



Original Research

Determinants of Toddler Toilet Training Readiness in the Kenjeran Community Health Center in Surabaya

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ABSTRACT

Introduction: Toilet training for children is an attempt to train children to control bowel movements and urination. Besides, children are encouraged to be able to defecate and urinate in the specified place. The success of toilet training depends on the readiness of the child and family. This study aims to determine the factors that affect toilet training readiness for toddlers.

Methods: The research design used is descriptive analysis, with a cross-sectional approach. The population at Kenjeran Community Health Center is 2.755 toddlers, and the sample used in this study is 25 toddlers with purposive sampling. The instrument used in this study was a children's toilet training questionnaire. Data were analyzed using the crosstab and chi-square analysis.

Results: This study showed a relationship between the child's age and the child's sex with the readiness of the child's toilet training with $p = 0.00$ ($\alpha = 0.05$).

Conclusion: Nurses as health workers are expected to be educators to parents about the importance of toilet training in children by taking into account both physical, psychological, and environmental aspects in supporting the process of toilet training.

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1. INTRODUCTION

Toddler age (1-3 years) is a golden age (golden age) because children at this age experience growth and development very quickly. One of the tasks of developing a toddler is toilet training (Khaironi, 2018). Toilet training exercises for children need preparation for the mother, both physically, psychologically, and intellectually. Through

these preparations, children are expected to be able to control bowel or bladder abilities independently. The success of toilet training depends on the readiness of the child and family, especially the mother, such as physical readiness is the child is healthy and capable (Munjiati, Fitriyani, and Walin, 2018). Likewise, psychological readiness in which every child needs a comfortable atmosphere can control and concentrate on

bowel movements (Andriyani, Ibrahim, and Wulandari, 2017).

Current conditions illustrate that most parents do not play an active role and do not understand the readiness to urinate and defecate children (Mendur P, Rottie, and Bataha, 2018). Some parents have improper habits in defecating and urinating, which causes children to urinate and defecate in the pants do not tell the mother or child to urinate and defecate while crying (Sintawati, 2016). This condition might be caused by the mother's lack of knowledge about how to practice defecating and urinating children, causing parents to have a negative attitude in practicing toilet training for children. Some have never even given toilet training exercises for their children (Susilowati and Pratiwi, 2016). Based on the facts of the research, the provision of information as a method of increasing knowledge is essential to give, because this will affect the application of toilet training in children (Musfiroh and Wisudaningtyas, 2014).

Riskesdas data in 2018, the number of children under five in Indonesia is 30% of the total 250 million people of Indonesia. East Java is the second-most populous province in Indonesia, with the number of toddlers in 2019 of 2.280.239 toddler. Data obtained from the Health Profiles of East Java Province, the number of children under five in Surabaya in 2019, reached 213.590 toddlers. Researchers conducted initial data collection on September 23th 2019, by interviewing holders of the mother and child program at the Kenjeran Community Health Center. The results show that the number of toddlers in the Kenjeran district is 2.755 toddler. The mother and child service program at the Kenjeran Community Health Center is carried out through the collaboration of integrated healthcare center cadres, which is carried out at the beginning of each month. Still, for the preparation of urination preparation or toilet training, it is known that it has never been given to mothers who have children aged 1-3 years.

The lack of parental roles during the toilet training phase can lead to toilet training failures, which are called dysfunctional voiding (Hodges *et al.*, 2014). If it continues to adolescents, the children cannot control the nocturnal bladder. This condition will bring

an impact on psychopathological problems and suicidal behavior (Pratiwi, 2019). The purpose of the research is to find determinants of toddler toilet training readiness in the Kenjeran Community Health Center Surabaya.

2. METHOD

2.1 Design

The research design used in this study was descriptive analysis with the cross-sectional approach.

