



## THE RELATIONSHIP OF LEARNING TOILET TRAINING IN CHILDREN WITH ENURESIS IN PRESCHOOL CHILDREN (5-6 YEARS) IN PAKUSARI DISTRICT, JEMBER REGENCY

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### ABSTRACT

**Introduction:** Preschoolers inclined has many health problem that always threatening and able to impact quality of life such as, general health problems, behavioral disorders, learning disorders, and developmental disorders. One of the health problems in preschool children is enuresis. To overcome this problem can be done by using toilet training to train and teach children to be able to control bowel movements and urinating. The purpose of this study to determine how the relationship of learning toilet training in preschool children (5-6 years) with enuresis in Pakusari District.

**Method:** This study uses quantitative non-experimental analysis that is correlational using a cross-sectional study with the sampling technique Probability Sampling by means of Purposive Sampling and obtained are 252 respondents. Data analysis using Chi Square test.

**Results:** The results ( $X^2 = 21,378$ ;  $p\text{-value} = 0,0001$ ) it can be concluded that there is a relationship between learning Toilet Training in preschool children (5-6 years) with enuresis in Pakusari District. There are several factors that influence learning toilet training such as the environment and education.

**Conclusion:** The family environment is very influential because family has important effect for child. At stage of child growth the parents must attention to see the child's readiness for receive learning toilet training.

**Keywords:** *preschoolers; enuresis; toilet training.*

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## INTRODUCTION

Preschoolers are children aged 3-6 years (Wong, 2008). Preschoolers tend to have various health problems that often arise and affect their quality of life, including general health problems, behavioral disorders, learning disorders, and developmental disorders (Septiarini, 2008). One of the health problems, in preschoolers are enuresis, also known as bedwetting.

According to The National of Health United States (2015), the incidence of children with enuresis is between the ages of 5 and 6 years reaches 5 million children worldwide. The Mayo Clinic website explains

that there are 15% of children aged 5 years who wet the bed at night and that continues until the age of 18-11 years as much as 5% (Wasitin, 2015). Furthermore, according to the Indonesian Pediatrician Association (IDAI) (2016), about 30% of children aged 4 years, 10% of children aged 5 years, and 1% of children aged 18 years have enuresis (Ikatan Dokter Anak Indonesia (IDAI), 2009). The percentage of enuresis in children aged 5 years without emptying of urine during the day reaches 20%, then gradually stops in 15% of children every year. Peak age of children experiencing enuresis at the age of 4-5 years with 15% of girls and 18% of boys, while the incidence of children aged 12 years

with enuresis decreased. The result show that 4% of girls and 6% of boys. Boys had slower micturition control than girls, more than 10% of children with aged 5 years wet the bed at least once a week, and in children with aged 15 years decreased to 1% of children who still wet the bed (Meadow, S.R., & Newell, 2005).

This high number is influenced by most of the factors that are often associated with enuresis, including genetics with the same family history, developmental delays, stress, family, low bladder capacity, delayed neurological development, sleep patterns, and the hormone ADH (Anti Deuretic Hormone), chronic constipation, and toilet training (Umboh, A., Malonda, A. A., & Sudjono, 2007). In addition, factors that often associated with enuresis include to developmental delays in children, where children should have completed their developmental tasks in the correct phase, but this has not been achieved by children (Meadow, S.R., & Newell, 2005). Toilet training is one of the tasks of child development at toddler (Hockenbery, M. J., Wilson, D., & Wong, 2012), but if the child hasn't been able to complete his developmental tasks to be able to do toilet training in the toddler phase and have an impact on the occurrence of enuresis then this will carry over until the child is in the preschool phase and even up to in adolescence. This can have an impact on the child's psychological and social (Meadow, S.R., & Newell, 2005).

The psychological and social impacts caused by enuresis are very disruptive to children's lives. Children who find it difficult to hold urine (wetting the bed) will experience psychological disorders in the form of stress, while the social impact of children will feel inferior, embarrassed and disrupted social relations with peers. These impacts require prevention and if these impacts are not handled will affect the quality of life of children as adults (Kurniawati, 2008).

Stimulation that can be done by parents is to stimulate children to be able to do toileting. Toilet training learning will be effective if it is carried out early and with mature readiness, Good and correct defecate and urinate habits that are carried out from an early age will carry over into adulthood. One way that parents can do in teaching their children to defecate and urinate properly and correctly is through toilet training (Hidayat, 2005).

