurdles (Woodgate et al. 2020). According to data from 88 countries worldwide, Scior et al. (2020) found that advocating and caring for a person with disabilities still rested on families. Further, children with disabilities were not afforded social inclusion as they were nurtured and schooled separately from those without disabilities. In South Korea, Choe (2016) and Kim et al. (2015) stated that the restricted selection criteria of beneficiaries, insufficient service content, and lack of integrated policies and delivery systems limit opportunities for social inclusion for children with disabilities and their families.

In this study, we aimed to assess the scope and characteristics of social services for children with disabilities and their families using a service classification system, and to identify major challenges. The analysis of these services offers a comprehensive framework, enabling a detailed understanding of the range and specific characteristics of the available services. This approach is instrumental in highlighting any discrepancies between the services offered and the actual needs of children with disabilities and their families. Furthermore, our findings will shed light on the availability and accessibility of these services, as well as the degree to which they meet the demands of their intended beneficiaries. The outcomes of this study are expected to be crucial in pinpointing gaps in service delivery. This, in turn, will help the development of informed policy decisions and provide a solid foundation for guiding future research initiatives, ensuring that the services are truly inclusive and effective.

2 | Methods

2.1 | Study Design

The study design was a descriptive study analyzing existing administrative datasets on service provision using the classification system for smart-health navigators developed by Shin et al. (2019).

2.2 | Data Collection

Data were collected on services for children under 18 years of age with disabilities and their families, provided by the central government nationwide, local governments, public–private partnership institutions, and private institutions in Seoul Metropolitan City, Incheon Metropolitan City, and Gyeonggi Province which contains both urban and rural regions. Services for social inclusion, which were either unavailable or not active at the time of the investigation, were excluded from this study. Furthermore, the data excluded therapeutic management services directly offered by healthcare institutions. The services classified under the “healthcare” domain in this study referred to those assisting in the delivery of such services.

Data were collected between July 1, 2019, and August 31, 2019. Information on services for children with disabilities and their families was posted on the official websites of the central government, GOV.KR (www.gov.kr) or Bokjiro (Welfare Information System, www.bokjiro.go.kr). Data were also obtained from a registry of services, which were stated to be for children with disabilities, on the official websites of local governments, public institutions, public–private partnership institutions, and private institutions. Data collection primarily relied on datasets that were publicly available, which included both general and specific information of services. If certain details were missing from these datasets, or if the associated websites did not provide enough information, additional data were proactively obtained by making phone calls to the administrative officers or staff of the relevant institutions. This approach allowed us to ensure the comprehensiveness and accuracy of our data.

Six trained research assistants collected services' information and organized it into a structured format developed by the research director and researchers. It comprised the service's title, web address to find service information, provider, regions, purposes, target beneficiary, service contents, and contact details of the person in charge. It is important to note that the information of target beneficiary did not include the personal characteristics or identifiable information of individual beneficiaries but rather described the target demographic for service accessibility. Before data analysis, two researchers and research assistants independently filled out the structured form with data from five randomly selected services and compared their results to verify interinvestigator reliability. The Fleiss's kappa values for the eight elements ranged from 0.63 (Good reliability) to 1.00 (Very Good reliability). Discrepancies were resolved through discussion. For example, while some assistants recorded the "provider" as the guiding institution, it was agreed to document the actual service provider. After reaching consensus, the reliability for data collection from another five randomly selected services was confirmed to be between 0.81 and 1.00 (very good reliability).

2.3 | Service Classification

The data were classified according to the classification system for smart-health navigators developed by Shin et al. (2019). The classification system analyzed social services for children with disabilities and their families across two domains: Service content and characteristics of target beneficiaries.

The content of the analyzed services includes 17 categories across three subdomains: community resources (infrastructure, information communication system [ICS], emotional environment), healthcare (assistive devices, healthcare costs support, treatment, nursing services, and operation), and child and family life (financial support, activity assistance, transportation, parenting/nurturing, culture/leisure, family support, residence support, enrollment, legal counseling/human rights). Characteristics of target beneficiaries comprised 18 categories across seven subdomains: children's and their families' general characteristics (child age, residential area, nationality), child health status (disability, level of functioning, assistive devices), socioeconomic status (income level, property level, benefits, national insurance level), family composition (household type, parents, grandparents, siblings), living quarters (house/institution, institution type), living condition, and life events. In classification categories, living conditions refer to the environment or circumstances affecting the way people live, including housing quality, such as whether the house is in a deteriorated or vulnerable condition. Life events are significant occurrences, such as the temporary or permanent absence of a child's parent or guardian for specific reasons.

