

Appreciation family support and the abilities of children with special needs to maintain personal hygiene: an Indonesian case study

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Abstract

Family support is needed to empower children with special needs to maintain personal hygiene, includes information, instrumental, emotional, and appreciation support. The study design was cross-sectional, involving 84 parents of children with special needs. The study was conducted via the respondents filling out a questionnaire consisting of three sub-questions. The results showed no relationship between the characteristics of children with special needs and personal hygiene; there was also no relationship between parental characteristics and personal hygiene ($P>0.05$). There was, however, a relationship between information, instrumental, emotional, and appreciation support and personal hygiene ($P<0.005$), the most influential support being appreciation support. In conclusion, there was a significant relationship between information, instrumental, emotional, and appreciation support and the ability of children with special needs to maintain their personal hygiene. The recommendations for future studies are different research methods to explore more about the types of family support.

Introduction

Children with special needs are those who have a risk of experiencing chronic conditions; developmental, behavioral, or emotional disorders; abnormalities or physical disabilities; and need health services that are more than those of typical children.¹ Children with special needs are those who experience limitations or excellence, including physical, intellectual, social, and emotional types, that have a significant influence on their process of growth and development compared to other children their age.²

One study's results shows that 15.3% of the world's population, or around 978 million of the estimated 6.4 billion people in the

world as of 2004, have moderate disabilities and 2.9% have severe disabilities, whereas in the population age range 0-14 years, people with moderate disabilities number around 0.7% (13 million people) and those with severe disabilities at around 5.1% (93 million people).³ The number of children with special needs in Indonesia is around 295,250, which is 7-10% of Indonesia's total population.⁴ Based on similar data, the presentation of children age 24-59 months, about 0.53% have disabilities.⁵

The ability to perform Activity Daily Living (ADL) or daily activities is important so that one can function in everyday life.⁶ Children with special needs often experience problems in carrying out ADL, one of which is the personal subdomain of eating, dressing, maintaining personal hygiene, and toileting.⁷ Autistic children have a low level of adaptation in terms of socializing, communicating, and daily activities.⁸ From a retrospective method, the dental health of children with special needs in Lithuania is very poor, where 72% of the children had five damaged teeth, and as many as 27% of the children had 10 damaged teeth.⁹ In another study, 60 children with disabilities in Spain, 19 (31.7%) stated that they brush their teeth twice a day, 18 (30%) brush their teeth three times a day, and 10 (16.7%) brush their teeth sometimes.¹⁰ Meanwhile, the majority of autistic children experience incompetence in self-care, eating, and dressing.¹¹ Atopic severe dermatitis in children is caused by bathing once a day only two to three times a week.¹²

Good self-care has an impact on health though the health status of those with disabilities is lower than general health.¹³ Some of the diseases caused due to lack of self-care are those in the mouth area, specifically from poor oral hygiene due to not brushing teeth.¹⁰ The mouth diseases that often arise are gingivitis, periodontitis, and caries.¹⁴ Another problem that arises due to a lack of self-care is the discomfort caused by dirty clothes from toileting inabilities; besides that, children with special needs are often victims of bullying, both physically and verbally.¹⁵

Family support is very much needed by children with special needs. Family support consists of information, emotional, appreciation, and instrumental support, which are all direct provided assistance, for example, parents provide assistive devices to bathe children with special needs that are suitable for those children's needs.¹⁶ The most common support is material/instrumental, where families provide basic needs such as food, shelter, and health care.¹⁷ The main source of support for children with chronic

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diseases re their mothers, who teach them about disease management, safety, and how to cope with their concerns.¹⁸

The role and support of the family, especially parents, is very much needed to help make children with special needs independent. The role of parental care for children with special needs is still low at 16.1%, and family and social support is as low as 12.9%.¹⁹ Another study stated that the percentage of mentally retarded children capable of self-care activities (personal hygiene, eating, drinking, dressing, mobilization, movement, socialization) without assistance from others is 3.1%.²⁰ A different study told that the ability of mentally disabled children to the toilet was 45.5%, while children are totally dependent on parents and teachers to carry out defecation and childbirth.²¹ Another study indicated

that parents with children with autism are taught how to toilet train their children by setting a schedule for toilet sitting, increasing their fluid intake, positively reinforcing elimination in the toilet, guiding self-initiation, and penalizing their children for failing to toilet; from all these steps, it was found that all the studied children were able to use toilets in other places, such as the home, school, and public places.²²

Nurses and parents look for ways for children with special needs to pass through developmental stages with all the potential they possess.¹ One way is to provide support and teach and train skills about individual needs, especially personal hygiene that must be done without help from others, to ensure independence in everyday life as individuals and social beings through education from families, schools, and communities.

