

# Effectiveness of Home Based Toilet Training on Knowledge and Practice of Mothers

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## ABSTRACT

### Background

Toilet training is one of the most important phenomena during childhood. At the age of three children must train enough to control the bowel and bladder. They should acquire to adapt not only to delight his and her loved ones additionally also to preserve self integrity. Therefore it's a moral responsibility of the caregivers to train their child for toilet training. The objectives of the study were to compare the post-test knowledge and practice of mothers in control group and experimental group.

**Materials and Methods:** The study was conducted at selected Village, Doiwala Block, Dehradun, Uttarakhand. One hundred and thirty-nine participants were selected based on inclusion criteria conveniently and assigned randomly to control and experimental group. Data was collected by administering structured knowledge questionnaire and self reported practice checklist.

**Results:** Findings suggest that the mean post test knowledge score (15.03±1.926) of experimental group was higher than the control group (12.48±2.40). The independent 't' test was applied to find the difference between two means. The difference was found 6.906 which was significant at the level of p<0.05. There was no difference in mean post test practice score of experimental group and control group. Conclusion: Based on the findings of the study it was concluded that home based toilet training was effective in improving the knowledge of mothers.

**Keywords:** Home based toilet training, mothers, knowledge and practice

## INTRODUCTION:

Toilet training ought to begin throughout routine well-child visits as a result of their development is so quicker throughout this year and before the child's readiness.<sup>2</sup>

Toilet training is the mastery in accomplishment essential for urinating and defecating in a socially acceptable time and manner. In several cultures, parents regard the action of independent toileting as a big accomplishment and a step towards self sufficiency. Bladder and intestine performance is regulated by advanced muscles and by physiological, psychological, social and cultural factors.<sup>3</sup> Parents typically curious to grasp regarding when to start toilet training and how long time period the process ought to take neuromuscular development of bowel and bladder is present in eighteen months of age.<sup>4</sup> Cultural factors play a key role in what age is acceptable for being toilet trained ranging. In the modern United States, most children may master to their bowel before their bladder, boys start and end later than girls, and it distinctively takes more time to learn to remain dry throughout the night.<sup>5</sup> Children are always curious to know that what parents are doing they easily imitate their actions.<sup>6</sup>

Parents should trained their child for the cleanliness, laxation, control and accomplishment.<sup>7</sup> Parents

should be provide information about toilet training strategies, which they can deal with their children.<sup>8</sup> Parents should use calm voice and easy language during toilet training and explain about that what is to be done in bathroom.<sup>9</sup>

Child should be assessed for readiness of toilet training in these aspects;-awareness about the body functions, communication with caregivers, control on the sphincter.<sup>10</sup> The technique in which the caregivers give training to their children that is more important in toilet training process.<sup>11</sup> There are mainly five signs which show the readiness of child for toilet training: Bladder readiness, Bowel readiness, cognitive and motor readiness and mental readiness. The main responsibility of parents is to know the signals of readiness of toilet training in their child.<sup>12, 13</sup> By toilet training child becomes extroverted, generative and self less.<sup>14</sup> This process need consistence, forbearance and self-realization of child regarding toilet training.<sup>15</sup>

**PURPOSE**

The purpose of study is to train the mothers in recognizing their child desire to control urination and bowel movements.

**OBJECTIVES**

1. To determine the effectiveness of home based toilet training on knowledge and practice among mothers in control group.
2. To determine the effectiveness of home based toilet training on knowledge and practice among mothers in experimental group.
3. To compare the post-test knowledge and practice of mothers in control group and experimental group.

**MATERIALS AND METHODS**

Two group pre test post test design with quantitative approach was selected to carry out the study. The study population was mothers of children (02 – 03 years) in selected village of Doiwala block, Dehradun, Uttarakhand. The sample size for the study was 139 mothers (69 in control group and 70 in experimental group). The participants were assigned randomly to control and experimental group . Structured knowledge questionnaire and self reported practice checklist was used to collect the data. Ethical Clearance was done before collecting data Informed consent was taken from the study participants before collecting the data. The data were analyzed by using descriptive.