The research director and researchers developed a structured framework based on the classification system, and six trained research assistants organized the collected data into the framework. A total of 2300 services were identified during the data collection phase, and in the subsequent classification phase, these services were categorized into 12,841 different coding units according to service content and characteristics of target beneficiaries. If a single service had multiple beneficiary characteristics or fell into more than one service content category, it was

classified into separate coding units. In the service classification process, interinvestigator reliability was verified using examples of services for social inclusion. In the initial reliability assessment of five sample services, the Fleiss's kappa for characteristics of target beneficiaries and service content was 0.85 and 0.77, respectively. Some research assistants missed services that could be classified into multiple categories. The researchers provided additional instructions on service classification to the research assistants. Subsequently, the reliability for beneficiary characteristics and service content improved to Fleiss's kappa 0.93 and 0.85 (very good reliability), respectively. The classification results were reviewed by two researchers.

2.4 | Ethical Consideration

This study was approved by the Kyung Hee University Institutional Review Board (No. KHSIRB-18-056(RA)).

3 | Results

3.1 | Services for Children With Disabilities and Their Families

Among 2300 social services identified in this study, 3.2% ($n = 74$) were provided by the central government nationwide, and 96.2% ($n = 2226$) were by the local government, public-private partnership institutions, and private institutions on a regional basis. Most of the services were provided in Seoul, the Capital city (52.5%, $n = 1207$), 29.4% ($n = 677$) in Gyeonggi province, and 14.9% ($n = 342$) in Incheon metropolitan city. A total of 88.5% ($n = 2035$) of the services were provided by public institutions, which included the central government (3.2%, $n = 74$) and local governments (85.7%, $n = 1971$). Eleven percent of services were provided by public-private partnership institutions, whereas 0.1% ($n = 3$) of the services were delivered by private institutions independently.

3.2 | Service Contents

As social services for children with disabilities and their families were classified according to their content, 50.2% of the services were related to children's "health care," followed by 47.0% of services related to "child and family life." "Community resources" related services were identified the least at 2.8%.

Within the "health care" domain and all categories of services, the number of services providing assistive devices for children with disabilities was the highest (39.9%). This was followed by healthcare costs support (5.0%), treatment (3.4%), nursing services (1.6%), and operations (0.4%). In the domain of "child and family life," financial support was the highest at 35.3%, and was the second highest among all services. Other categories of services accounted for less than 5%, and among them, services for legal counseling or human rights were the lowest (0.3%). Under the "community resources," the number of services in the infrastructure (1.9%) category was the highest; however, all of them were less than 2% (Table 1).

TABLE 1 | Contents of services for children with disabilities and their families.

Domain	Category	Subcategory	N = 12,841 n (%)
Community	Infrastructure	Social welfare facility	256 (2.8)
		Disability-inclusive infrastructure	240 (1.9)
		Accessible roads and parking lots for people with disabilities	106 (0.8)
		Disability inclusion institutions	4 (< 0.1)
		Institutions for people with special needs	5 (< 0.1)
		Others	3 (< 0.1)
		Information communication system (ICS)	85 (0.7)
		Informatization	37 (0.3)
		Rehabilitation news letter	64 (0.5)
		Others	38 (0.3)
		Others	13 (0.1)
Healthcare	Assistive devices (AD)	Emotional environment	13 (0.1)
		Disability-friendly cit	52 (0.4)
		Others	48 (0.4)
		Others	4 (< 0.1)
Healthcare	Assistive devices (AD)	Type of AD	6453 (50.2)
		Daily living	5119 (39.9)
		Sensory	2481 (19.3)
		Mobility	1029 (8.0)
		Posture	991 (7.7)
		Communication	848 (6.6)
		Housing	812 (6.3)
		Vehicle	545 (4.2)
		Computer	520 (4.0)
		Leisure	184 (1.4)
		Others	73 (0.6)
		Others	4 (< 0.1)
		Others	113 (0.9)
		Others	113 (0.9)
Healthcare costs supports	Healthcare costs supports	Type of support	2638 (20.6)
		Rental	2203 (17.2)
		Cost support	435 (3.4)
Healthcare costs supports	Healthcare costs supports	Diagnosis/Screening costs	646 (5.0)
		Diagnosis/Screening costs	430 (3.3)

(Continues)

TABLE 1 | (Continued)

Domain	Category	Subcategory	N = 12,841 n (%)
Child and family life	Treatment	Medical costs	143 (1.1)
		Others	73 (0.6)
		Rehabilitation care	439 (3.4)
		Speech therapy	403 (3.1)
		Art therapy	81 (0.6)
		Physical therapy	40 (0.3)
		Music therapy	37 (0.3)
		Cognitive therapy	33 (0.3)
		Occupational therapy	32 (0.2)
		Exercise therapy	25 (0.2)
		Psychological therapy	23 (0.2)
		Hearing rehabilitation	22 (0.2)
		Play therapy	20 (0.2)
		Behavior therapy	14 (0.1)
		Sensory integration therapy	13 (0.1)
	Others	9 (0.1)	
	Nursing services	Medical services	54 (0.4)
		Others	31 (0.2)
		Home visit nursing	5 (< 0.1)
		Family nursing	202 (1.6)
		Others	163 (1.3)
	Operation	Cochlear implant	34 (0.3)
		Ophthalmic surgery	8 (0.1)
Others		6032 (47.0)	
Financial support	Voucher	4537 (35.3)	
	Public utility charges	2569 (20.0)	
	Allowance	907 (7.1)	
	Others	489 (3.8)	
	Others	572 (4.5)	
Activity assistant	Independent living (daily living)	395 (3.1)	
	Independent living (capacity development)	269 (2.1)	
	Skill training	77 (0.6)	
	Others	13 (0.1)	
	Others	36 (0.3)	
Transportation	Others	252 (2.0)	
	Special transportation	182 (1.4)	

