

Study to Assess the Effectiveness of Planned Teaching Program on Knowledge and Attitude Regarding Toilet Training among Mothers of Toddlers in Selected Rural area, Patan, Jabalpur

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Abstract

Aim: This study was to assess the effectiveness of planned teaching program on knowledge and attitude regarding toilet training among mothers of toddlers in selected rural area, Patan, Jabalpur.

Materials and Methods: Pre-experimental research design is utilized in this research. In the present study, quantitative research approach used. The study was conducted in the selected Anganwadi, Patan, Jabalpur. Non-probability convenient sampling technique was used in the study. Sample size comprises 60 mothers of toddlers fulfilled the inclusion criteria.

Results: The mean knowledge score of pre-test is 14.3 and the mean knowledge score of post-test is 23.1, mean difference of pre- and post-test 8.8, with standard deviation 3.72, standard deviation error 0.63, and calculated “t” value (13.9) is more than tabulated value (1.98) at 0.05 level of significance. Hence, significance of difference is found between knowledge score in pre-test and post-test among mothers of toddlers in selected rural area, Patan, Jabalpur. The mean attitude score of pre-test is 34.46, the mean attitude score of post-test is 38.83, mean pre and post-test difference 4.37, with standard deviation 2.82, standard deviation error 0.47, and calculated t value (9.29) is more than tabulated “t” value (1.98) at 0.05 level of significance. Hence, significance of difference is found between attitude score in pre-test and post-test among mothers of toddlers in selected rural area, Patan, Jabalpur in relation to toilet training.

Conclusion: This study concludes that planned teaching program for mothers of toddlers about toilet training was a useful way to improve their knowledge and attitude.

Keywords: Toilet training, Knowledge, Attitude, Planned teaching program

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INTRODUCTION

Teaching kids to use the toilet and control the timing of their bowel and bladder motions is known as toilet training. It's among the first actions kids take toward independence. The two main methods for teaching a kid bladder and bowel control are parental instruction, which teaches the child where to urinate and how to pass feces, and the child's learning to identify bodily signals that indicate when to

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release and retain water in sphincters. Each child should only be allowed to display their unique developmental rhythm. Child and parent's willingness to train in toileting is called toilet readiness. After the child signs readiness, the parent starts toilet training. Parents must also be aware of training and willing to potty train their kids difficulties like day care or physical or mental problems. Toilet training requires physiological and behavioral readiness. He must be neurologically mature, have bladder and bowel control, and volunteer for toilet training. Pediatric literature supports Brazelton's child-centered approach. Starting toilet training gradually after physical and psychological milestones is recommended.^[1]

For families with little children, toilet training is a developmental challenge. The majority of healthy kids successfully finish potty training without the need for medical assistance. The best time and method to begin potty training or toilet training are questions that many parents have. It is crucial to observe children for indications of readiness, including pausing an activity for a short while or holding onto their nappy, as not all children are prepared at the same age.^[2]

Toilet training seems to come so easily to such a vast number of kids that it is frequently taken for granted. It would be simple to conjecture an internal mechanism that, when set off at just the right moment, starts a pre-programmed procedure that ends with the infant receiving training. Cultural differences exist in the age at which children are trained, the diversity of training methods employed, and the issues parents face when potty training their children. The completion of toilet training marks a developmental milestone and is a crucial aspect of child education. It is advised by the Western medical establishment to begin toilet training a child after they are 18 months old. As it is currently implemented, aided child toilet training places a strong emphasis on communication between carers and the child as they gradually learn to manage their bowel and bladder. When providing elimination aid, a carer can follow the child's signals.^[3]

Parental anxiety is typically raised by the topic of toilet training or learning, which can cause a great deal of discussion and concern in both the parents and the children. Evaluation of the child's and parents' preparedness is a necessary part of the right toilet training strategy.^[4]

The importance of toilet training is to teach children to live in a disciplined and healthy life, motivate children's thinking and creativity, support children's independence, and keep away from lazy behavior from an early age. About 5–10% of children in the US wet the bed by the time they reach the age of ten, having reached the age of seven, <5% are affected.^[5]