**RESULTS****Table No. 1.1 Frequency and percentage distributions of characteristics of mothers****(N=139)**

S. No	Socio demographic variables	Control Group		Experimental Group		Homogeneity	
		f	%	f	%	$\chi^2$	p-value
1.	<b>Mother's Age</b>					3.12	0.002
	a) 20-25 years	09	13	21	30		
	b) 26-35 years	60	87	49	70		
2.	<b>Mother's Education</b>					-	0.866
	a) Primary	15	22	12	17		
	b) Secondary	36	52	48	68		
	c) Graduate	09	13	09	13		
	d) Post-graduate	09	13	01	01		
3.	<b>Mother's Occupation</b>					-	1.000
	a) Working	66	96	66	94		
	b) Non-working	03	04	04	06		
4.	<b>Type of Family</b>					-	1.000
	a) Nuclear	54	78	59	84		
	b) Joint & extended	15	22	11	16		
5.	<b>1. No. of children</b>					3.175	0.001
	a) 1	40	58	59	84		
	b) 2-3	29	42	11	16		
	<b>2. Age of children</b>					0.562	0.575
	a) 2 -2.5 years	27	39	28	40		
	b) 2.5 -3 years	42	61	42	60		
	<b>3. Sex of the children</b>					-	0.093
	a) Male	35	51	34	48		
	b) Female	34	49	36	51		

**Table No. 1.1** showed that majority (87%) of participants in control group and (70%) in experimental group were in 26-35 years of age. More than half (52%) of the participants in control group and (68%) in experimental group had secondary level of education. In both groups majority (96%) of participants were homemaker. Most of participants (78%) in control group and (84%) in experimental group were from nuclear family. Most of participants had (61%) in control group and (60%) in experimental group were having child with 2.5-3 years. In control group (51%) were having male in experimental group (51%) were having female child.

**Table No. 1.2- Frequency and percentage distribution of the study participants****(N=139)**

S. No.	Socio demographic variables	Control group		Experimental Group		Homogeneity
		f	%	f	%	
1.	<b>Child started toilet training?</b>					0.46
	a) Yes	21	30	38	54	
	b) No	48	69	32	46	
2.	<b>Child using diaper at home?</b>					1.000
	a) Yes	65	94	11	16	
	b) No	04	06	59	84	
3	<b>Knowledge of toilet training</b>					1.000
	a) Yes	17	25	45	64	
	b) No	52	75	25	36	

4.	<b>Initiation of pre-school</b>					
	a) Yes	51	74	08	12	0.47
b) No	18	26	62	88		
5.	<b>Child still do bed wetting?</b>					
	a) Yes	11	16	10	14	0.65
b) No	58	84	60	86		
6.	<b>Type of toilet</b>					
	a) Indian	59	85	68	97	0.26
b) Western	10	14	02	03		
7.	<b>Had tap water facility</b>					
	a) Yes	63	91	65	93	0.37
b) No	06	09	05	07		
8.	<b>Had sink at toilet</b>					
	a) Yes	48	70	19	27	0.38
b) No	21	30	51	73		

**Table No.1.2-** Showed that Majority (69%) of children did not started toilet training in control group, and (54%) in experimental group. Maximum participants (94%) using diaper for child at home in control group and maximum (84%) participants didn't use diaper for child in experimental group. Majority of (75%) participants had no previous knowledge regarding toilet training in control group and in experimental group (64%) participants had knowledge regarding toilet training. Maximum participants (74%) started initiation of preschool of their child in control group and maximum (88%) participants didn't started initiation of preschool of their child in experimental group. Most (84%) participants in control group and in experimental group most of the (86%) participant's child didn't do bed wetting. Majority of participant in control group (85%) and in experimental (97%) had Indian toilet in their home. Majority (91%) of participants had tap water facility in their toilet and (93%) in experimental group. Majority (70%) of participants had sink facility in their toilet in control group and (73%) in experimental group were not having sink facility.

Data revealed that there was no significant difference between experimental and control group in terms of education ( $p=.86$ ), occupation ( $p= 1.000$ ), type of family( $p= 1.000$ ), age of children( $p=0.57$ ),sex of children ( $p= .09$ ),started toilet training ( $p=.43$ ),using diaper ( $p= 1.000$ ),knowledge of toilet training ( $p= 1.000$ ),initiation of preschool ( $p= .42$ ), still bedwetting ( $p=.65$ ),type of toilet ( $p= .24$ ),had tap water facility ( $p= .37$ ),had sink in toilet ( $p= .38$ ). Hence it can be interpreted that the study participants in experimental and control group were homogenous except mother's age and number of children.

**Table No.2: Effectiveness of home based toilet training knowledge and practice score of control group. (N=69)**

Variable	Test	Maximum possible score	Range	Mean $\pm$ SD	't' value	P value
Knowledge	Pre test	24	5-18	10.55 $\pm$ 2.32	7.854	<b>0.0001</b>
	Post test		7-18	12.48 $\pm$ 2.40		
Practice	Pre test	15	4-13	9.26 $\pm$ 2.19	2.275	<b>0.026</b>
	Post test		6-13	9.61 $\pm$ 1.80		

$t_{68} = 2.00$  at  $<0.05$  level of significance

**Table No.2** showed that the mean pretest knowledge of mother was (10.55 $\pm$ 2.32) and post test mean was (12.48 $\pm$ 2.40) in control group. Similarly the mean of the pre test practice score of control group was (9.26 $\pm$ 2.19) and the post test practice mean was (9.61 $\pm$ 1.80) in control group. Paired 't' test was computed to find the difference and the calculated 't' value in knowledge was 7.854 and practice was 2.275 which was greater than the table value at  $p<0.05$ .

