

Comparison between Hospital-based and Community-based Services for the Special Health Care Needs of Children with Developmental Delays

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Background: Recognizing special health care needs (SHCN) is obligatory for children with developmental delay (DD). The purpose of this study was to compare hospital-based and community-based services for the SHCN of children with DD.

Methods: We collected 114 children with DD. An expert-designed questionnaire was used to measure the SHCN of children in either hospital-based or community-based services. The questionnaire included the children's characteristics, family ecology and SHCN, which encompassed four categories, team assessment and counseling, rehabilitation, complementary and alternative treatment, and home care. We compared the differences and needs between the two health care services.

Results: More children with DD in hospital-based services had disabled certificates, catastrophic illness certificates and multiple caregivers than community-based services. More children with DD in community-based services had severe-disabled certificates than those in hospital-based services ($p < 0.001$). Children in hospital-based services had more SHCN for some items of team assessment and counseling, rehabilitation, and complementary and alternative treatment than those in community-based services ($p < 0.05$). The need for home care was not significantly different between the two services except for nutrition counseling ($p = 0.048$).

Conclusion: SHCN in multiple aspects imply the necessity for team assessment and counseling, rehabilitation, complementary and alternative treatments and nutrition counseling in approaching children with DD in hospital-based services. (*Chang Gung Med J 2010;33:164-73*)

Key words: special health care needs, developmental delay, community-based services

Developmental delay (DD) is a condition in which children do not achieve developmental milestones in motor, perceptual, speech, cognition and behavior aspects.⁽¹⁾ The prevalence of DD is esti-

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mated to be 3~4%, which means DD are not uncommon.^(2,3) Early intervention (EI) provided by different services is obligatory for children with DD, because it has been documented to improve children's developmental outcomes and reduce socioeconomic costs and impact.^(4,5)

Children with DD need special health care. Children with special health care needs (SHCN) are those who have a risk of a chronic physical, developmental, behavioral, or emotional condition and who also require health and related interventions of a type or amount beyond that required by children generally.⁽⁶⁾ Recognizing SHCN is necessary for children with DD, since many children need EI programs and do not receive them.^(6,7) Studies show that only 17~33% of children with DD receive EI programs.^(2,8) The reasons include lack of information, difficulty in accessing health services, and high poverty level.^(9,10)

EI programs, which include therapeutic programs (eg. physical therapy, occupational therapy, and speech therapy), specialized medical treatment, family counseling and equipment,⁽⁶⁾ are provided by different services such as hospital-based, community-based, home-based, and school-based services. There are more comprehensive therapeutic facilities in hospital-based services. For example, children with DD can receive physical therapy with strength training using bicycles, ambulation training using partial-weight support treadmills, and therapeutic exercise using suspension equipment. Community-based services can not provide related training due to of a lack of facilities. Therapists in community-based services use simple, portable equipment such as Swiss balls for treatment.

Hospital-based services provide more specialists, complete medical equipment, and comprehensive therapeutic facilities than community-based services. On the other hand, shorter transportation times, and lower costs, including transportation fees, are needed to access community-based than hospital-based services. Community-based services aim to provide better availability of EI programs.^(11,12) Community-based rehabilitation projects have been conducted in Australia and India for disabled people in urban areas.^(13,14) In the United States, an institution with a similar function, called the "medical home", practices the spirit of community-based care for children with SHCN.⁽¹⁵⁻¹⁷⁾

Few studies have compared the different ser-

vices for the SHCN of children with DD.⁽¹⁸⁾ The purpose of this study was to compare hospital-based and community-based services for the SHCN in children with DD in Taiwan. Also, we identified differences in children's characteristics and family ecology between the two services, and correlated these background data with SHCN in children with DD.