Parents should identify the fact that every child is unique and different. The type of difficulty that the child faces during toilet training and potential to attain control is dependent on the particular requirements of the child and the extent of their impact.^[6]

Objectives

The objectives of this study were as follows:

1. Assess the pre-test knowledge and attitude scores regarding toilet training among mothers of toddlers
2. Administer planned teaching program for mothers regarding toilet training
3. Assess the post-test knowledge and attitude scores regarding toilet training among mothers of toddlers
4. Assess the effectiveness of planned teaching program on toilet training
5. Find out the association between pre-test knowledge and attitude score regarding toilet training among mothers of toddlers with their selected demographical variables.

MATERIALS AND METHODS

Research approach

In the present study, quantitative research approach is considered to be suitable.

Research design

The investigator has adopted a pre-experimental research design. In the present study, the samples are 60 mothers of toddlers. Pre-test and post-test knowledge was assessed using structured knowledge questionnaire and attitude was assessed by Likert scale for samples and results were analyzed.

Research variables

Independent variable

The independent variable is the planned teaching program on toilet training.

Dependent variable

The dependent variable is knowledge and attitude of mothers regarding toilet training for the study.

Setting

Mothers of toddlers were selected from ward no. 8 of Aaganwadi, Patan, Jabalpur, to conduct the study.

Population

Target population

The target population consists of all mothers of toddlers.

Accessible population

The accessible population is mothers of toddlers of selected Aaganwadi Patan, Jabalpur, who fulfilled the inclusion criteria.

Sample size

Sample size comprises 60 mothers of toddlers from the selected Aaganwadi Patan, Jabalpur who fulfilled the inclusion criteria.

Sampling technique

In this study, non-probability convenient sampling technique was used.

Criteria for selection of the sample

Inclusion criteria

The following criteria were included in the study:

- From selected rural area of Patan Jabalpur
- Who are able to communicate in Hindi
- Who are available at the time of data collection
- Who are having children of 1–3 years of age
- Who are willing to participate in the study.

Exclusion criteria

The following criteria were excluded from the study:

- Who cannot read and write in Hindi
- Who are having children above 3 years of age
- Who are not available at the time of data collection.

RESULTS

Table 1 depicts that out of 60 mothers of toddlers majority, that is, 39 (65%) are in the age group of 18–23 year, 19 (31.66%) in the age group of 24–29 year, and 2 (3.34%) in the age group of 30–35 years, whereas none of the samples were above 35 years. The mothers of toddlers majority 31 (51.66%) are having female child and 29 (48.34%) male child. Majority of mothers of toddlers 40 (66.67%) have one child. About 37 (61.67%) mothers of toddlers are higher secondary educated. The majority of mothers of toddlers 40 (66.66%) are house wives. Out of 60 mothers majority, 38 (63.34%) belong to nuclear family and 22 (36.66%) belong to joint family. About 37 (61.66%) of mothers of toddlers have not received any previous education. The majority of mothers of toddlers 37 (61.66%) have not received any previous information.

Table 2 depicts that in pre-test, none of the mothers of toddlers have good knowledge, 91.66% (55) have average knowledge, and 8.34% (5) have poor knowledge regarding toilet training. In post-test, 75% (45) mothers of toddlers have good knowledge, 21.66% (13) have average knowledge, and 3.34% (02) mother of toddlers have poor knowledge regarding toilet training. The mean knowledge score of pre-test is 14.6 with standard deviation 2.7 and the mean knowledge score of post-test is 22.66 with standard deviation 5.1.

Table 3 depicts that in pre-test, 83.33% (50) mothers of toddlers have positive attitude, 16.67% (10) have neutral attitude, and none of the mothers of toddlers have negative attitude regarding toilet training. In post-test, 96.66% (58) mothers of toddlers have positive attitude, 3.34% (2) have neutral attitude, and none of the mothers of toddler have negative attitude regarding toilet training. The mean attitude score of pre-test is 35.5 with standard deviation 5.59 that the mean attitude score of post-test is 37.5 with standard deviation 2.69.