**Table No.3: Effectiveness of home based toilet training knowledge and practice score of experimental group. (N=70)**

Variable	Test	Maximum possible score	Range	Mean $\pm$ SD	't' value	P value
Knowledge	Pre test	24	6-15	10.84 $\pm$ 2.23	13.054	<b>0.001*</b>
	Post test		11-20	15.03 $\pm$ 1.92		
Practice	Pre test	15	5-11	8.21 $\pm$ 1.47	7.176	<b>0.001*</b>
	Post test		6-12	9.59 $\pm$ 1.24		

\*Indicates significance  $t_{69} = 2.00$  at  $<0.05$  level of significance

**Table No.3** showed that the mean pre test knowledge of mothers was (10.84 $\pm$ 2.23) and the mean post test was (15.03 $\pm$ 1.92) in experimental group. Similarly the mean of the pre test practice score of mothers was (8.21 $\pm$ 1.47) and the mean post test practice score was (9.59 $\pm$ 1.24). Paired' test was performed to find the difference and the calculated 't' value in knowledge was 13.05 and practice was 7.176 which was greater than the table value at  $p<0.05$ .

**Table No. 4: Comparison of post test knowledge and practice of experimental and control group. (N=139)**

Variable	Groups	Mean $\pm$ SD	Mean difference	't' value	P value
Knowledge	Control	12.48 $\pm$ 2.40	2.550	6.906	<b>0.049*</b>
	Experimental	15.03 $\pm$ 1.92			
Practice	Control	9.61 $\pm$ 1.80	0.23	0.87	0.38
	Experimental	9.59 $\pm$ 1.24			

\*Indicates significant,  $t_{137} = 2.11$ , at  $<0.05$  level of significance

**Table No 4** showed that the mean post test knowledge score of control group was  $12.48 \pm 2.40$  and in experimental group was  $15.03 \pm 1.92$  and the calculated 't' value was 6.906 which was higher than the table value at  $p < 0.05$  level of significance. This revealed that home based toilet training were effective in improving the knowledge of mothers.

The mean post test practice score of control group was  $9.61 \pm 1.80$  and in experimental group was  $9.59 \pm 1.24$  and the calculated 't' value was 0.87. This revealed that there is no difference between the mean post test practice score in control group and experimental group.

## DISCUSSION

### SUMMARY

The mean post test practice level of control group was  $9.61 \pm 1.80$  and in experimental group  $9.59 \pm 1.24$  which was statistically significant with t value 0.87 at p value 0.38. This revealed that there is no difference between the mean post test practice level of control group and experimental group.

It is supported by evidenced based practice project report which was conducted by On Anong T (2013) to get the impact of the parental education intervention on parental information, which showed that the mean on the pre test was  $14.92$  (SD=4.07), and the mean on the post-test was  $24.50$  (SD=2.38). A statistically significant increase in parental information occurred after participants gotten the parental education intervention. The mean self-efficacy before an intervention was  $39.53$  (SD=5.20), and the mean self-efficacy after an intervention was  $44.53$  (SD=3.62). A statically significant increase in participants reported self-efficacy (M=39.53, SD=5.20) and post-intervention self-efficacy (M=44.53), SD=3.62).

### Major Findings of the study

The mean post test knowledge score of control group was  $12.48 \pm 2.40$  and in experimental group was  $15.03 \pm 1.92$  and the calculated 't' value was 6.906 which was higher than the table value at  $p < 0.05$  level of significance. This revealed that home based toilet training were effective in improving the knowledge of mothers.

The mean post test practice score of control group was  $9.61 \pm 1.80$  and in experimental group was  $9.59 \pm 1.24$  and the calculated 't' value was 0.87. This revealed that there is no difference between the mean post test practice score in control group and experimental group.

### Implications

The present study would help the nurses to understand the level of knowledge and practice of mothers regarding home based toilet training.

### Limitations

Practice for readiness of child was done on the basis of mother's verbal response.

Data related to practice was collected by self-reported of the respondents and not measured or observed by investigator

### CONCLUSION

Intervention on home based toilet training was effective in improving the knowledge and practice of mothers, such teaching program can be carried out in hospital as well as community continuously to improve the knowledge and practice of mothers.

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