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ANTICIPATORY TOILET TRAINING GUIDANCE: THE EFFECT TOWARD KNOWLEDGE, ATTITUDE AND ENURESIS INCISDENCE ON TODDLER

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A B S T A C T

Anticipatory Toilet Training Guidance (BATT) is the attempt of nurse to parents in order that the toddlers conduct the function of urination optimally. Toilet training is necessary to be carried out by parents and toddler at the age of 28-48 months; if it is not conducted the children will have enuresis which will lead into health problem and development problem. This study aimed to find out the effect o f BATT toward the knowledge, mothers' attitude and enuresis incidence on toddler. This study was conducted for two months in service area of Bandar Lampung health center. The study design was quasi experiment with two group pre test and post test design. The population of this study was all toddlers in service area of Bandar Lampung health Center. The size of the sample was calculated by using non-pair numerical analytic study formula, which were case group of 30 toddlers of control group. Sample was chosen by using consecutive sampling with inclusion criteria those are that the mother was cooperative, they are biological children, did not have urinary tract infection, kidney function disorder, diabetes mellitus, back bone problem: spina bifida, has proper development, has no psychological problem such as depression, regression, sibling rivalry and did not consume diuretic medicine. Intervention is in a form of BATT toward toddler with BAAT module and toilet training and the follow up of case on toddler. The data collection was conducted by using questionnaire and observation sheet. Univariate data analysis with mean and deviation standard (SD); bivariate analysis was conducted by using Wilcoxon and Mc Nemar test. The result shows significant difference of average mother knowledge before and after BATT (p value=0,00); significant difference of average mother attitude before and after BATT (p value=0,026); significant difference of enuresis incidence on case and control group (p value=0,020).

Keywords: Anticipatory Toilet Training Guidance (BATT), Knowledge, Attitude, Enuresis

1. INTRODUCTION

Development phase is a distinct characteristic on children which is different from adult. One of important role of development on toddlers based on Duvall in Wong

(2009) is toilet training. Toilet training needs complex skills including motoric skill, sensoric skill, language, neurologic and social maturity which has to be trained since the children are 18 month old. Most of the time the parents assume that the capability will be mastered by the children themselves, however toilet training needs intensive guidance, takes time. Lack of parents' attention in giving toilet training makes the condition of children to be enuresis.

The prevalence of Enuresis in the world ranges between 11.4% -45%. It is estimated that the number of toddlers reaches 30% of the 250 million in habitants of Indonesia. Survey results in Jakarta that the prevalence of enuresis is around 2,83% in boys and 2,79% in girls. Apparently 82,4% had nocturnal enuresis and 17,6% had diurnal enuresis(Janah, 2017).

According to (Setiowati, 2012) enuresis which extends to adolescence will have an impact on the children's psychosocial condition, including: bad relationships with parents, labeling or bullying, verbal communication tend to be rude. They have low self-confidence and self-concept, lack of responsibility and neglect personal hygiene.The purpose of this study is to find out the effect of the Anticipatory Toilet Training Guidance (BATT) on knowledge, attitudes and the incidence of enuresis in toddlers.

2. MATERIAL AND METHOD

2.1 Study Design

It is a quantitative study with pre-experimental designs with Two Group Pretest and Posttest Design. To observe and to compare actions taken before and after interventions in the case and control groups. Furthermore, differences in pre-test and post-test are assumed to be the effects of experiments (Arikunto, 2010).

2.2. Population and sample

The study population was all toddlersin the service area of the Bandar lampung Health Center. Samples were calculated using a paired numerical analysis research formula which was equal to 30 each group. Samples were selected by consecutive sampling techniques with inclusion criteria of cooperative mothers, biological children, not suffering from urinary tract infections, impaired kidney function, Diabetes mellitus, spinal disorders: Spina bifida, growth and development accordingly, no psychological disorders, such as: depression, regression, sibling rivalry.

2.3 Material and tools of study

Measurement of knowledge and attitude was conducted by using a questionnaire while the incidence of enuresis was observed with an observation sheet.

2.4 data collection /study implementation

Data collection was carried out twice before and after the intervention the results of the intervention were then followed-up every week for two months. BATT intervention in the case group by modifying the Basic Bladder Advice / BBA procedure (Neveus et al., 2010) with the procedure: 1) To provide information and identification, explaining that enuresis is very common and not the child's fault; 2) Children are asked to empty the bladder regularly every three hours; 3) Children are still given optimal fluid intake in the morning and afternoon as much as 6-8 glasses / day while at night only to relieve thirst. Avoid drinking milk with pacifiers while sleeping; 4) Keep the position in the squat

toilet when urinating; 5) Physical activity of children remains optimized; 6) Children are asked to urinate before sleeping; 7). Wake the child every 3 hours; 8) Evaluation of enuresis every week for two months. The difference between BATT and BBA interventions is that BBA was implemented in school-age children, while BBA was carried out at the age of 18-48 months and does not use alarm equipment as an indicator of enuresis.

2.5 Data analysis

Univariate data analysis was conducted by using mean and deviation. Bivariate analysis was conducted by using a different test of the average value of knowledge and attitudes with the Wilcoxon test, where the correlation between BATT and the incidence of enuresis was conducted by using McNemar Test.