METHODS

Participants

From January 2007 to December 2007, children with DD receiving EI in the Taoyuan area were recruited into this study. The sources were either rehabilitation departments in hospitals, or community-based services. There were a total of 2 hospitals and 11 community-based services enrolled in this study. The community-based services were located in Junli, Longtan, Yangmei, Shinwu, Bade, Dasi, Dayuan, and Luchu townships. The community-based services in Taoyuan had specialists including a rehabilitation physiatrist, physical therapists, occupational therapists and speech therapists. The therapists came to the rehabilitation stations on a regular schedule and provided EI programs.

Procedures

The questionnaire was mailed to the main caregiver or guardian of the children. Telephone interviews and then personal interviews were done if the questionnaire was not answered completely. The children were classified into 2 groups according to the EI providing services. Children receiving EI programs in both services had rehabilitation treatment at hospital-based services at irregular intervals during out-patient department follow up. Intervention at community-based services was at regular intervals. Considering the treatment interval, these children were classified as receiving community-based services. The response rate was 46%, and a total of 57 children from hospital-based services, and 57 children from community-based services were recruited into this study. Once the questionnaire was completed, the data were enrolled into the analysis.

Questionnaire

The content of the questionnaire was designed through data collection, expert conferences and revisions. The average content validity index was 0.88.

The questionnaire included three parts, children's characteristics, family ecology and SHCN. Children's characteristics encompassed their age, gender, severity of disabilities, categories and types of disabilities, and whether they had a disabled certificate and catastrophic illness certificate. The severity on a disabled certificate, which is issued by the Taiwan Ministry of the Interior, is classified into mild, moderate and severe. The categories of disabled certificate included single-type or multiple-type disabilities. The types of disabled certificates were divided into limb-related or other types, such as mental retardation. A catastrophic illness certificate is issued by the Taiwan Bureau of National Health Insurance to those who fulfilled the criteria.

Family ecology consisted of the main caregiver, number of caregivers, whether the subject lived with the parents, parents' marital status, family type, economic status, father's occupation, mother's occupation, parents' educational level and mother's nationality. The main caregiver was categorized into mother and people other than the mother (eg. father, grandparents, relatives and others). The number of caregivers was categorized as one caregiver and two or more caregivers such as grandparents, babysitter, relatives, and others. The marital status included married and other statuses, which encompassed unmarried, divorced, separated and others. The family types included nuclear, extended, single-parent, and care-by-grandparents. The economic status was categorized into 2 grades, below or above 360,000 Taiwan dollars per year. The father's occupation included labor and non-labor, such as housekeeping, education, farming, business, military, service industry and others. The mother's occupation included housekeeping, and non-housekeeping which included education, farming, labor, business, military, service industry and others. The education level was categorized into 3 grades (low: less than high school, middle: high school, and high: university or higher). The education level of the parent with the higher level was selected into analysis. The mother's nationality was categorized into Taiwan and other countries.

The SHCN encompassed 4 categories, team assessment and counseling, rehabilitation, complementary and alternative treatment, and home care. Team assessment and counseling included team assessment, explanation of assessment results, expla-

nation of early intervention plan, genetic counseling, and specialist-family meetings. Rehabilitation encompassed physical therapy, occupational therapy, speech therapy, mental health intervention, cognitive therapy and orthoses (ambulation aids, corrective orthoses, devices to assist communication). Examples of ambulation aides included crutches, walkers, and wheelchairs. Corrective orthoses included splints, corrective shoes, and braces. Devices to assist communication included communication boards and language training systems. Complementary and alternative treatment included music therapy, art therapy, dance-movement therapy, drama therapy, play therapy and acupuncture. Home care included home care services, nursing counseling, instruction in nursing skills and nutrition counseling.

Special health care needs on this questionnaire were rated on a 5 point scale: 1: no need, 2: no strong need, 3: need, 4: need very much, and 5: strong need. If responders did not know whether they needed the health care services, the need was expressed as "not known".

