

Effectiveness of Pamphlet on Knowledge Regarding Toilet Training of Children among Mothers of Toddler in Selected Rural Areas: A Quasi Experimental Study

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Abstract

Background: In present years, the age at which parents start and finish toilet training of their children has increased. To cope with the problems caused by this later completion, it is essential to raise the knowledge of mothers of toddler regarding toilet training.

Objectives: (1) To assess the pre-test knowledge score regarding toilet training among mothers of toddler. (2) To assess the post test knowledge score regarding toilet training among mothers of toddler. (3) To compare the pre test and post test knowledge score regarding toilet training among mothers of toddler. (4) To find out the association between knowledge score regarding toilet training among mothers of toddler with the selected demographic variables.

Methodology: Quantitative Quasi experimental one group pre test post test research design was selected to conduct study. 70 mothers of toddler were selected as samples based on exclusion and inclusion criteria through non-probability purposive sampling technique.

Results: The mean pre-test knowledge of mothers of toddler was 11.08 ± 1.73 , whereas mean post-test knowledge of mothers of toddler was 16.64 ± 1.03 . The findings revealed that pamphlet was statistically effective ($t = 22.63^*$ p-value 0.0001*) and the association between post-test knowledge and selected demographic variables of toddler such as age in years ($f = 3.50$, p-value 0.03*) and number of children ($f = 4.37$, p-value 0.01*) were statistically significant.

Conclusion: Pamphlet helped the mothers of toddler to increase knowledge regarding Toilet Training of Children.

Keywords: Mother of toddler; Pamphlet; Rural areas; Toilet Training of Children.

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INTRODUCTION

Achievement of control over bodily functions of defecation and urination is one of the major tasks of the toddler period during growth and development¹ Mariam Webster defines, “Toilet training as the process of training a child to control bladder and bowel movements and to use the toilet”.² Voluntary control of the anal and urethral sphincters is achieved sometime between ages

18 and 24 months.³ Acquiring toileting skills is a universal developmental milestone, but the path to toilet training has changed subsequently over the past century. Parents need guidance in recognizing age for toilet training, methods of toilet training and how to address problems in toilet training.⁴

Background

In present years, the age at which parents start and finish toilet training of their children has increased. To cope with the problems caused by this later completion, it is essential to raise the knowledge of mothers of toddler regarding toilet training.⁵

Need of the study

The prevalence of nocturnal enuresis in India is 7.61%–16.3%. The prevalence is elevated in children between 5 to 8 years (6 to 8 years) and little in children between 11 to 12 years (8 to 10 years). Single center in India revealed, 18.4% of children experienced nocturnal enuresis with sleep problems. In rural areas in India, the prevalence is higher among children from poor socio-economic background compared to those from the upper middle background. A family history of enuresis has been recognized in enuretic children from both rural and urban areas. Other risk factors comprise of living with a single parent, living with stepparents, parents with health issues, conflicts at home, stress due to enuresis, scolding, and poor scholastic performance.⁶

Based on the above findings an investigator felt need of educating mothers of toddler in rural area regarding toilet training through pamphlet. This will raise awareness and improve knowledge of mother to facilitate toilet training among toddler at appropriate age and time.

Title of the study

Effectiveness of pamphlet on knowledge regarding Toilet Training of Children among mothers of toddler in selected rural areas: A Quasi Experimental Study.

OBJECTIVES OF THE STUDY

Primary Objective:

To assess the effectiveness of pamphlet on knowledge regarding toilet training among mothers of toddler in selected rural areas.

Secondary Objectives:

- To assess the pre test knowledge score regarding toilet training among mothers of toddler.
- To assess the post test knowledge score regarding toilet training among mothers of toddler.
- To compare the pre test and post test knowledge score regarding toilet training among mothers of toddler.
- To find out the association between knowledge score regarding toilet training among mothers of toddler with the selected demographic variables.

Operational definitions

1. *Effectiveness:* In this study, effectiveness of pamphlet on improvement of knowledge of mothers of toddler regarding toilet training of children.
2. *Pamphlet:* In this study, pamphlet means an educative material which provides information on toilet training on the following aspects such as meaning of toilet training, age for toilet training, indications of toddler's readiness for training, toilet training methods, process of toilet training, problems of toilet training.
3. *Knowledge:* In this study, knowledge is facts, information, with regards to toilet training among mothers of toddlers in term of correct response to the items on structured knowledge questionnaire.
4. *Toilet training:* In this study, it refers to the acquisition of skills necessary for urinating and defecating in a toilet at a socially acceptable time and age.
5. *Mother:* In this study, it refers to mothers of children between 1 – 3 years.
6. *Toddler:* In this study, it refers to a young child, usually defined as the ages of 1-3 years old.
7. *Rural area:* In this study, it refers to a selected village.