(Continues)

TABLE 1 | (Continued)

Domain	Category	Subcategory	N = 12,841 n (%)
		Public transportation	33 (0.3)
		Vehicle repair	20 (0.2)
		Others	17 (0.1)
	Parenting/Nurturing		207 (1.6)
		Childcare costs	73 (0.6)
		Caring services	47 (0.4)
		Household services	57 (0.4)
		Family counseling	12 (0.1)
		Family education	11 (0.1)
		Others	7 (0.1)
	Culture (leisure)		203 (1.6)
		Cultural using support	89 (0.7)
		Media support	63 (0.5)
		Others	51 (0.4)
	Family support		181 (1.4)
		Psychological support for parents	121 (0.9)
		Respite care	32 (0.2)
		Psychological support for siblings	8 (0.1)
		Others	20 (1.6)
	Residence support		111 (0.9)
		Housing	55 (0.4)
		Rental housing	25 (0.2)
		Key money deposit support	19 (0.1)
		Housing sales	11 (0.1)
		Residential environments improvement	47 (0.4)
		Others	9 (0.1)
	Enrollment		104 (0.8)
	Legal counseling/ Human rights		42 (0.3)
		Legal counseling	33 (0.3)
		Human rights counseling	5 (<0.1)
		Others	

Note: If the percentage was less than 0.1 %, it was marked as “<0.1.”

3.3 | Target Beneficiaries of Services

According to the characteristics of target beneficiaries of services for children with disabilities and their families, 96.2% of the

services under the “general characteristics of child and their families” domain were considered residential areas. This was followed by services that considered nationality (60.1%) and child’s age (33.4%). Within the domain of “child health status,”

disability status (64.1%) was the most common characteristic of the child. Regarding socioeconomic status, whether the children and their families were recipients of national livelihood benefits (45.1%) and the median standard income (23.8%) were the two most considered characteristics of target beneficiaries. The services that considered beneficiaries' family composition, living quarters, living conditions, and life events were all lower than 1.5% (Table 2).

3.4 | Target Beneficiaries by Service Contents

Services for children with disabilities and their families were divided into domains of community, healthcare, and child and family life according to the characteristics of the target beneficiaries of each service.

Residential area was most frequently considered condition for receiving all kinds of community services, including infrastructure (99.6%), emotional environments (98.1%), and ICS (95.3%). In the infrastructure category, 51.7% of services considered the beneficiary's nationality. In the child health status domain, 26.3% considered the level of disability, and 22.1% considered the benefit in the socioeconomic status domain. In the ICS category, the type of disability (28.1%), benefit (23.4%), and nationality (21.9%) were included. The emotional environment and services usually considered the beneficiary's nationality (38.5%). Living conditions and life events were not considered in the community domain (Appendix I, Table A1).

The services in the healthcare domain also included the general characteristics of the child and their families (child age, residential area, and nationality) as the condition of the target beneficiary. The residential area of the beneficiary was considered in 95.8 to 100.0% of services. Child age was used as a criterion in 96.0% of nursing services, 48.1% of treatments, and 40.4% of operations. Nationality was considered a criterion in 76.7% of nursing services and 60.2% of services in the categories of healthcare cost support and assistive devices. For services in the categories of operation (95.7%) and assistive devices (92.9%), the type of disability in the child's health status, was one of the most frequently considered criteria, and 43.3% of services in the treatment category also included this as beneficiary selection criterion. Nursing services considered the level of disability (47.5%) or level of functioning (73.3%) more important than the type of disability. Among socioeconomic status, benefits were the most necessary criterion for 70.1% of services in assistive device services and 59.9% of healthcare cost support services. Factors such as standard median income, family monthly income, and minimum cost of living in the income level category, as well as type of national insurance, were also considered. However, property, family composition, living quarters, living conditions, and life events were rarely included as selection criteria for receiving healthcare services (Appendix I, Table A2)