Data analysis and statistics

The categories of no need and no strong need were considered together as the "no need" group, while the need, need very much, and strong need categories were considered together as the group of "need." Differences in continuous data (age) between the 2 groups were compared using a t-test. Differences in the categorical data of children's characteristics, family ecology and SHCN (enrolled as "Need" and "No need") between the two services were determined with the chi-square or Fisher's exact test if at least one of the expected cell counts was less than 5. With items showing a significant difference, Spearman's correlation was used to determine the relationship between children's background data and SHCN. A value of $p < 0.05$ was considered statistically significant.

RESULTS

Children's characteristics and family ecology

We found that 70.2% of children with DD were boys in community-based services, and 49.1% were boys in hospital-based services ($p = 0.022$, Table 1). The majority of children with DD in hospital-based

Table 1. Children's Characteristics in Hospital-based and Community-based Services

Data	Hospital based	Community-based	<i>p</i> value
Age (year) [‡]	5.1 ± 1.8	5.4 ± 2.3	0.444
Gender			0.022*
Male	28 (49.1%)	40 (70.2%)	
Female	29 (50.9%)	17 (29.8%)	
Disabled certificate			< 0.001*
Yes	42 (73.7%)	20 (35.1%)	
No	15 (26.3%)	37 (64.9%)	
Disability severity [‡]			0.001*
Mild	8 (19.5%)	4 (20.0%)	
Moderate	26 (63.4%)	4 (20.0%)	
Severe	7 (17.1%)	12 (60.0%)	
Disability category			0.461
Single	33 (78.6%)	14 (70.0%)	
Multiple	9 (21.4%)	6 (30.0%)	
Disability type			0.138
Limb-related	21 (50.0%)	6 (30.0%)	
Other types	21 (50.0%)	14 (70.0%)	
Catastrophic illness [‡]			0.004*
Yes	26 (46.4%)	12 (21.1%)	
No	30 (53.6%)	45 (78.9%)	

Data are expressed as n (%) of cases.

*: *p* < 0.05; †: t-test; ‡: data is missing in one subject.

services had disabled certificates (73.7%), while fewer children in community-based services had these (35.1%) (*p* < 0.001, Table 1). Among those with disabled certificates, more children had severely-disabled certificates in community-based services (60.0%) than hospital services (17.1%) (*p* = 0.001, Table 1). More children from the hospitals (46.4%) had catastrophic illnesses than those from community-based services (21.1%) (*p* = 0.004, Table 1). There was no significant difference in the number of children in single and multiple disabled categories between the two services (Table 1).

Most children from hospitals had two or more caregivers (94.7%) compared with those in community-based services (75.4%) (*p* = 0.007, Table 2). More children in hospital services lived with their parents (96.5%) than those in community-based services (84.2%) although this did not reach statistical significance (Table 2). There were no significant dif-

Table 2. Family Ecology in Hospital-based and Community-based Services

Data	Hospital based	Community-based	<i>p</i> value
Main caregiver			0.469
Mother	48 (84.2%)	45 (78.9%)	
Other: father, grandparents, relatives and others	9 (15.8%)	12 (21.1%)	
Number of caregivers			0.007*
One	3 (5.3%)	14 (24.6%)	
Two or more	54 (94.7%)	43 (75.4%)	
Living with parents			0.053
Yes	55 (96.5%)	48 (84.2%)	
No	2 (3.5%)	9 (15.8%)	
Parents' marital status			1
Married	53 (93.0%)	52 (91.2%)	
Other: unmarried, divorced, separation and others	4 (7.0%)	5 (8.8%)	
Family type			0.203
Nuclear/Extended	54 (94.7%)	49 (86.0%)	
Single-parent/Care-by-grandparents	3 (5.3%)	8 (14.0%)	
Economic status [†]			0.082
Below NTD 360,000 per year	9 (16.1%)	17 (29.8%)	
Above NTD 360,000 per year	47 (83.9%)	40 (70.2%)	
Father's occupation [†]			0.386
Labor	22 (39.3%)	27 (47.4%)	
Non-labor	34 (60.7%)	30 (52.6%)	
Mother's occupation [†]			0.301
Housekeeper	30 (53.6%)	36 (63.2%)	
Non-housekeeper	26 (46.4%)	21 (36.8%)	
Parent's educational level ^{†‡}			0.524
Low: < high school	2 (3.6%)	5 (8.8%)	
Middle: high school	25 (44.6%)	22 (38.6%)	
High: university or higher	29 (51.8%)	30 (52.6%)	
Mother's nationality [†]			0.298
Taiwan	50 (89.3%)	47 (82.5%)	
Other countries	6 (10.7%)	10 (17.5%)	