Table 4 depicts that the mean knowledge score of pre-test is 14.3 and the mean knowledge score of post-test is 23.1, mean difference of pre- and post-test 8.8, with standard deviation 3.72, standard deviation error 0.63, and calculated “t” value (13.9) is more than tabulated’ value (1.98) at 0.05 level

Table 1: Frequency and percentage distribution of demographic variables

S.no.	Age in years	Frequency (f)	Percentage
a.	18–23	39	65
b.	24–29	19	31.66
c.	30–35	02	3.34
d.	Above 35	00	00
Gender of child			
a.	Male	29	48.34
b.	Female	31	51.66
Number of children			
a.	One	40	66.67
b.	Two	11	18.34
c.	Three	7	11.66
d.	More than three	02	3.33
Educational status			
a.	Illiterate	0	0
b.	Primary education	19	31.67
c.	Higher secondary education	37	61.67
d.	Graduation	3	5
e.	Postgraduation	1	1.66
Occupation			
a.	Government job	2	3.34
c.	House wife	40	66.66
d.	Laborer	12	20
Family type			
a.	Nuclear family	38	63.34
b.	Joint family	22	36.66
Previous educational information			
a.	Yes	23	38.34
b.	No	37	61.66
Source of information			
a.	Family member	19	31.67
b.	Aanganwadi worker	04	6.67
c.	Mass media	00	0
d.	No information so far	37	61.66

Table 2: Grade-wise distributions of frequency, percentage, mean, and standard deviation of pre- and post-test knowledge score

S. No	Test	Grade	Range	F	%	Mean	SD
1.	Pre-test	Poor	1–10	5	8.34	14.6	2.7
		Average	11–20	55	91.66		
		Good	21–30	0	0		
2.	Post-test	Poor	1–10	02	3.34	22.66	5.1
		Average	11–20	13	21.66		
		Good	21–30	45	75		

Table 3: Grade-wise distribution frequencies, percentage, mean, and standard deviation of pre- and post-test attitude score

S. No	Test	Grade	Range	F	%	Mean	SD
1.	Pre-test	Negative	1–15	0	0	35.5	5.59
		Neutral	16–30	10	16.67		
		Positive	31–45	50	83.33		
2.	Post-test	Negative	1–15	0	0	37.5	2.69
		Neutral	16–30	2	3.34		
		Positive	31–45	58	96.66		

of significance. Hence, significance of difference is found between knowledge score in pre-test and post-test among

mothers of toddlers in selected rural area, Patan, Jabalpur, in relation to toilet training.

Table 5 depicts that the mean attitude score of pre-test is 34.46, the mean attitude score of post-test is 38.83, mean pre- and post-test difference 4.37, with standard deviation 2.82, standard deviation error 0.47, and calculated t value (9.29) is more than tabulated “t” value (1.98) at 0.05 level of significance. Hence, significance of difference is found between attitude score in pre-test and post-test among mothers of toddlers in selected rural area, Patan, Jabalpur, in relation to toilet

training. It indicates that the planned teaching program has a significant effect on the attitude level of toilet training among mothers of toddlers. Thus, mothers of toddlers will show a significant difference in their knowledge and attitude toward potty training between the pre-and post-test results, according to hypothesis H1.

Table 6 reveals the Association of Knowledge Scores with their demographic variables. The calculated X^2 value for age in years, number of children, educational status, occupation, and sources of information is higher than the tabulated X^2 12.59 value

Table 4: Significance of difference between pre-test and post-test knowledge scores using “t” test

S. No.	Test	Mean knowledge score	Mean difference	SD	SED	t-value	P-value
01	Pre-test	14.3	8.8	3.72	0.63	13.9	$t=13.9$ ($P>0.05$)
02	Post-test	23.1					significant at 118 df $P=1.98$

Table 5: Significance of difference between pre-test and post-test attitude scores using “t” test