Materials and Methods

This research followed a quantitative method with a descriptive analysis design and is cross-sectional because family support and personal hygiene in children with special needs were assessed simultaneously to see whether there is a relationship or not between the two.²³

The data collection technique used was a questionnaire. The study sample were parents of children with special needs who attend the Bogor City special school and Bogor District special school and are age 6-18 years old, amounting to 84 people. The instrument used in this study was a questionnaire consisting of three components, namely questionnaire A about family characteristics, questionnaire B about family support, and questionnaire C about personal hygiene. Family support consists of information, instrumental, emotional, and appreciation support, while personal hygiene consists of bathing and shampooing, brushing teeth, and cleaning genitalia. We measured the results using a Likert scale.

The study was conducted after passing an ethics review from the ethics committee of the Indonesian University of Nursing Faculty (FIK UI), then obtaining permission from the local education office, which together with the school identified parents who were in accordance with the inclusion criteria. The researchers provided informed consent to the respondents; if they were not willing to participate, they were able to resign.

Results

From this study, the following results were obtained: Tables 1 and 2 show no significant relationship between parental char-

acteristics and the characteristics of children with special needs and the ability to maintain personal hygiene (P-value <0.05). Table 3 features a relationship between family support and children's with special needs ability to maintain personal hygiene, as well as other family support variables with P-value <0.05. The majority of family support is appreciation support, with an OR value of 17.672 (CI 5.933-52.629). This means that children with special needs with good appreciation support have a risk of 17.672 times to be able to maintain personal hygiene independently.

Discussion

The assessed children with special needs were age 6-18 years and divided into two categories, namely children age 6-12 years and children age 12-18 years. The majority of children with special needs were 6-12 years old. The ability of children with special needs to maintain personal hygiene routines is not the same as children in general. Typical children can maintain personal hygiene in accordance with the appropriate stages of growth and development. This is certainly different for children with special needs, especially mentally disabled children, whose level of intelligence is limited and below the average age of children, such as instances where once they reach the age level of grade II or IV, they reach the mental age of preschool-level children.²⁴

Most of the parent respondents in this study were 35-55 years old. People at the age of over 20 years can make decisions and play a role in educating and shaping the behavior of themselves and children.²⁵ People at the age of over 20 years are mature enough to parent, as parents are expected to be able to provide support to family members, especially children with special needs.

The education level of the parental respondents in this study was mostly high school. Parental education level is related to parental involvement in education and childcare, as parental education can indirectly affect the academic achievements of children because of the parents' support in the home.²⁶ In addition, parents can become teachers at home and help their children do homework and provide other cognitive stimulation. Two of the factors that influence childcare are education and parental experience, which affect parents' readiness to carry out their duties.²⁷ The quality of life of children with special needs is better primarily for those who are cared for by mothers with higher education and receive addi-

tional social support from all family members.²⁸

The description of family support in this study generally shows good results. The most common family support is instrumental, which can be seen in the form of equipment for personal hygiene, such as a small dipper for bathing; storing soap, toothbrushes, and glasses for gargling in a place that is easily accessible to children; and the availability of soft-bristled toothbrushes sized according to the size of the child's mouth. Children with special needs require social support, one form of which being children with intellectual impairments receiving instrumental support from their parents, such as in carrying out self-care, in addition to their parents receiving instrumental support from their biological or other close relatives.²⁹ Family support is very helpful in minimizing psychological complaints; providing strength, motivation, and energy; and reducing uncertainty and insecurity that affect the health and quality of life of children with special needs.³⁰

Based on the results of this study's Chi-square test, there was no significant relationship between parental characteristics, namely parents' age, education, employment, and income, and the ability of children with special needs to maintain personal hygiene. The results of the Chi-square test for the relationship between the characteristics of children with special needs and personal hygiene ability also showed no significant relationship. This is in line with self-care agents in mentally disabled children are not influenced by the characteristics of children, parents, or the environment.²⁰

Our results showed that there is a relationship between family support and children's with special needs ability to maintain personal hygiene at $P < 0.05$. From the results of this study, we found that the majority of children with special needs who receive good family support can maintain personal hygiene independently. The majority of families provide family support to children with special needs in regard to personal hygiene.

There is a relationship between information support and children with special needs ability to maintain personal hygiene. More than one-third of children with disabilities who were given information by their families brush their teeth twice to three times a day.¹⁰ There is also a relationship between instrumental support and children with a special needs ability to maintain personal hygiene. Instrumental support is included in the health care and family economic functions.¹⁶ The health care function can take the form of providing food, clothing, and shelter, and the

family economic function in the form of adequate financial provision. Meanwhile, the most common family supports, namely material/instrumental, are where families really provide basic needs, such as food, shelter, and health care.¹⁷

There is one other relationship between appreciation support and children with special needs ability to maintain personal hygiene. Appreciation support from the family can improve the psychosocial status of all family members, so children with special needs who receive encouragement and praise will feel useful and have increased

self-esteem, so they are motivated to maintain their personal hygiene.¹⁶ Based on the results of this conducted research and as supported by related studies, it can be concluded that appreciation support has a meaningful relationship with increasing family support for children with special needs in maintaining their personal hygiene.