Data are expressed as n (%) of cases.

*: *p* < 0.05; †: data is missing in one subject; ‡: the education level of the parent with the higher level was selected.

ferences between the two services for the main caregiver, parents' marital status, family type, economic status, parents' occupations and education level, and mother's nationality (Table 2).

Special health care needs

The need for genetic counseling (31.6 ~ 50.9%) was lower than for team assessment, explanation of assessment results and specialist-family meetings (63.2 ~ 78.9%) (Table 3). In general, the need for conventional rehabilitation (physical therapy, occupational therapy, speech therapy) (59.6% ~ 89.5%, Table 4) was higher than the need for complementary and alternative treatment (35.1 ~ 54.4%, Table 5). The need for home care ranged from 19.3% to 52.6% (Table 6).

Table 3. Team Assessment and Counseling Needs of Children with DD in Hospital-based and Community-based Services

	Hospital-based	Community-based	<i>p</i> value†
Team assessment			0.045*
Need	41 (71.9%)	38 (66.7%)	
No need	5 (8.8%)	14 (24.6%)	
Not known	11 (19.3%)	5 (8.8%)	
Explanation of assessment results			0.019*
Need	45 (78.9%)	38 (66.7%)	
No need	4 (7.0%)	14 (24.6%)	
Not known	8 (14.0%)	5 (8.8%)	
Explanation of early intervention plan			0.025*
Need	46 (80.7%)	38 (66.7%)	
No need	5 (8.8%)	14 (24.6%)	
Not known	6 (10.5%)	5 (8.8%)	
Genetic counseling			0.006*
Need	29 (50.9%)	18 (31.6%)	
No need	16 (28.1%)	32 (56.1%)	
Not known	12 (21.1%)	7 (12.3%)	
Specialist-family meetings			0.021*
Need	42 (73.7%)	36 (63.2%)	
No Need	5 (8.8%)	15 (26.3%)	
Not known	10 (17.5%)	6 (10.5%)	

Data are expressed as n (%) of cases.

*: *p* < 0.05; †: the *p* value indicates the difference in "Need" and "No need" between the two services.

The need for all items of team assessment and counseling in children with DD was higher in hospital-based (71.9 ~ 80.7%) than community-based services (63.2 ~ 66.7%) (*p* < 0.05, Table 3). In rehabilitation, the need for physical therapy and cognitive therapy was higher in hospital-based (71.9 ~ 87.7%)

Table 4. Rehabilitation Needs of Children with DD in Hospital-based and Community-based Services

