

**Research Article**

# The use of the "sariksa" model for the ability to fulfill the personal hygiene of mentally retarded children in special schools (SLB) in Indonesia

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**ABSTRACT**

Personal hygiene is important and fundamental in one's life. But not everyone can meet the needs of personal hygiene independently, especially mental retardation children. This study aims to determine the effect of the use of the "sariksa" model on the personal hygiene independence of mental retardation children in special schools (SLB) in Indonesia. The study design uses quasi-experimental quantitative research through a non-random approach to the Pre-Post test design group with controls. This study measures the effect of applying family support models on the level of independence of personal hygiene for children's mental retardation. The sampling technique uses a consecutive sampling technique. The Sariksa model is effective in increasing the personal independence of mentally retarded children in Bandung and Tasikmalaya, Indonesia.

**Keywords:** mental retardation, personal hygiene, the celestial model

**INTRODUCTION**

Everyone wants to live a perfect life. But many people are born imperfect, with special needs such as mental retardation. In Indonesia, in 2012 the population of Indonesia with disabilities was 2.45% or around 6,515,500 people [1].

Children with special needs / mental retardation are children who have abnormal physical, mental, and social abilities compared to other children [2]. Children with mental retardation have limitations in thinking, low memory, low academic ability, low ability, difficult to think abstractly, and experiencing motor disturbances because one's intelligence abilities are assessed from all aspects [3], [4]. This intelligence limitation makes children's mental retardation knowledge below average, including knowledge about personal hygiene.

Personal hygiene is important and fundamental to one's survival. Maintaining good personal hygiene in children with mental retardation will help increase self-confidence and will minimize the occurrence of illness [5]. Mental retardation children generally can not fulfill personal hygiene independently. Research in Turkey shows that children with low IQ and mental retardation show the ability to meet the needs of low daily activities [6]. Therefore, mental retardation children need the ability to fulfill personal hygiene independently. One way is through learning/education.

Education for mentally retarded children requires special methods that cannot be compared to normal children's education in general. According to the ministry of education and culture in 2009, there were 1,314 extraordinary schools with 70,501 students [1]. When viewed based on these data, only a few children with special needs attend formal education / special schools (SLB). Whereas each student has unique differences characteristics so that they need the optimal role of teachers and parents so that they can fulfill personal hygiene independently [7] [8].

Special education is expected to help children with special needs to improve their abilities to meet their daily needs. The teacher's role is very important because it plays an active role in teaching, must be patient and diligent in dealing with students, must be sincere in giving teaching. Besides teachers, the role of family/parents is needed in educating children with special needs. Family functions include strengthening husband and wife ties, procreation and sexual relations, socialization and education of children, giving names and status, basic child care, protection of family members, recreation and emotional care, and exchange of goods and services. Many social and legal problems in society begin with the non-functioning of the family [9].

Mentally retarded children who attend school and receive a variety of teaching programs at SLB-C. This means that they are taught various activities

to fulfill their care independently. Various daily activities such as the ability to eat, bathe, eliminate, clean themselves and dress are activities that must be done. This is inseparable from various factors both internal and external. The results showed that mental retardation children who are given the skills or direction to meet the needs of personal hygiene, it can increase independence. This research is a continuation of previous research which is about finding a model to assess the independence of children's mental retardation hygiene [10].

### THE METHOD

This research aims to determine the effect of the use of the "sariksa" model on the independence of fulfilling the personal hygiene of mentally retarded children in special schools (SLB) in Indonesia. The sampling technique uses a consecutive sampling technique. The study design used a quasi quasi-experimental through a non-random approach to the Pre-Post test design group with controls. This study measures the effect of applying family support models on the level of independence of personal hygiene for children's mental retardation. The study design was carried out by comparing the results of interventions that applied the celestial model

before and after the intervention in the mental retardation group of children in special schools (SLB) between the intervention group and the control group. The location of the study was conducted in special education schools in Bandung and Tasikmalaya, Indonesia. The Sariksa Model is an effort for the mental retardation child to be able to independently fulfill personal hygiene. The Sariksa model is a child-family-environment interaction model that is directed to improve children to be independent according to Orem's theory. This model is equipped with two modules. A first module is a form of support for families. While the second module is a module that is used to guide parents in caring for their children related to increasing children's independence in children's hygiene. Especially for modules for families/parents, modules are taught and trained specifically to get the same understanding of childcare. Data analysis used univariate and bivariate analysis (paired dependent t-test). Before collecting data, the researcher submitted an ethical permit / ethical approval to the Research Ethics Code Assembly (MKEP) of the Poltekkes Kemenkes Bandung.