## **METHOD**

This research is a non-experimental quantitative research with correlational analysis. Analytical research is a form of research that tries to find the

relationship between variables by collecting data, then the data is analyzed to find out how big the relationship between variables (Sugiyono, 2015). This study uses a cross sectional study, where the cause or risk and effect variables or cases that occur in the object of research are measured and collected simultaneously, momentarily or only once at a time (at the same time) and in this study there is no follow-up (Setiadi, 2007).

The population is the entire research subject to be studied (Setiadi, 2007). The population in this study were all parents who have preschool children (5-6 years) in Pakusari District, Jember Regency as many as 680 populations. This study uses a sampling technique Probability Sampling by means of Purposive Sampling. This sampling technique is a non-random sampling technique where the sampling method is carried out by determining special characteristics that are in accordance with the research objectives so that it is expected to be able to answer research problems (Sugiyono, 2015). Sampling using the slovin formula. So it takes a sample of 252 from a total population of 680.

Inclusion Criteria: Parents who have children with preschool age criteria (5-6 years). Parents who live at home with their children, are willing to be respondents, can read and write, and are domiciled in Pakusari District, Jember Regency. Exclusion criteria: received therapy that affects the voiding process (catheter or kagel exercises), received antidiuretic drug therapy, and circumcision.

The data collection instrument in this study used a questionnaire. The questionnaire was divided into 3 parts, namely, demographic data questionnaire, toilet training learning questionnaire, and bed-wetting habit questionnaire (Enuresis) (Ningsih, 2012).

**RESULTS**

Table 1. Characteristics of parent respondents (n=252)

Characteristics of parent respondents	n	%
<b>Age</b>		
20-30 year	142	(56,3%)
31-40 year	101	(40,3%)
41-50 year	9	(3,4%)
<b>Education</b>		
Not Schooling	5	(2,0%)
Primary School	86	(34,1%)
Junior High School	90	(35,7%)
Senior High School	57	(22,6%)
College	14	(5,6%)
<b>Job</b>		
Not Working/Housewife	207	(82,1%)
Government Employees	3	(1,3%)
General Employees	4	(1,6%)
Entrepreneur	18	(7,1%)
Farmer	13	(5,2%)
Etc	7	(2,8%)
<b>Gender</b>		
Male	21	(8,3%)
Female	231	(91,7%)

Table 1 show that, characteristics of parent respondents with the highest parental age group scores are 20-30 years (56.3%), and 91,7 % female parent with 35,7% Junior High School level. Based on the type of job, the most parents are Not Working/Housewife with 207 respondents (91,7%).

Table 2. Characteristic Of Responden (n=252)

Toilet Training	Enuresis		P Value
	Enuresis	Not Enuresis	
Good	151(31,3%)	140(68,6%)	0,0001
Not Good	33 (68,8%)	64 (31,4%)	
Characteristic of Respondents	N	(%)	
<b>Age</b>			
5 year	88	(34,9%)	
6 year	164	(65,1%)	
<b>Gender</b>			
Male	111	(44,0%)	
Female	141	(56,0%)	

Table 2 show that, characteristics of child respondents with the highest number of children aged 6 years (65.1%) and the sex of the child dominating is female (56.0%)

Table 3. Distribution of toilet training learning to children

Toilet Learning Variables	n	(%)
<b>Category Total Score</b>		
Good	155	(61,5%)
Not Good	97	(38,5%)

Based on Table 3 above, it can be seen that the highest category value is toilet training learning is good (61.5%). It can be concluded that the Toilet Training learning conducted by parents to children in Pakusari District, Jember Regency is good.

Table 4. Distribution of enuresis in children in Pakusari District (n=252)

Enuresis Variables	n	(%)
<b>Category Total Score</b>		
Enuresis	48	(19,0%)
Not Enuresis	204	(81,0%)

Based on Table 4 above, it can be seen that the highest category value for the incidence of enuresis is not wetting the bed (81.0%). It can be concluded that the incidence of non-wetting in children in Pakusari District, Jember Regency is more dominant.