	Hospital-based	Community-based	<i>p</i> value†
Physical therapy			0.005*
Need	50 (87.7%)	34 (59.6%)	
No need	6 (10.5%)	17 (29.8%)	
Not known	1 (1.8%)	6 (10.5%)	
Occupational therapy			0.742
Need	49 (86.0%)	51 (89.5%)	
No need	6 (10.5%)	4 (7.0%)	
Not known	2 (3.5%)	2 (3.5%)	
Speech therapy			0.636
Need	47 (82.5%)	46 (80.7%)	
No need	8 (14.0%)	10 (17.5%)	
Not known	2 (3.5%)	1 (1.8%)	
Mental health intervention			0.053
Need	34 (59.6%)	28 (49.1%)	
No need	10 (17.5%)	20 (35.1%)	
Not known	13 (22.8%)	9 (15.8%)	
Cognitive therapy			0.002*
Need	41 (71.9%)	28 (49.1%)	
No need	9 (15.8%)	24 (42.1%)	
Not known	7 (12.3%)	5 (8.8%)	
Orthoses			0.472
Ambulation aids			
Need	18 (31.6%)	14 (24.6%)	
No need	36 (63.2%)	38 (66.7%)	
Not known	3 (5.3%)	5 (8.8%)	
Corrective orthoses			0.068
Need	34 (59.6%)	23 (40.4%)	
No need	21 (36.8%)	29 (50.9%)	
Not known	2 (3.5%)	5 (8.8%)	
Communication devices			0.510
Need	19 (33.3%)	24 (42.1%)	
No need	27 (47.4%)	26 (45.6%)	
Not known	11 (19.3%)	7 (12.3%)	

Data are expressed as n (%) of cases.

*: *p* < 0.05; †: the *p* value indicates the difference in "Need" and "No need" between the two services.

Table 5. Complementary and Alternative Treatment Needs of Children with DD in Hospital-based and Community-based Services

	Hospital-based	Community-based	<i>p</i> value [†]
Music therapy			0.025*
Need	31 (54.4%)	25 (43.9%)	
No need	9 (15.8%)	21 (36.8%)	
Not known	17 (29.8%)	11 (19.3%)	
Art therapy			0.027*
Need	29 (50.9%)	22 (38.6%)	
No need	11 (19.3%)	23 (40.4%)	
Not known	17 (29.8%)	12 (21.1%)	
Dance-movement therapy			0.053
Need	27 (47.4%)	21 (36.8%)	
No need	13 (22.8%)	24 (42.1%)	
Not known	17 (29.8%)	12 (21.1%)	
Drama therapy			0.058
Need	26 (45.6%)	20 (35.1%)	
No need	14 (24.6%)	25 (43.9%)	
Not known	17 (29.8%)	12 (21.1%)	
Play therapy			0.053
Need	31 (54.4%)	26 (45.6%)	
No need	9 (15.8%)	19 (33.3%)	
Not known	17 (29.8%)	12 (21.1%)	
Acupuncture			< 0.001*
Need	38 (66.7%)	14 (24.6%)	
No need	10 (17.5%)	29 (50.9%)	
Not known	9 (15.8%)	14 (24.6%)	

Data are expressed as n (%) of cases.

*: *p* < 0.05; †: the *p* value indicates the difference in “Need” and “No need” between the two services.

than community-based services (49.1 ~ 59.6%) (*p* < 0.05, Table 4). The need for occupational therapy, speech therapy, mental health intervention, and orthoses showed no significant differences between the two services (Table 4). In complementary and alternative treatment, and home care, the need for music therapy, art therapy, acupuncture and nutrition counseling in children with DD was higher in hospital-based (50.9 ~ 66.7%) than community-based services (24.6 ~ 43.9%) (*p* < 0.05, Tables 5 and 6). There were no significant differences in need for dance-movement therapy, drama therapy, play therapy, home care services, nursing counseling and

Table 6. Home Care Needs of Children with DD in Hospital-based and Community-based Services

	Hospital-based	Community-based	<i>p</i> value [†]
Home care services			0.990
Need	15 (26.3%)	16 (28.1%)	
No need	33 (57.9%)	35 (61.4%)	
Not known	9 (15.8%)	6 (10.5%)	
Nursing counseling			0.695
Need	26 (45.6%)	24 (42.1%)	
No need	26 (45.6%)	28 (49.1%)	
Not known	5 (8.8%)	5 (8.8%)	
Instruction in nursing skills			0.813
Need	12 (21.1%)	11 (19.3%)	
No need	39 (68.4%)	40 (70.2%)	
Not known	6 (10.5%)	6 (10.5%)	
Nutrition counseling			0.048*
Need	30 (52.6%)	21 (36.8%)	
No need	20 (35.1%)	31 (54.4%)	
Not known	7 (12.3%)	5 (8.8%)	

Data are expressed as n (%) of cases.