2.2 Population, Samples, and Sampling

The population at Kenjeran health center were 2.755 toddlers, and the sample used in this study were 25 toddlers defined by purposive sampling. The instrument used in this study was a children's toilet training questionnaire. Data were analyzed using the crosstab and chi-square analysis.

2.3 Variables

The independent variables in this study were the child's age and gender, while the dependent variable in this study is the readiness of toilet training.

2.4 Instruments

The instrument was in the form of a questionnaire sheet on the level of children's toilet training developed by Binarwati (2006). Statements consist of favorable (positive) questions and unfavorable (negative) statements, with a choice of "yes" or "no" answers. The report is favorable (positive) has a value of 0 if the answer is "no" and value 1 if the answer is "yes". Vice versa for statements that are unfavorable (negative) has a value of 0 if the answer is "yes" and value 1 if the answer is "no". This questionnaire has been tested for validity and reliability by previous researchers with 6 total items. Reliability test using the Cronbach alpha scale with a value of 0,906, which means very reliable. To get the category "less", "enough," and "good" from score in this instrument authors use the mean value of the questionnaire result.

2.5 Procedure

The researcher applied for an initial data collection permit to the academic section of

Table 1. Data crosstab of toilet training readiness for the toddler in the working area of the Kenjeran

Variables	Toilet Training Readiness			Total
	Less	Enough	Good	
Age				
18-23	7	0	1	8
24-29	12	5	0	17
Gender				
Female	8	5	1	14
Male	11	0	0	11

the Faculty of Nursing, Airlangga University, and the Kenjeran Health Center. After obtaining permission, the researcher conducted the initial data collection at the Kenjeran Health Center by interviewing for a population. The researcher wrote the data that had been obtained into the research proposal. Researchers conducted a proposal seminar on October 16, 2019 and received an ethics protocol agreement from the Health Research Ethics Commission (KEPK) on December 5, 2019, with No. 1846-KEPK. After that, the researchers took care of the permission letter at the Faculty of Nursing, Airlangga University, to conduct research at the Posyandu at the Kenjeran Community Health Center. The researcher also submitted a research permit to BAKESBANGPOL and Surabaya City Health Office and Kenjeran Health Center. Researchers submitted letters from the Faculty of Nursing, Airlangga University, BAKESBANGPOL, and Surabaya City Health Office to the Administration for the Kenjeran Health Center. The researcher meets with the MCH program holder, and the data were given to several posyandu that can be used as a place to collect research data.

The study began on December 6, 2019, by listing respondents' names from the Posyandu visit. Before starting the research, the explanation sheet explained to the respondent, included the title of the study, the purpose of the study, rights of the respondents, things were done with this research, and the data collecting method. Then the researchers gave informed consent to be signed by the respondent's parents. Researchers made time contracts with the respondent's parents and the respondent itself. The researcher assessed the ability of the child toilets training level by conducting interviews and filling out questionnaires by the respondent's mother during the daily

toilet training level. The results of filling out the questionnaire will be analyzed using the crosstab and chi-square analysis.

2.6 Analysis

Data analysis in this study was conducted to determine the determinants of toddler age toilet training readiness. The collected data then tabulated through research using the crosstab and chi-square analysis.

2.7 Ethical Clearance

This research has passed the ethical test with certificate number 1846-KEPK issued by Airlangga University on December 5, 2019.

3. RESULT

Table 1 showed the cross-tabulation between the age of children with toilet training readiness in toddlers. Children aged 18-23 months who are in the less category are 12 children, 5 children in the fair category, and good category only 1 child, while the readiness of toilet training in children aged 24-29 months is only 7 children. Cross-tabulation between the sexes of children with toilet training readiness in toddlers. From 25 respondents, toilet training readiness for females is in low category with less than 8 children, adequate category are 5 children, and a good category for 1 child, while the readiness of toilet training in males is low with only 11 children.