The services of "child and family life" were also considered in the general characteristics of children and their families. Except for culture or leisure services (82.3%), more than 90% of all categories of services were considered residential areas, and 32.6 to 74.0% also considered nationality as a considered criterion. A total of 68.5% of financial support, 66.2% of parenting or

nurturing, and 54.9% of activity assistant services were identified as including child age as a beneficiary selection criterion. In the child health status domain, more than half of services in financial support (56.4%), family support (56.4%), culture, or leisure (59.1%) categories included the type or level of disability as selection criteria. Functioning was considered for 23.8% of the services in the activity assistance category, and the usage and type of assistive devices accounted for 15.1% of the services in the transportation category. Income levels according to socioeconomic status had various criteria for each service category. The standard median income was used as a selection criterion by more than one-fifth of the services for parenting or nurturing (34.3%), residence support (25.2%), and financial support (24.3%). Additionally, 34.3% of the services in the family support category considered family monthly income. House ownership (39.6%) and housing state (20.7%) were in the property level category, and the benefits were considered for the services of residence support. The benefits to beneficiaries were also considered in 30.4% of services in financial support, 25.6% in culture or leisure, 21.3% in parenting or nurturing, and 20.4% in family support. As considered criteria for the services that provide support for "child and family life," the family composition, living quarters, and live events were considered more compared to "communities" and "child health care" services; however, all were less than 10% (Appendix I, Table A3).

4 | Discussion

This study was conducted to analyze the range and nature of social services for children with disabilities and their families, to propose strategies to improve the availability and accessibility of these services, and to better meet the needs of their intended beneficiaries. The findings of this study identified key aspects of the existing social services and highlighted major issues and challenges such as imbalanced geographical distribution of services, concentration of specific service contents, and narrow eligibility criteria for beneficiaries.

We identified the number and distribution of social services for children with disabilities and families in three major regions, including Seoul Metropolitan City, Incheon Metropolitan City, and Gyeonggi Province. This study found that the proportion of social services for children with disabilities and their families provided by local governments was significantly higher compared to those managed by the central government. Although services for people with disabilities and their families in Korea are planned according to the laws and policies of the central government, the actual operation and administration are mostly carried out by local governments and their affiliated institutions. Considering that overall services in the study included community-driven bottom-up social services as well, the proportion of services provided by local governments becomes even higher. Recent studies have shown that welfare disparities between regions tend to intensify depending on the capacities of local governments and communities. These capacities include not only financial resources but also administrative and political aspects such as personnel and expertise (Shin and Moon 2017). An examination of the 2023 social welfare budget composition of local governments in Korea revealed no significant differences in the welfare budget per person with disabilities between urban and rural areas

TABLE 2 | Characteristics of Target beneficiaries of services for children with disabilities and their families.

Domain	Category	Subcategory	N = 12,841 n (%)	
General characteristics of child and their families	Child age		4289 (33.4)	
	Residential area	Provincial-level	12349 (96.2)	
		Municipal-level	11285 (87.9)	
		Sub-municipal-level	545 (4.2)	
Child health status	Nationality		7715 (60.1)	
	Disability	Type of disability	8233 (64.1)	
		Level of disability	5020 (39.1)	
	Level of functioning		369 (2.9)	
	Assistive devices (AD)	Usage	244 (1.9)	
		Type of AD	228 (1.8)	
		Duration of AD usage	0 (0.0)	
Socioeconomic status	Income level	Income status	7 (0.1)	
		Family annual income	23 (0.2)	
		Standard median income	3056 (23.8)	
		Family monthly income	1163 (9.1)	
		Minimum cost of Living	28 (0.2)	
		Property level	House ownership	61 (0.5)
			Housing state	33 (0.3)
			Estate ownership	0 (0.0)
	vehicle ownership		155 (1.2)	
	General properties		0 (0.0)	
	Financial properties		0 (0.0)	
	Property as standards-based assessment		22 (0.2)	
	Benefit		5794 (45.1)	
	National insurance level	Type of national insurance	81 (0.6)	
		National insurance fee	13 (0.1)	
Catastrophic health expenditure		0 (0.0)		
Family composition	Type of households		143 (1.1)	
		Parents	Presence	33 (0.3)
			Parents with disabilities	41 (0.6)
	Parents with chronic disease		0 (0.0)	
	Grandparents	Presence	9 (0.1)	
		Grandparents with disabilities	6 (0.1)	
	Siblings	Presence	6 (0.1)	
Siblings with disabilities		6 (0.1)		
Living quarters	House/Institution		166 (1.3)	
	Type of institution		137 (1.1)	
Living condition	Vulnerable state		5 (< 0.1)	
Live events	Absence of parents	Absence of parents	32 (0.3)	
		Temporary absence of parents	8 (0.1)	

Note: If the percentage was less than 0.1 (%), it was marked as “<0.1.”