S. No	Test	Mean attitude score	Mean difference	SD	SED	t-value	P-value
01	Pre-test	34.46	4.37	2.82	0.47	9.29	$t=9.29$ ($P>0.05$)
02	Post-test	38.83					significant at 118 df $P=1.98$

Table 6: Association between pre-test knowledge score and demographic variables

Age in year	Good	Average	Poor	Total	Chi-value	Significance
18–23 years	0	35	4	39	65.7	$X^2=65.7$
24–29 years	0	18	1	19		$P>0.05$ most significant at 6 degree of freedom $P=12.59$
30–35 years	0	2	0	2		
Above 35 years	0	0	0	0		
Gender of child						
Male	0	25	4	29	0.06	$X^2=0.06$
Female	0	30	1	31		$P<0.05$ is not significant at 2 degree of freedom $P=5.99$
Number of children						
One	0	36	4	40	58.18	$X^2=58.18$
Two	0	11	0	11		$P>0.05$ most
Three	0	6	1	7		significant at 6 degree of freedom $P=12.59$
More than three	0	2	0	2		
Educational status						
Illiterate	0	0	0	0		
Primary education	0	17	2	19	84.9	$X^2=84.9$
Higher secondary education	0	35	2	37		$P>0.05$ most
Graduation	0	2	1	3		significant at 8 degree of freedom $P=15.51$
Postgraduation	0	1	0	1		
Occupation						
Government Job	0	2	0	2	58.92	$X^2=58.92$
House wife	0	37	3	40		$P>0.05$ most
Laborer	0	11	1	12		significant at 6 degree of freedom $P=12.59$
Self-employed	0	5	1	6		
Family type						
Nuclear	0	34	4	38	4.2	$X^2=4.2$
Joint	0	21	1	22		$P<0.05$ is not
						significant at 2 degree of freedom $P=5.99$
Previous information						
Yes	0	21	2	23	3.2	$X^2=3.2$
No	0	34	3	37		$P<0.05$ is not
						significant at 2 degree of freedom $P=5.99$
Sources of information						
Family member	0	18	1	19	56.3	$X^2=56.3$
Aanganwadi worker	0	3	1	4		$P>0.05$ most
Mass media	0	0	0	0		significant at 6 degree of freedom $P=12.59$
No information so far	0	34	3	37		

at $P > 0.05$, which is significantly highly associated with pre-test knowledge score. Hence, it shows that sociodemographic variables have an influence on the pre-test knowledge score.

Calculated X^2 value for gender of child, family type, and previous information is less than the tabulated $X^2 = 5.99$ value at $P < 0.05$, which is not significantly associated with pre-test knowledge score. Hence, it shows that sociodemographic variables have an influence pre-test knowledge score.

The above Table 7 reveals the Association of Knowledge Scores with their demographic variables. The calculated X^2 value for age in years, number of children, educational status, occupation, and sources of information is higher than the tabulated $X^2 = 12.59$ value at $P > 0.05$, which is significantly highly associated with pre-test attitude score. Hence, it shows that sociodemographic variables have an influence on the pre-test attitude score.

The calculated X^2 value for gender of child, family type, and previous information is less than the tabulated $X^2 = 5.99$ value at $P < 0.05$, which is not significantly associated with pre-test attitude score. Hence, it shows that sociodemographic variables influence pre-test attitude score.

DISCUSSION

Leelavathi – The study was performed to evaluate mothers of toddlers' knowledge about potty training. According to analysis, mothers of toddlers have three levels of knowledge: satisfactory (0%), moderate (3%), and inadequate (71%) (21). A noteworthy correlation has been observed between knowledge and the mother's age, educational attainment, and occupation. About 70% of moms of toddlers (21) had insufficient information, according to the study's findings. To encourage appropriate toilet training practices, the nurse administrator should organize frequent training camps for the local community.^[7]

Negi and Handa – It was discovered that moms of toddlers had insufficient information about behavioral issues and toilet training when this study evaluated their attitudes and expertise in these areas. According to the study's findings, moms' attitudes, and understanding about behavioral issues and potty training were improved by the structured education approach.^[8]