*: *p* < 0.05; †: the *p* value indicates the difference in “Need” and “No need” between the two services.

instruction of nursing skill between the two services (Tables 5 and 6).

Correlation between children’s background data and SHCN

Children with disabled certificates needed more physical therapy, cognitive therapy, acupuncture and nutrition counseling (coefficient = 0.216 ~ 0.456, *p* < 0.05) than other children. Children with catastrophic illness had more need for team assessment, physical therapy, cognitive therapy, music therapy, art therapy and acupuncture (coefficients = 0.193 ~ 0.368, *p* < 0.05) than other children. Children with two or more caregivers had more need for team assessment, explanation of assessment results and EI plans, and specialist-family meetings (coefficient = 0.272 ~ 0.365, *p* < 0.05) than those with one caregiver. The severity of disability showed no statistically significant correlation with SHCN items.

DISCUSSION

Children with DD needed more conventional treatment than complementary and alternative treatment in this study. There were several factors that led to this difference. First, charges for conventional therapy are covered by national health insurance in Taiwan, while those for complementary and alternative treatment are not. Second, conventional treatment has evidence-based treatment effects,^(19,20) while most complementary and alternative treatments lack clinical practice and evidence.⁽²¹⁻²⁴⁾ Third, not all hospitals provide complementary and alternative treatment, but most hospitals provide conventional therapy.

The rehabilitation needs for physical therapy and cognitive therapy were significantly higher in children with DD from hospital-based services. The population of children using physical therapy is far higher than those using occupational therapy and speech therapy.⁽²⁵⁾ The main rehabilitation services used by children with disabilities are physical therapy and occupational therapy.⁽²⁶⁾ In this study, children at hospitals received EI in the rehabilitation department. In addition, more children in hospital-based services than community-based services had disabled certificates and catastrophic illnesses, which indicate a more disabled condition with a need for more comprehensive interventions such as physical therapy and cognitive therapy.

The need for team assessment, counseling, and complementary and alternative treatments in hospital-based services was higher than in community-based services. Hospitals have specialists in different fields so they can execute these interventions,⁽²⁷⁾ and provide related information. Compared with community-based services, children in the hospital-based services had more caregivers, which was correlated with more need in most items of team assessment and counseling. For caregivers who didn't need explanations of assessment results and EI plans, the data showed an association with higher economic status than that for caregivers who needed explanations. This could be because their financial condition was better and they subsequently could afford more treatments.

Genetic counseling needs were lower than other needs in team assessment. During diagnosis of a dis-

abled child, caregivers' adaptation is most related to early disclosure of diagnosis, and sharing of information.⁽²⁸⁻³⁰⁾ Genetic counseling can facilitate the caregivers' adaptation process,⁽³¹⁾ and is usually preserved for those children with sporadic diseases, uncertainty in diagnosis, or those who are severely disabled.^(31,32) Only a few of the participants in our study had these conditions so there were lower needs for genetic counseling.

Home care is one of the main policies, especially for the elderly, in community-based services.^(33,34) In this study, however, the need for home care services in children with DD from the community-based services was not as high as we expected. Children needing home care were mostly severely disabled.^(35,36) Twelve children in the community-based services had severe-disabled certificates. Because this number was so small, higher home needs in community-based services by this group could not be demonstrated in this study.

More children in the hospital-based services than community group had disabled certificates, which was correlated with a higher need for nutrition counseling. This explained the higher need for nutrition counseling in children with DD at hospital-based services than community-based services.