(Chung 2023). However, the actual institutions and personnel capable of providing welfare services tend to be concentrated in large cities (Hwang 2024). This concentration can lead to an imbalance in the supply and demand of social services. In the provision of social services, while decentralization to local governments is emphasized, a balanced strategy is required. This strategy should focus not on the dichotomy between centralization and decentralization but on enhancing the autonomy of utilizing national and local budgets, expanding dedicated experts/personnel and organizations, and discovering services (Shin and Moon 2017). More than half of the services found in this study were provided in Seoul. Gyeonggi province provided less than one-third of the services, although it had the largest number ($n = 20,825$) and prevalence rate (1.00%) of children diagnosed with disabilities, exceeding the national average (Kim, Choi, Kim et al. 2022). As in previous studies, there exists a regional gap between supply and demand such as budget, providers, and personnel which were more concentrated in large cities or metropolitan areas than in rural areas (Ham 2019). This phenomenon is no exception for services for children with disabilities and their families (J. H. Kim et al. 2015). Although the official registration location for many children with disabilities is in rural and regional areas, they often temporarily relocate to urban areas with higher levels of goods and services for several months. This phenomenon leads to these children and their families becoming so-called “rehabilitation refugees.” Paradoxically, this results in a vicious cycle where, regardless of the increasing prevalence rates in rural areas, the demand for services remains concentrated in large cities or metropolitan areas, thereby reinforcing the provision of services in those cities (Choi, Lee, and An 2021). Such services deepen the crisis of health inequality and widen the gap in information accessibility within the community. The result of the present study showed that systematically shared and easily accessible information on services for children and families is limited though the central and local governments have tried to overcome the trend of concentrated services in the metropolitan area (Choi, Lee, and An 2021). The biggest demand for communities is not to provide new services or programs but to improve coordination and cooperation among the services currently available (S. Kim et al. 2015; Vogelsberg, Williams, and Friedl 1980) and this reflects the need to establish a community network or integration system that coordinates all organizations responsible for services. Therefore, to increase the uptake for vulnerable groups with poor access to and use of services for physical or socioeconomic reasons, improvement measures for the availability of existing services will have to be a priority.

When analyzing the contents of services for children with disabilities and their families, the majority of service contents were “Health care” related services including assistive devices, healthcare costs support, and treatment. These were followed by services supporting children and family life, such as financial support or activity assistance. According to the 2020 National Survey of Persons with Disabilities, the highest priority request for government and society regarding the welfare of children with disabilities under the age of 17 was medical security, followed by income security, childcare or education security, and employment security (Ministry of Health and Welfare & Korea Institute for Health and Social Affairs 2021). The findings of this study show a good alignment with these expressed needs. That is, in South

Korea, services seem to be well-prepared in areas with high demand for children with disabilities and their families. However, according to the national survey, the utilization rate of most services among children with disabilities and their families was found to be less than 30%, excluding public utility discounts. Services for care support, such as activity support and parenting support, were shown to be less than 10% (Ministry of Health and Welfare & Korea Institute for Health and Social Affairs 2021). The authors of the survey report interpreted these circumstances to mean that despite the introduction and significant expansion of support programs for people with disabilities since the 2010s, the actual perceived support felt by people with disabilities and their families is not high, indicating large blind spots in support and low policy effectiveness. They suggested that the fragmentation of disability support and lack of accessibility may have exacerbated this issue (Ministry of Health and Welfare & Korea Institute for Health and Social Affairs 2021).

Through the analysis of the characteristics of beneficiaries in our study, we can delve deeper into these interpretations. Through the analysis of characteristics of target beneficiaries by service content, the lack of both universality and selectivity of service provision was further explored. In other countries with advanced welfare states, the expansion of social integration and social inclusion is achieved with a twin-track approach of selectivity and universality (Kim 2013; Wertlieb 2019). This strategy not only promotes accessibility and inclusion throughout public systems but also provides services tailored to disability-specific needs. In this study, when services for children with disabilities and their families were classified according to characteristics of target beneficiaries, type and level of disabilities included in the child health status category, and benefit and income level included in socioeconomic status were the most frequently considered eligibility criteria, except for the general characteristics of children and families. This pattern was observed across three domains of service content (community, healthcare, and child and family lives). This suggests that services in South Korea are often provided based on restrictive criteria, focusing more on socioeconomic status or type of disability rather than on identifying who truly needs the service. While generalization of policy coverage is an important strategy for universal allocation, this study and previous studies highlight that the service provision of South Korea has not reached a comprehensive range of services and is still limited to focusing on vulnerable people depending on their income or disability status (Kim 2011; Yoo et al. 2015).

Selectivity means providing the necessary services to those in need of the very services (Carey and Crammond 2017); that is, it is necessary to deliberate on whether the criteria for identifying people in service needs are appropriate. Indeed, only a small number of services in the categories of nursing services and activity assistance evaluated the level of physical function of children with disabilities (level of functioning) and used the result as an inclusion criterion of services. It is also rare to consider the service recipient’s situation, such as family composition, living quarters, living conditions, or life events. Along with considering whether the determinants are appropriate for the service, their consistency should also be reconsidered. We found that there are five different items that the actual service adopted as criteria of income level, and the property level also contained another five items. Those in need of the service experience restrictions from

the benefits, as well as inconvenience because of the differences in criteria used. The government has made efforts to communicate the inclusion criteria of social services (S. Kim et al. 2015), but it is not yet a reality.