**DISCUSSION**

Age is life span measured in years (Hurlock, 2004). Based on the results of research conducted in Pakusari District, Jember Regency, it is known that the median age of parents who have preschool age children (5-6 years) is 30 years with the youngest age being 20 years and the oldest being 50 years. The results of this study are in line with research conducted by Maidartati (2018) with the title of the study describing parents' knowledge about toilet training in toddlers who got the results that the age of mothers who have toddlers or preschoolers is in the age range of 20 years to 50 years (Maidartati, 2018). Age can affect a person's grasping power and mindset, the older a person gets, the development and capture power will also increase so that the knowledge gained is getting better (Notoatmodjo, 2007). Age within a certain range is very good for carrying out the role in nurturing and caring children, too young or too old may not be able to carry out the role optimally, because of physical and psychological strength (Supartini, 2004).

Several factors that can affect education include age, level of education, information obtained, socio-cultural, economic, and environmental factors (Notoatmodjo, 2007). Changes in behavior can also be caused by higher education, where the higher a person's education, the easier it is for a person to receive information and the more knowledge that can

be obtained (Notoatmodjo, 2003). Based on the results of research conducted in Pakusari District, Jember Regency, it was found that most of the parents had a confident level of education at the junior high school level (35.7%). The results of this study are not in line with the results of research conducted by Dewy and Qoriah (2017) entitled the relationship between the level of mother's knowledge about toilet training and the incidence of enuresis in children aged 5-6 years with the results of research on the level of education of mothers who have toddlers at the Senior high school level as much as 40, 6% (Dewy, I.L & Qoriah, 2017). This difference can be caused by differences in research locations, this research was conducted in a village environment where most of the population in Pakusari District, Jember Regency after graduating from junior high school immediately married and did not continue their education to a higher level of education.

The results of the statistical test in table 5 show  $p$ -value = 0.0001 ( $p$ -value < ) meaning that there is a relationship between toilet training learning in children and the incidence of enuresis in preschool-aged children in Pakusari District, Jember Regency. Several factors can affect the learning of toilet training by parents such as environment and education (Sunaryo, 2004). The family environment is very influential on the behavior of parents who influence the behavior of children because the family is the closest environment for children, especially mothers (Muscari, 2005). Parents act as the first and main educators in the family so that parents need to be equipped with the knowledge and skills to understand and be skilled in carrying out child care so that they can be positive in guiding children's growth and development properly and in accordance with their development (Dwijayanti, 2008). At the child's development stage, parents must pay attention to signs of children's readiness to be able to receive toilet training learning where children must be physically and mentally ready, signs of children's physical readiness can be seen from the child's readiness to control the volunteer sphincter nerve, keeping it dry for more than 2 weeks. hours, and are able to perform motor skills, while the child's mental readiness can be seen from the child recognizing the urge to urinate and defecate, skilled in verbal and non-verbal communication, and the child has the cognitive ability to imitate behavior appropriately and follow learning directions (Wong, 2008). The behavior of parents can be imitated by children because at this preschool age children can already imitate the behavior of parents and children are good observers so that if the example given is wrong, the

child can behave wrongly too (Muscari, 2005; Supartini, 2004).

The results of the statistical test in table 5, there are good toilet training learning outcomes 15 (31.3%) but still experiencing enuresis and there are also poor toilet training learning outcomes 64 (31.4%) but not enuresis. These results can be caused by several factors, one of which is where the most common age characteristics of children in this study are children aged 6 years 164 (65.1%), The results of this study are in line with the results of research conducted by Soetjiningsih and Windiani (2008) which states that the average age of preschool children is 4 years 7 months with enuresis and 5 years 7 months without enuresis. At an average age, children should not have the habit of wetting the bed (Windiani, I Gusti A.T, 2008). This study is also supported by Noer (2006) that children aged 4.5 years are able to control the bladder well and do not wet the bed at night (Noer, 2006). Another factor can also be caused by the number of preschool children, in this study dominated by 141 girls (56.0%) while 111 boys (44%), the results of this study are not in line with the results of research conducted by Behrman. et al (1999), stated that boys have a greater prevalence (7%) than girls (2%). According to Potter & Perry (2005), boys are generally slower to control urination than girls (Behrman, 1999).

## CONCLUSION

This study is also supported by Noer (2006) that children aged 4.5 years are able to control their bladder well and do not experience enuresis at night [23]. Another factor is that the number of preschool children in this study was dominated by 141 girls (56.0%) while 111 boys (44%), the results of this study were not in line with the results of research conducted by Behrman. et al (1999). It is stated that boys have a greater prevalence (7%) than girls (2%). According to Potter & Perry (2005) boys are generally slower to control urination than girls (Behrman, 1999).

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