3. RESULT AND DISCUSSION

3.1 Result

Characteristics of toddlers' mother in the case and control group were housewives (96.7%) and the majority worked as teachers (3.3%). The average age of the mother in the case group was 32,70 ± 6,64 with a youngest was 19 years old and the oldest was 45 years. While the average age of the toddlers in the control group was 29,77 ± 6,317 the youngest was 18 and the oldest was 44.

Characteristics of toddlers were 53,3% male and 46,7% female. The average age of toddlers in the case group was 26,50 ± 8,78 with the youngest was 18 and the oldest was 48 months. The average age of toddlers in the control group was 28,17 ± 8,175 months, with the youngest was 18 and the oldest was 38 months.

There was an increase in the average score of knowledge of toddlers after BATT intervention in the case group from (5,33 ± 2,78) before intervention to (8,27 ± 4,27) after intervention. There was a significant difference in the average value of knowledge in the case group before and after the intervention (p value = 0,00). Knowledge improvement also occurred in the control group from (5,20 ± 2,18) to (6,03 ± 1,49). There was a significant difference in maternal knowledge in the control group with p value = 0,001.

Table 1
Difference in average score of Mother's Knowledge of Toilet Training in the case and control groups in service area of Bandar Lampung Health Center in 2018

Knowledge after intervention	N	Average score ±SD	SD	p- value
Case	30	8,27	4,26	0,002
Control	30	6,03	1,49	

There was an increase in attitudes of mothers of toddlers after BATT in the case group from (39,00 ± 9,82) to (44,77 ± 6,68). There was a significant difference in the average score of maternal attitudes in a number of cases with a p value = 0,00. In the control group, there was an increase in attitudes of mothers of toddlers towards BATT from (39,87 ± 6,25) to (41,50 ± 5,32). However there was no difference in attitudes of mothers of toddlers towards BATT with p = 0, 03.

Table 2
Difference of average score of Mother's Attitudes towards Toilet Training in Case and Control Groups in Bandar Lampung Health Center in 2018

Attitude after intervention	N	Average score	± SD	P value
Case	30	44,77	6,678	0,026
Control	30	41,50	5,316	

In the group of cases of enuresis before BATT intervention, from 30 toddlers, 29 children had enuresis and 1 toddler had no enuresis. After the intervention toddlers who experienced enuresis were 22 children and those who did not enuresis 8 children. There was a correlation of BATT intervention on the incidence of enuresis in toddlers with a p value = 0,02. In the control group before the intervention all (30 children) experienced enuresis, whereas in the after intervention those who experienced enuresis 27 and those who did not enuresis were 3 children. There was no difference in the incidence of enuresis in the control group with p = 0,083.

Table 3
Effect of BATT intervention toward the incidence of Enuresis on toddlers in service area of Bandar lampung Health Center in 2018

Control		Enuresis case	not Enuresis	Total	P value
	Enuresis	22	8	30	0,02
	not Enuresis	27	3	30	
	Total	49	11	60	

3. DISCUSSION

The results showed an increase in knowledge after the intervention of both in case and control groups. The bivariate statistical test results showed that there were significant differences in the average score of knowledge both in case and control groups, p values <0.05. There was a significant difference in the mean scores of the case and control groups with p <0.05.

The results of this study are also consistent with research (Kamel, 2016) that the level of knowledge of mothers about toilet training will increase the success of the implementation of toilet training programs to prevent enuresis. Furthermore Kamel also recommends toilet training for mothers be carried out on an ongoing basis to improve their knowledge and skills about toilet training as well as by utilizing the advance health education technology through the development of poster media, booklets, MCH centers and individual counseling.

The results showed there were differences in attitudes of mothers of toddlers towards BATT in the case group (p value <0.05) but there was no difference in attitude in the control group (p value> 0.05). There were differences in the average scores of the attitudes of the case group and the control group (p value <0.05). This condition is consistent with study of (Kamel, 2016), that health

education at the beginning of the program will improve mothers' attitudes. According to Permatasari et al. handling the enuresis condition includes increasing the motivation of children to urinate regularly in the bathroom. This condition can occur if the mother also had a positive attitude by preparing herself and taking the time to train her child to toilet training.

The results of the study showed a significant relationship between BATT and the incidence of enuresis in infants (p value <0,05). According to (Neveus et al., 2010) that training for regular urination during the day and before going to sleep is the treatment of enuresis with the method of "behavioral therapy" in the form of behavioral treatment that is regular urination. Mothers still pay attention to the fluid needs of toddlers by giving about 6-8 glasses of drinking during the day and avoid drinking at night. This is a form of emptying the bladder to avoid the urinary reflex that is not realized. According to Tkaczyk (2017), the results showed that BBA for three months was proven to significantly reduce the average number of enuresis events and the frequency of enuresis decreased from 8,9 to 5,9 every two weeks (p <0,05).

CONCLUSION

There was a significant difference in average score of mothers' knowledge and attitude about BATT in case group and control group and there was significant correlation between BATT provision and enuresis incidence on toddlers. It is suggested to the lecturer of nursery to teach BATT in the lesson of anticipatory guidance of toddler's development. The researcher was then doing BATT with the same method by prolonging the time of study up to three months in order that it can decrease the incidence of enuresis on toddlers.

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