Recent literature underscores the significance of integrating social determinants of health (SODH) into healthcare delivery systems. Given the substantial societal investment in healthcare and the considerable number of individuals who could potentially benefit from social services, it becomes imperative for society to determine the allocation of these benefits. To this end, it is essential to identify the most appropriate approach from those previously described for recognizing current beneficiaries of social services (Bickenbach, Sabariego, and Stucki 2021). Furthermore, the importance of coordination in optimizing limited resources and addressing SODH, especially for children with disabilities and their families, at the community level cannot be overstated (Pankewicz et al. 2020). Therefore, the criteria for beneficiary characteristics cannot be determined solely based on provider convenience and general vulnerability standards; they must be decided by considering the actual SODHs that have an impact.

In terms of focusing on providing services for individuals in need, the International Classification of Functioning, Disability, and Health (ICF) by the World Health Organization (2001) can be referenced. The ICF framework is a biopsychosocial model that aims to comprehensively understand and assess various aspects related to an individual's health. The ICF emphasizes "functioning" rather than merely diagnosing diseases or disabilities. This encompasses not only physical functions and structures but also activities, participation, environmental factors, and personal factors. The concept of functioning is essential as it directly connects social services to what is significant for individuals regarding their health, such as the activities they can engage in, the roles they can assume within society, and the objectives and ambitions they can pursue (Bickenbach, Sabariego, and Stucki 2021).

For appropriateness and consistency of the service coverage and provision, an integrated welfare delivery system from the diagnosis of disabilities and evaluation of the need for support to a timely link to suitable services is consistently required. In Australia, disability reform has been carried out centered on the National Disability Insurance Scheme (NDIS) that provides services for people with disabilities based on the principle of reasonable and necessary support through a unified statutory organization since 2013 (Cowden and McCullagh 2020; Olney and Dickinson 2019). Each person with a disability is assigned a support coordinator, who links a series of steps to providing information, disability registration, service planning, provision, and evaluation. In this process, a person with a disability could not only set goals and plan for individualized needs but also be given a beneficiary-controlled budget for care, providing free choice to individuals and families (Cowden and McCullagh 2020; Olney and Dickinson 2019). Beneficiaries report improvement in QoL through the new scheme, which excludes the inequality driving factors (e.g., age, gender, socioeconomic status, residential area) and strengthens individual needs and choices (Warr et al. 2017). Additionally, caregivers of children with disabilities participating in the NIDS

program showed significant improvement in well-being and QoL (Snow and Donnelly 2017).

In South Korea, the government continues to make efforts to prepare an effective and efficient system for providing services for people with disabilities. However, the results of our study suggest that services for children with disabilities and their families in South Korea are limited and face several challenges, including restricted beneficiary criteria for using the services, weighted service content, and a lack of effective information dissemination and accessibility for services. These challenges contribute to the exclusion and burden experienced by children with disabilities and their families, as well as a lower QoL. Based on these results, it is evident that more needs to be done to promote social inclusion and support the rights of children with disabilities and their families. To achieve this goal, we recommend several actions, including expanding and improving existing services for social inclusion, developing more integrated and comprehensive policies and delivery systems, and increasing awareness and understanding of the needs of children with disabilities and their families among policymakers and the general public.

In this study, information on social services for children with disabilities and their families in South Korea was collected and evaluated using a predetermined framework. However, there were limitations in incorporating all the services that the institutions had not disclosed. Additionally, we relied on data from a single country. It is important to note that beneficiary requirements and service content may vary across countries, regions, and institutions. Therefore, we propose a methodology to review and classify existing services in other countries. Future studies could aim to investigate the global status and challenges of services for children with disabilities and their families, identifying improvement strategies by comparing these services across different areas and countries.

5 | Conclusion

This study identified and analyzed the range and characteristics of social services for children with disabilities and their families provided by public and private institutions across the three major regions in South Korea. Using a systematic classification approach, we revealed significant disparities in service inclusion criteria, which often fail to accommodate the diverse needs of the beneficiaries. These criteria not only vary widely but also tend to be restrictive, focusing primarily on socioeconomic status or specific types of disabilities, thereby limiting the overall reach and effectiveness of the services. Our findings underscore a critical gap in the current service delivery system, where the exclusion of nuanced beneficiary situations results in the underutilization of available resources. To bridge this gap, it is imperative to adopt more inclusive, needs-based criteria that reflect the actual circumstances and requirements of children with disabilities and their families. By advocating for an integrated and inclusive delivery system, we call for immediate policy reforms and strategic implementations to ensure that social services are tailored to meet genuine needs. Such an approach promises to enhance the QoL and social inclusion for children with disabilities, fostering a more equitable and supportive environment.

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Ethics Statement

This study was approved by the Kyung Hee University Institutional Review Board (No. HSIRB-18-056(RA)).

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Appendix

TABLE A1 | Target beneficiaries by service content (1) Community.