### RESULTS

**Table 1: Characteristics of Respondents (parents) of children with disabilities with mental retardation based on age, education, and occupation.**

VARIABLES	ROLE	Frequency (f)	Percentage (%)
AGE	MOTHER		
	≤ 30 yr	7	20.6
	31 - 40 yr	17	50.0
	41 - 50 yr	9	26.5
	≥ 51	1	2.9
EDUCATION	MOTHER		
	SD		
	Mild	0	0
	Medium	2	5,8
	junior / equal		
	Mild	2	5,8
	Medium	2	5,8
	high / equal		
	Mild	4	11,7
	Medium	14	41,17
higher education			
Mild	2	5,8	
Medium	8	23,5	
OCCUPATION	MOTHER		
	Working	9	26.5
	Not Working	25	73.5

Table 1 gives an illustration that the age of the mother is the most distributed in the age range 31-40 years ie 17 people (50 %). In the mother education variable, high school / equivalent education is 18 people (52.9%). Job variable, most of the mothers do not work, namely, 25 people (73.5%). All mothers who have children who attend special education schools Asih

manunggal all have children with mild mental retardation, half of the mothers with junior high school education have mild mental retardation children, most mothers with high school education have children with moderate mental retardation, and most mothers with college education have children with moderate mental retardation.

**Table 2: Characteristics of Respondents of children with disabilities With mental retardation based on education, gender, and Children Mental Retardation Levels**

Variables	Role	Frequency (f)	Percentage (%)
SEX	Boys	21	61.8
	Girls	13	38.2
MENTAL RETARDATION LEVELS	Mild	10	29.4
	Medium	24	70.6
ELEMENTARY SCHOOL	Levels Mental Retardation:		
	Mild	0	0
	Medium	9	100
JUNIOR HIGH SCHOOL	Mild	4	30.8
	Medium	9	69.2
SENIOR HIGH SCHOOL	Mild	6	50.0
	Medium	6	50.0

Table 2. shows that children with disabilities Mental Retardation in special education schools Asih Manunggal are distributed at primary (secondary) and secondary (junior high/high) levels. Only 9 people (26.47%) were completing elementary education, while 25 73.52% were attending secondary education (junior and senior

high school). All special education schools Asih Manunggal elementary school students all experienced moderate mental retardation, more than half of middle school students experienced moderate mental retardation and half of the high school students experienced moderate retardation.

**Table 3: Effect of training to improve the knowledge and attitudes of parents in providing support to children with mental retardation disabilities**

VARIABLE	N	MEAN	ST DEV	SE	p value
KNOWLEDGE					
Before	34	72.01	9.14	1.56	0.000
After	34	77.61	8.51	1.46	
ATTITUDE					
Before	34	73.79	5.54	0.95	0.000
After	34	76.22	5.90	1.01	

Table 3 shows the average score of knowledge of parents before being given training on efforts to improve children's independence in personal hygiene using the SARIKSA model is at a score of 72.01. While after training, they rose to 77.61. Referring to the p-value of 0.000, it was concluded that there was a significant increase in the average score of parents' knowledge after the training.

In the attitude variable, the attitude of parents before the training on efforts to improve children's independence in personal hygiene using the Sariksa model is at a score of 73.79. While after training, it increased to 76.22. Referring to the p-value of 0.000, it was concluded that there was a significant increase in the average attitude of parents after the training.

The study then tried to explore changes in parental knowledge about child hygiene care based on the level of education of children.

**Table 4. The difference in the average score of family support before and after the implementation Sariksa**

SUPPORT VARIABLE	N	Mean	SD	P-value
informational				
Before	34	83.46	11.27	0.019
After	34	84.69	11.47	
EMOTIONAL				
Before	34	82.10	15.57	0.105
After	34	82.87	14.43	
AWARDS				
Before	34	79.53	15.73	0.003
After	34	80.70	15.25	
INSTRUMENTAL				
Before	34	85.78	11.19	0.001
After	34	88.18	9.38	
SOCIAL				
Before	34	75.97	12.56	0.000
After	34	79.03	11.21	
TOTAL				
Before	34	81.83	9.57	0.000
After	34	83.10	8.68	

Table 4 shows the change in the average score of family support for each aspect of support. Overall an increase in the average score of support from 81.83 to 83.10. This increase was statistically significant (p-value 0,000). The biggest increase occurred in instrumental support of 2.4. Emotional support did not increase statistically significantly.