4. DISCUSSION

The cross-tabulation data between age and readiness of toilet training for 25 children show that most of the respondents were in the poor category. Still, there was 1 respondent who was in the good category. The mothers from less category have never been able to find out information about good and proper toilet training steps, neither from

health workers nor family or relatives. This is in accordance with Binarwati (2006), which revealed information or health education obtained by mothers in the learning process that affects mothers' attitudes and actions in training children's toilet training. The higher the knowledge, attitudes, and actions of the mother also influence when the mother applies toilet training to the child.

In this study, respondents have good toilet training readiness at the age of 24-29 months, where the age in achieving optimal toilet training is between 24-36 months. This has a correlation with the child's language development at this age; both verbally and non-verbally can communicate their needs in eliminating. Also, the motor development of children shows more mature development to support the improvement of toilet training ability that month. Following the opinion from Hidayat (2014) which states that in general toilet training can be carried out for every child who has begun to enter independence phase. The success of toilet training depends on the readiness of the child and family. The readiness includes physical, psychological and intellectual readiness (Nurfajriyani, Prabandari and Lusmilasari, 2016).

Another influencing factor is where most of the age of the child is 24-36 months. The age in reaching optimal toilet training is between 24-36 months (Hooman *et al.*, 2013). This is because the child's language development at this age, both verbally and non-verbally, can communicate their needs in eliminating. Besides, children's motor development at this age also shows a more mature development so that it can support the improvement of toilet training skills (Kurnianingsih, 2019).

Based on cognitive development, children aged 24-36 months enter the phase of tertiary circular reactions so that children can mimic others' activities (domestic mimicry) (Wong *et al.*, 2009). First, the child will observe the activity or behavior around him; then the child will imitate the activity or behavior. It is good to teach toilet training when children begin to imitate other people's behavior and be able to follow orders (Andriyani, Ibrahim, and Wulandari, 2017). Children will easily absorb and mimic what parents teach (Franco *et al.*, 2015).

Respondents in this study had more boys than respondents in the treatment group, namely 11 children (44%). Toilet training has always been done by the mother (a woman) (Ningsih, 2019). This can make a complicated experience for boys. In accordance with Erikson's psychosocial development theory, children will imitate others' behavior to develop their autonomous function in controlling the body and the environment through the learning process. This makes toddler-age children more likely to have an imitation, so he needs a figure that is appropriate to train him, even though toilet training between men and women is different in terms of how to urinate/defecate and how to proper hygiene (Machmudah, 2017).

According to Rahayuningsih & Rizki (2012), some research results published in the Journal of Pediatric Urology say that the right time is far more important than the technique. Age cannot be used as a benchmark to determine when a child should begin to be taught to use the toilet; the key is to do toilet training when the child's physical, emotional, and psychological development is ready. Child readiness needs to be concerned and essential to facilitate children in achieving success in toilet training. If the child has shown signs of readiness, then the child likes to do toilet training, not because he is forced to carry out his parents' orders (Astuti, 2018). Thus, parents will efficiently work together and direct their children. Readiness that parents need to consider before starting toilet training is physical, psychological, and intellectual readiness. Physical readiness is also in the stage of maturity or strength of muscles already achieved so that children can be trained. Psychological readiness can be seen from the attitude of interest shown by children, and intellectual readiness is a condition where children have begun to understand about the use of toilets (Indrawati, 2010). Children who have shown signs of physical, psychological, and intellectual readiness indicate that the child is ready for toilet training. If the child is not ready, parents should not force but continue to stimulate development, especially in all three aspects and start toilet training at the right time (Agustina and Septa, 2015).

5. CONCLUSION

The level of toilet training ability is influenced by the child's age and development as well as the existence of external support from parents and chaperones during the intravenous procedure. Future researchers can use this research as data in determining appropriate interventions to improve toddler toilet training readiness. The researcher suggests that further study can seek other factors that affect toddler toilet training readiness in terms of external factors such as knowledge, attitudes, and practices of mothers in the implementation of toilet training.

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