Characteristics of target beneficiaries			Contents of services		
			Community		
			Infra structure (n = 240)	ICS (n = 64)	Emotional environment (n = 52)
General characteristics of child and their families	Child age		34 (14.2)	5 (7.8)	
	Residential area	Provincial-level	239 (99.6)	61 (95.3)	51 (98.1)
		Municipal-level	227 (94.6)	49 (76.6)	49 (94.2)
Sub-municipal-level		20 (8.3)			
Child health status	Nationality		124 (51.7)	14 (21.9)	20 (38.5)
	Disability	Type of disability	47 (19.6)	18 (28.1)	7 (13.5)
		Level of disability	63 (26.3)	12 (18.8)	5 (9.6)
	Level of functioning				
	Assistive devices	Usage		5 (2.1)	
Type of AD			5 (2.1)		
Duration of AD usage					
Socioeconomic status	Income level	Income status			
		Family annual income			
		Standard median income	14 (5.8)	3 (4.7)	
		Family monthly income	1 (0.4)		
	Property level	Minimum cost of living			
		House ownership			
		Housing state			
		Estate ownership			
		Vehicle ownership	1 (0.4)		
		General properties			
Benefit	Financial properties				
	Property as standards-based assessment				
	Vehicle value				
		53 (22.1)	15 (23.4)		
National insurance level	Type of national insurance				
	National insurance fee				
	Catastrophic health expenditure				
Family composition	Type of households		10 (4.2)	2 (3.1)	
	Parents	Presence			
		Parents with disabilities			

(Continues)

TABLE A1 | (Continued)

Characteristics of target beneficiaries		Contents of services		
		Community		
		Infra_structure (n = 240)	ICS (n = 64)	Emotional environment (n = 52)
		Parents with chronic disease		
	Grandparents	Presence		
		Grandparents with disabilities		
	Siblings	Presence		
		Siblings with disabilities		
Living Quarters	House/Institution		5 (2.1)	4 (6.3)
	Type of institution		2 (0.8)	
Living condition	Vulnerable state			
Live events	Absence of parents	Absence of parents		
		Temporary absence of parents		

Abbreviation: ICS, information communication system.

TABLE A2 | Target beneficiaries by service content (2) Healthcare.

Characteristics of target beneficiaries	Contents of services				
	Operation (n = 47)	Treatment (n = 439)	AD (n = 5119)	Health_care costs support (n = 646)	Nursing services (n = 202)
General characteristics of children and their families	19 (40.4)	211 (48.1)	115 (2.2)	132 (20.4)	194 (96.0)
Child age	47 (100.0)	437 (99.5)	4906 (95.8)	623 (96.4)	202 (100.0)
Residential area	44 (93.6)	418 (95.2)	4415 (86.2)	585 (90.6)	194 (96.0)
	Sub-municipal-level	5 (1.1)	304 (5.9)	4 (0.6)	
Nationality	14 (29.8)	102 (23.2)	3083 (60.2)	389 (60.2)	155 (76.7)
Disability	45 (95.7)	190 (43.3)	4756 (92.9)	144 (22.3)	7 (3.5)
Child health status	12 (25.5)	25 (5.7)	2270 (44.3)	123 (19.0)	96 (47.5)
Level of functioning					148 (73.3)
AD	1 (2.1)	1 (0.2)	170 (3.3)		
Usage	1 (2.1)	1 (0.2)	154 (3.0)		
Type of AD					
Duration of AD usage					
Income status					
Family annual income	16 (34.0)	77 (17.5)	1487 (29.0)	157 (24.3)	18 (8.9)
Standard median income					
Family monthly income	17 (36.2)	119 (27.1)	39 (0.8)	6 (0.9)	36 (17.8)
Minimum cost of living	1 (2.1)	3 (0.7)		1 (0.2)	
House ownership					
Housing state					
Estate ownership					
Vehicle ownership					
General properties					
Financial properties					
Property as standards-based assessment					

(Continues)

TABLE A2 | (Continued)

	Contents of services				
	Healthcare				
	Operation (n = 47)	Treatment (n = 439)	AD (n = 5119)	Health_care costs support (n = 646)	Nursing services (n = 202)
Characteristics of target beneficiaries	Benefit	Vehicle value	1 (2.1)	1 (0.2)	45 (22.3)
	National insurance level	Type of national insurance	2 (4.3)	65 (14.8)	387 (59.9)
		National insurance fee			19 (2.9)
		Catastrophic health expenditure			12 (1.9)
Family composition	Type of households		1 (2.1)	17 (3.9)	2 (0.04)
	Parents	Presence		9 (2.1)	
		Parents with disabilities		3 (0.7)	
Grand_Parents		Parents with chronic disease			
		Presence		9 (2.1)	
		Grandparents with disabilities			
Siblings		Presence			3 (0.5)
		Siblings with disabilities			
Living quarters	House/Institution				
	Type of institution				
Living condition	Vulnerable state				
	Absence of parents				
Live events		Absence of parents			
		Temporary absence of parents			

Abbreviation: AD, assistive devices.