**Table 5: Results of measurement of the personal hygiene independence value of children with special needs with mental retardation Before and after the application of the model (parents) based on the level of mental retardation**

Variable Independence PH	level of retardation Mental							N
	Mild			Moderate				
	Pre	Post	P Value	Pre	Post	P Value	24	
Bath	87.99	90.66	0.087	10	81.10	84.58	0.000	24
Brushing teeth	91.99	94.66	0.022	10	87.22	90.00	0.001	24
Washing hair	87.13	90.45	0.052	10	79.16	83.35	0.000	24
Cut nails	90.83	91.84	0.101	10	71.37	75.62	0.000	24
Elimination	94.16	95.13	0.251	10	84.72	86.47	0.022	24
Menstruation	96.66	96.66	-	2	71.85	75.18	0.067	9
Total	90.3140	92.55	0.160	10	79.97	84.00	0.001	24

Table 5 shows that the independence of personal hygiene in the aspect of tooth brushing significant in statistics in the mild retardation group ( $p \leq 0.05$ ), whereas in the moderate retardation group, independence of personal hygiene was statistically significant in all aspects of personal hygiene.

## DISCUSSION

Parents who have children with mental retardation are experiencing tragedy in their lives. This is due to family life will change because the problem is not only mental retardation children but the whole family unit [11]. Mothers with mentally retarded children can experience high or even very high psychological pressure [12]. Learning or education in children with mental retardation can be done at school. But education

in special schools for mentally retarded children cannot replace the role of parents. Therefore, the role of parents is needed to support the independence of mentally retarded children [11]. Based on Dorothea Orem's Self Care Theory in 1991, and an educational support system for self-care skills. This system is used when a child can master this skill but requires minimal support. The methodological approach in Orem's Self-Care Theory has three main components: the assessment of self-care skills, the process scheme as a learning plan for self-care skills and the implemented implementation. Adequate techniques are used in studying self-care activities in mentally retarded children [13].

A child's development is the result of ongoing dynamic interaction between the child and his social experiences. Although many factors are interrelated, the role of parenting by parents is the most influential factor [14]. This shows that the role of parents shapes the behavior of children. In children with mental retardation, the fulfillment of children's personal hygiene requires the attention of parents. If parents interact a lot to teach personal hygiene to children with mental retardation, the mental health needs of children with mental retardation can be fulfilled independently. This can be proven from the results of other studies that the involvement of low parental interactions results in significant cognitive and motor development delays in children [14].

Barnard's parent-child interaction model is a model for paying attention to interactions between family or parents and their children. Under normal conditions, parents always show good interactions with their children [10], [15]. But in some conditions, such as mental retardation children, there are some families or parents who show low interaction with their children. Therefore, the "sariksa" model was created to identify family or parent interactions to teach children about mental retardation in fulfilling personal hygiene independently.

Families who have mentally retarded children have different experiences in exercising the independence of their children, especially to fulfill personal hygiene. Families teach their children to be able to shower, clean their mouth, dress neatly and do toilet training, defecate, urinate properly and correctly. The results of this study indicate that mental retardation girls who have menstruated, fulfilling their menstrual personal hygiene needs are assisted by their mother or grandmother [16]. Limitations experienced by children of mental retardation cause problems in self-care which result in health problems. In order for them to live a quality life, especially in terms of self-care, support from their families is needed

[17]. Social support from all family members and care by highly educated mothers on mental retardation children have a better quality of life. This can improve children's attitudes and skills in mental retardation to practice self-care [17]. While the results of other studies indicate that to ensure adequate preparation for the transition to adulthood such as facing menstruation requires collaborative intervention between doctors, families, and adolescents who experience mental retardation [18].

Mental retardation shows significant limitations in intellectual functioning and adaptive behavior contained in conceptual, social, and practical. Children with intellectual disabilities have two important points: mental retardation includes not only intellectual functioning but also adaptive behavior. Both intellectual function and adaptive behavior can be developed in individuals with mental retardation. Intellectual function is determined by intelligence tests that refer to abilities related to academic performance. Adaptive ability refers to the conceptual, social, and practical abilities that individuals learn to function in their daily lives [19]. Therefore, mental retardation children need to be supported by families to improve their adaptive abilities so that mental retardation children can meet their daily needs including personal hygiene. The results showed that mental retardation children who were given training on personal hygiene including knowledge, attitudes, and behavior, skills can improve personal hygiene habits [20].

## CONCLUSION

The SARIKSA Model is a model used by parents to make children independent in fulfilling their own hygiene needs. This model is a synthesis of the *parent-child interaction model* with the *self-care model*. The Sariksa model is aimed at increasing children's *self-care agency* to answer the demands of *self-care demand*.

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