Hypothesis

Will be tested at 0.05 level of significance

H₀: There is no significant difference in the pre-test and post-test knowledge regarding toilet training of children among mothers of toddler.

H₁: There is significant difference in the pre-test and post-test knowledge regarding toilet

training of children among mothers of toddler.

Delimitation

Present study is delimited to mothers of toddler residing in selected rural areas.

Ethical Aspects

The study proposal was accepted by the ethical committee of the institution. Permission was obtained by the concerned authorities before conducting the study. Consent letter was obtained by individual samples after explaining them the research process in their own language. Confidentiality regarding the participants information was maintained by using code number by the investigator.

Review of literature

In the present study the literature reviewed has been organized into the following categories:

- Literature related to toilet training.
- Literature related to knowledge of mothers regarding toilet training.
- Literature related to effectiveness of various educational intervention on toilet training.

Conceptual Framework

The conceptual framework selected for the study was based on Ernestine Wiedenbach's "Prescriptive Theory" (Helping art of clinical nursing).⁷

MATERIAL AND METHOD

- Research approach:** Quantitative research approach
- Research design:** Quasi experimental one group pre-test and post-test research design
- Research setting:** Selected rural areas of the city
- Variables**
 - **Independent variable:** Pamphlet on knowledge regarding Toilet Training of Children.
 - **Dependent variables:** Knowledge regarding Toilet Training of Children among mothers of toddler.
 - **Demographic variable:** In this study the demographic variables are Age, Education, Occupation, Monthly family income, Religion, Type of family, Order of the child.
- Population:** All mothers of toddler.

- **Target population:** All mothers of toddler residing in selected rural areas of the city.

- **Accessible population:** Mothers of toddler residing in selected rural areas of the city who were available at the time of data collection and who were fulfilling the inclusive criteria.

F. Sampling

- **Sample size:** 70 mothers of toddler
- **Sampling technique:** Non probability purposive sampling technique.

G. Sampling criteria

Inclusive criteria: In this study, inclusive criteria was, mothers of toddler.

- Residing in rural areas.
- Who are available at the time of data collection.
- Who are able to read and write Marathi, Hindi and English.

2 Exclusive criteria: In this study, exclusive criteria was, mothers who are:

- Not willing to participate in the study.
- Having mentally retarded children.
- Having physically retarded children.
- Health professionals.

H. Description of Tools

- **Section A:** Demographic variables
- **Section B:** Self-structured knowledge question -naire based on Toilet Training of Children

I. Validity

To ensure the content and construct validity, the tool was distributed to 22 experts including child health nursing subject experts, community health nursing and paediatrician. 17 tools were received after validation from the experts.

J. Reliability

In this study, Karl Pearson correlation coefficient formula was used for reliability. The correlation coefficient 'r' of the questionnaire was $r = 0.8439$, which is more than 0.8. hence the questionnaire was found to be reliable.

K. Pilot study

Pilot study was conducted for a period of 7 days. A sample of seven mothers of toddler was selected from the selected rural area. The collected data was coded, tabulated and analysed by using descriptive statistics and inferential statistics. The pilot study was feasible in terms of time, money, material and

resources.

L. Data collection

- The main study data was gathered from 28/12/2020 to 16/01/2021.
- Permission was obtained from the Sarpanch of concerned gram panchayat.
- The samples were approached in small groups on a daily basis.
- Before giving the questionnaire, self-introduction was given by the investigator and the purpose of the study mentioned.
- Consent of the samples were taken.
- The pre-test questionnaires were distributed and collected back after 30 minutes.
- After collecting the Pre-test score, the investigator administered the treatment (Pamphlet on knowledge regarding toilet training of children).
- After 7 days post test was taken on the same subjects.

RESULT

Section I: Distribution of mothers of toddler with regards to demographic variables.

Section II: Assessment of pretest knowledge of mothers of toddler regarding toilet training of children in the selected rural areas.