TABLE A3 | Target beneficiaries by service content (3) Child and family life.

		Contents of services								
		Child and family life								
		Legal counseling, human right (n = 42)	Enrollment (n = 104)	Financial support (n = 4537)	Parenting/ Nurturing (n = 207)	Family support (n = 181)	Culture (Leisure) (n = 203)	Transportation (n = 252)	Residence support (n = 111)	Activity assistance (n = 395)
General characteristics of children and their families	Child age		6 (5.8)	3106 (68.5)	137 (66.2)	56 (30.9)	42 (20.7)	11 (4.4)	4 (3.6)	217 (54.9)
	Residential area	Provincial-level	38 (90.5)	4363 (96.2)	190 (91.8)	175 (96.7)	167 (82.3)	251 (99.6)	104 (93.7)	394 (99.7)
		Municipal-level	35 (83.3)	4028 (88.8)	179 (86.5)	149 (82.3)	147 (72.4)	213 (84.5)	95 (85.6)	362 (91.6)
		Sub-municipal-level		114 (2.5)	44 (21.3)	5 (2.8)		2 (0.8)		45 (11.4)
Child health status	Nationality		77 (74.0)	3028 (66.7)	132 (63.8)	59 (32.6)	76 (37.4)	146 (57.9)	37 (33.3)	233 (59.0)
	Disability	Type of disability	2 (4.8)	2559 (56.4)	26 (12.6)	102 (56.4)	120 (59.1)	109 (43.3)	19 (17.1)	80 (20.3)
Level of functioning		Level of disability	9 (21.4)	1951 (43.0)	75 (36.2)	8 (4.4)	28 (13.8)	153 (60.7)	30 (27.0)	143 (36.2)
	AD	Usage		123 (2.7)					4 (3.6)	94 (23.8)
Socioeconomic status	Income level	Income status		7 (0.2)						
		Family annual income		23 (0.5)						
		Standard median income	6 (14.3)	1101 (24.3)	71 (34.3)	15 (8.3)	10 (4.9)	5 (2.0)	28 (25.2)	47 (11.9)
		Family monthly income		871 (19.2)	19 (9.2)	44 (34.3)	1 (0.5)		1 (0.9)	9 (2.3)

(Continues)

TABLE A3 | (Continued)

		Contents of services							
		Child and family life							
	Legal counseling, human right (n = 42)	Enrollment (n = 104)	Financial support (n = 4537)	Parenting/ Nurturing (n = 207)	Family support (n = 181)	Culture (Leisure) (n = 203)	Transportation (n = 252)	Residence support (n = 111)	Activity assistance (n = 395)
Characteristics of target beneficiaries	Minimum cost of living		11 (0.2)	6 (2.9)				6 (5.4)	
	Property level	House ownership	16 (0.4)					44 (39.6)	1 (0.3)
		Housing state	10 (0.2)					23 (20.7)	
		Estate ownership							
		Vehicle ownership	8 (7.7)	128 (2.8)				15 (6.0)	
		General properties							
		Financial properties							
		Property as standards-based assessment		22 (0.5)					
		Vehicle value							
	Benefit	National insurance level	1 (1.0)	1381 (30.4)	44 (21.3)	37 (20.4)	52 (25.6)	5 (2.0)	36 (32.4)
	Type of national insurance		12 (0.3)						
	National insurance fee		1 (0.02)						
	Catastrophic health expenditure								

(Continues)

TABLE A3 | (Continued)

		Contents of services								
		Child and family life								
		Legal counseling, human right (n = 42)	Enrollment (n = 104)	Financial support (n = 4537)	Parenting/ Nurturing (n = 207)	Family support (n = 181)	Culture (Leisure) (n = 203)	Trans_ portation (n = 252)	Residence support (n = 111)	Activity assis- tance (n = 395)
Characteristics of target beneficiaries	Family composition	Type of households		49 (1.1)	22 (10.6)	2 (1.1)			9 (8.1)	11 (2.8)
		Parents	Presence	24 (0.6)						
		Parents with disabilities	Parents with disabilities	32 (0.7)		4 (2.2)	2 (1.0)			
		Parents with chronic disease	Parents with chronic disease							
		Grandparents	Presence							
Living quarters		Grandparents with disabilities	Grandparents with disabilities			4 (2.2)	2 (1.0)			
		Siblings	Presence		2 (1.0)					
Living condition		Siblings with disabilities	Siblings with disabilities			4 (2.2)	1 (0.5)			
		House/ Institution		151 (3.3)			1 (0.5)		2 (1.8)	3 (0.8)
Live events		Type of institution		130 (2.9)					2 (1.8)	3 (0.8)
		Vulnerable state								
	Absence of parents	Absence of parents		32 (0.7)						
	Temporary absence of parents	Temporary absence of parents	8 (0.2)							

Abbreviation: AD, assistive device.