Rajan – Based on the demographic characteristics, the bulk of participants (40%) fall within the 26–30 age range. The majority of parents (60%) had intermediate comprehension, 35% had inadequate information, and 5% had high knowledge,

Table 7: Association between pre-test attitude score and demographic variables

Age in year	Positive	Neutral	Negative	Total	Chi-value	Significance
18–23 years	32	7	0	39	65.7	$X^2=65.7$
24–29 years	16	3	0	19		$P>0.05$ most
30–35 years	2	0	0	2		significant at 6° of freedom $P=12.59$
Above 35 years	0	0	0	0		
Gender of child					0.06	
Male	25	4	0	29		$X^2=0.06$
Female	25	6	0	31		$P<0.05$ is not significant at 2° of freedom $P=5.99$
Number of children					58.18	
One	34	6	0	40		$X^2=58.18$
Two	8	3	0	11		$P>0.05$ most
Three	6	1	0	7		significant at 6° of freedom $P=12.59$
More than three	2	0	0	2		
Educational status					84.9	
Illiterate	0	0	0	0		$X^2=84.9$
Primary education	15	4	0	19		$P>0.05$ most
Higher secondary education	31	6	0	37		significant at 8° of freedom $P=15.51$
Graduation	3	0	0	3		
Post-graduation	1	0	0	1		
Occupation					58.92	
Government Job	1	1	0	2		$X^2=58.92$
House wife	34	6	0	40		$P>0.05$ most
Labor	9	3	0	12		significant at 6° of freedom $P=12.59$
Self-employed	6	0	0	6		
Family type					4.2	
Nuclear	33	5	0	38		$X^2=4.2$
Joint	17	5	0	22		$P<0.05$ is not significant at 2° of freedom $P=5.99$
Previous information					3.2	
Yes	18	5	0	23		$X^2=3.2$
No	32	5	0	37		$P>0.05$ is not significant at 2° of freedom $P=5.99$
Sources of information					56.3	
Family member	16	3	0	19		$X^2=56.3$
Aganwadi worker	2	2	0	4		$P>0.05$ most
Mass media	0	0	0	0		significant at 6° of freedom $P=12.59$
No information so far	32	5	0	37		

according to a study on their knowledge about potty training. The mean proportion of 46.75% and the overall mean knowledge score of 14.03 ± 2.665 show that parents have a limited overall level of understanding regarding toilet training. The success of the curriculum in toilet training assessment showed a mean knowledge score rise of 25.83% after the video-assisted teaching program was administered, with a mean \pm SD of 7.75 ± 2.55 . There is a considerable difference between the pre-test and post-test scores, as indicated by the cumulative frequency distribution of the knowledge scores. The post-test median score was 21.50, while the knowledge pre-test median score was 13.50. There is an understanding gap of nine points. Pre-existing knowledge and these demographic characteristics on toilet training were found to have a substantial correlation when pre-test knowledge was compared to them. Experts recommend delaying toilet training until a child is at least 18 months old. Since boys usually lack the necessary language and fine motor skills, it is best to wait even longer before starting toilet training. The child's desire to please his or her parents makes this time frame considerably easier to use.^[9]

Jain According to a study on seven demographic variables, four of them education, profession, age, and income were discovered to be statistically significant ($P < 0.05$) at the five percentile. In terms of the association with knowledge of practice level, education, age, occupation, and religion were found to be significant at the five percent level ($P < 0.05$), while it was discovered that the remaining factors did not matter. There seems to be a strong correlation between mothers' awareness of potty training and age, income, education, and occupation. There appears to be a strong correlation between age, education, occupation, and religion and mothers' practices regarding potty training. Mothers were found to have sufficient knowledge and practice in relation to potty training.^[10]

CONCLUSION

The research concluded that the planned teaching programs on the toilet training were a useful tool for improving the knowledge and attitude of mothers of toddlers.

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CONFLICTS OF INTEREST

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