Most children in community-based services encompassed two diverse populations, those with disabilities not severe enough to have disabled certificates and those with severe-disabled certificates. These are two extremes, mild and very severe disabilities. Children with more severe disabilities have a higher intensity of treatments, while those with mild disabilities might be more likely to access a wider range of facilities, such as community-based services.^(18,37) Meanwhile, a severe disability could limit transportation and further access to a hospital. For example, the need for continuous oxygen supplementation in children with poor respiratory function could be a hindrance in transportation. This could be why most children in community-based services had mild or very severe disabilities.

More children in hospital-based services had disabled certificates and catastrophic illnesses than those in community-based services. Catastrophic illnesses include cerebral palsy, spinal cord injury, and congenital muscular atrophy, which necessitate long term medical care. Although Gruen et al. pointed out that specialist outreach services to disadvantaged

communities improved access to specialist consultations and procedures,^(38,39) lack of a specialist team and lack of complete medical facilities in community-based services forced children to go to hospitals for comprehensive medical care. In addition, medical subsidies for those with disabled certificates and catastrophic illnesses lower the financial burden to access hospital-based services.

Family ecology was also associated with access to different health services. In this study, a higher percentage of children from hospital-based services had two or more caregivers and lived with parents. Other studies found that if the function of the family was better, children had more opportunities to access health care needs.⁽⁴⁰⁾ In our study, the presence of the mother as a main caregiver and the type of family showed no differences between the two services. Lin et al. found that children with the main caregiver as a female and a nuclear family received a higher proportion of health services.⁽²⁶⁾

The limitation of this study was the study sample. Only two hospitals in Taoyuan were enrolled in this study; hence the findings cannot be generally applied to Taiwan. However, our findings can demonstrate the different SHCN in children with DD from the two services.

In conclusion, disease severity and family function are both factors influencing children's access to health care services. Children with DD in hospital-based services have more SHCN, especially in team assessment and counseling, rehabilitation, and complementary and alternative treatment and nutrition counseling. Needs in multiple aspects imply a necessity for these interventions in approaching children with DD in hospital-based services. Community-based services provide a more accessible method for long-term health care, but still require some intervention by specialists. The roles of hospital and community-based services are complementary to each other. The integration of these two health services can provide more comprehensive health care to children with DD. This information is useful for orienting resources and implementing helpful policies for children with DD. Further study may be needed with a larger sample size and larger study area in Taiwan.

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比較接受醫院型式及社區醫療型式服務的 發展遲緩兒童其特殊醫療照護需求

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背景：發現並認知到特殊醫療照護的需求，對發展遲緩兒童至為必要。本篇研究主要的目的為比較發展遲緩兒童在醫院型式及社區醫療型的特殊醫療照護需求差異處。

方法：本篇研究共收集 114 位發展遲緩兒童。藉由專家設計的問卷去評量兒童在醫院型式及社區醫療型的特殊醫療照護需求。問卷包含兒童資料、家庭生態，與特殊醫療照護需求項目；需求分為四大類：團隊評估與諮詢、復健、輔助與另類治療、及居家照護。比較在不同醫療照護機構下的需求。

結果：醫院型式接受治療的發展遲緩兒童相較於社區醫療型式者，有較多殘障手冊、重大傷病卡，及較多照顧者。在社區醫療型的發展遲緩兒童持有重度殘障手冊者較醫院型式者多 ($p = 0.001$)。醫院型式接受治療的兒童，其團隊評估與諮詢、復健、輔助與另類治療其中的許多項目需求高於在社區醫療型式接受治療的兒童 ($p < 0.05$)。除營養諮詢 ($p = 0.048$)，其他的居家照護的需求在醫院型式與社區醫療型式之間未達顯著差異。

討論：對於以醫院型式接受治療的發展遲緩兒童而言，許多特殊醫療照護需求項目的需求較高；此現象顯示，團隊評估與諮詢、復健、輔助與另類治療及營養諮詢對醫院型式接受治療的發展遲緩兒童是必要的。

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關鍵詞：特殊醫療照護需求，發展遲緩，社區醫療

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