Multivariate analysis revealed that the most related variables to children with special needs personal hygiene are appreciation and information support. Appreciation support is given to another through positive expressions so that the person feels better in

facing stressors. Children with special needs who receive appreciation support such as encouragement, praise, and positive reinforcement to maintain their personal hygiene will feel happy, proud, and valuable and thus motivated to actualize themselves. With the support of information, children with special needs will know how to maintain and the benefits of personal hygiene so they will want to do it. Information support, meanwhile, is information provided so that children with special needs become aware of how to maintain personal hygiene.

Table 1. Distribution of the relationship characteristics of parents of children with special needs with the ability to maintain personal hygiene in Bogor (n=84).

No.	Parent characteristics variables	Independent		Personal hygiene Not independent		n	Total %	P-value
		N	%	N	%			
1	Age							
	20-35 years	9	56.2	7	43.8	16	100	0.670
	>35-55 years	37	55.2	30	44.8	67	100	
	>55 years	1	100	0	0.00	1	100	
2	Education							
	Elementary school	4	57.1	3	2.94	7	100	0.309
	Junior high school	2	25.0	6	75.0	8	100	
	High school	26	57.8	19	42.2	45	100	
	College	15	62.5	9	37.5	24	100	
3	Job							
	Does not work	6	66.7	66.7	33.3	9	100	0.488
	Works	41	54.7	334	45.3	75	100	
4	Income							
	Less minimum wage	29	58.0	21	42.0	50	100	0.647
	More minimum wage	18	52.9	16	47.1	34	100	

Table 2. Distribution of the relationship characteristics of children with special needs with the ability to maintain personal hygiene in Bogor (n=84).

No.	Children with special needs characteristics variables	Independent		Personal hygiene Not independent		n	Total %	P-value
		N	%	N	%			
1	Physical condition							
	Deaf	17	36.2	3	8.1	20	23.8	0.004*
	Blind	2	4.3	2	5.4	4	4.8	
	Physical disabled	4	8.5	5	13.5	9	10.7	
	Mentally disabled	21	44.7	20	54.1	41	48.8	
	Autism	3	6.4	4	10.8	7	8.3	
	ADHD	0	0.0	2	5.4	2	2.4	
	Difficulties in learning	0	0.0	1	2.7	1	1.2	
2	Cognitive ability							
	IQ <25	0	0.00	2	5.4	2	2.4	0.314
	IQ >25-50	16	34.0	13	35.1	29	34.5	
	IQ >50	31	66.0	22	59.5	53	63.1	
3	Age							
	6-12 years	24	51.1	23	48.9	47	100	0.308
	>12-18 years	23	62.2	14	37.8	37	100	
4	Gender							
	Male	23	51.1	22	48.9	45	100	0.336
	Female	24	61.5	15	38.5	39	100	

*P-value <0.05.

Table 3. Distribution of the relationship between family support and children with the ability to maintain personal hygiene in Bogor (n=84).

No.	Family support variable	Independent		Personal hygiene Not independent		Total n	Total %	OR 95%CI	P-value
		N	%	N	%				
1	Family support								
	Good	33	73.3	12	26.7	45	100	4.911	0.001*
Not good	14	35.9	25	64.1	39	100	(1.938-12.444)		
2	Information support								
	Good	34	73.9	12	26.1	26	100	5.449	0.000*
Not good	13	34.2	25	65.8	38	100	(2.130-13.939)		
3	Instrumental support								
	Good	36	72.0	14	28.0	50	100	5.377	0.000*
Not good	11	32.4	23	67.6	35	100	(2.085-13.865)		
4	Emotional support								
	Good	33	71.7	13	28.3	46	100	4.352	0.001*
Not good	14	36.8	24	63.2	38	100	(1.734-10.919)		
5	Appreciation support								
	Good	39	83.0	8	17.0	47	100	17.672	0.001*
Not good	8	21.6	29	78.4	37	100	(5.933-52.639)		

*P-value <0.05.

Conclusions

Our results showed that there is a significant relationship between family support and personal hygiene in children with special needs. Additionally, there is a significant relationship between information, instrumental, emotional, and appreciation support and the personal hygiene of children with special needs. The most dominant family support types for personal hygiene are appreciation and information support.

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