Table 1: Percentage Wise Distribution of Mothers of Toddler According to their Demographic Characteristics.

Demographic Variables	Frequency (f)	Percentage (%)
Age (yrs)		
20-24 yrs	12	17.1
25-29 yrs	37	52.9
30-34 yrs	21	30.0
≥35 yrs	-	-
Education		
Primary	-	-
Secondary	5	7.1
Higher Secondary	38	54.3
Graduation	27	38.6
PG	-	-
Other	-	-
Occupation		
Government Service	4	5.7

n=70

Pvt. Service	5	7.1
Housewife	38	54.3
Self Employed	17	24.3
Labourer	6	8.6
Other	-	-

Monthly Family Income (Rs)

Below 10000 Rs	1	1.4
10001-15000 Rs	4	5.7
15001-20000 Rs	22	31.4
>20000 Rs	43	61.4

Religion

Hindu	48	68.5
Muslim	2	2.9
Christian	2	2.9
Buddhist	18	25.7
Others	-	-

Type of family

Nuclear	36	51.4
Joint	33	47.1
Extended	1	1.4

Number of children

One	33	47.1
Two	35	50.0
Three	2	2.9
More than three	-	-

Section III: Assessment of post test knowledge regarding toilet training of children among mothers of toddler.

Table 2: Distribution of Mothers of Toddler with Regard to Level of Pre Test Knowledge Regarding Toilet Training of Children.

Level of knowledge score	Percentage score	Frequency (f)	Percentage (%)	Mean	SD
Poor	0-20% (0-5)	-	-	-	-
Average	21-40% (6-10)	27	38.57	-	-
Good	41-60% (11-15)	42	60	11.08	1.73
Very Good	61-80% (16-20)	1	1.43	-	-
Excellent	81-100% (21-25)	-	-	-	-

Section IV: Analysis of effectiveness of pamphlet on knowledge regarding toilet training of children among mothers of toddler in the selected rural

Table 3: Distribution of Mothers of Toddler with Regards to Level of Post Test Knowledge Regarding Toilet Training of Children n=70

Level of knowledge score	Percentage score		Frequency (f)		Percentage (%)		Mean	SD
Poor	0-20%		0	0	0			
Average	21-40%		0	0	0			
Good	41-60%		6	6	8.57		16.64	1.03
Very Good	61-80%		64	64	91.43			
Excellent	81-100%		0	0	0			

areas.

Section V: Association of post test knowledge regarding toilet training of children among mothers of toddler
Table 4: Significance of Difference Between Knowledge Scores in Pre And Post Test of Mothers of Toddler Regarding Toilet Training of Children n=70

Test	Mean	SD	Mean Difference	Calculated t-value	DF	Table value	p-value
Pre Test	11.08	1.73	5.55±2.05	22.63	69	1.98	0.0001 S
Post Test	16.64	1.03					

*S-Significant

from selected rural areas of the city with selected demographic variables.

Table 5: Association of Post Test Knowledge Score with Selected Demographic Variables n=70

Demographic variables	Calculated value		DF	Table value	Level of Significance		
	T-value	F-value					
Age in years	-	3.50	0.030	2,67	3,07	p<0.05	S
Education	-	1.87	0.16	2,67	3,07	p>0.05	NS
Occupation	-	1.02	0.40	4,65	2,45	p>0.05	NS
Monthly family income	-	0.16	0.91	3,66	2,68	p>0.05	NS
Religion	-	1.18	0.32	3,66	2,68	p>0.05	NS
Type of family	1.28	-	0.28	2,67	3,07	p>0.05	NS
Number of children	-	4.37	0.013	2,67	3,07	p<0.05	S

NS - Not significant S - Significant

DISCUSSION

In October 2018, Keerthi G conducted a study to assess the effectiveness of structured teaching programme on levels of Knowledge regarding Potty Training (Toilet Training) among mothers of Toddlers, residing at Medavakkam Rural Area, Chennai. Quantitative approach was used. This study was conducted with 60 samples, the study design was pre-experimental one group pre test post test design. Convenient sampling technique was applied. Pre test was assessed by using semi structured questionnaires. In pre test (54) 90% of mothers were having inadequate knowledge and (6) 10% of them having moderate knowledge and none of them were having adequate knowledge.

After the pre test, structured teaching programme was given regarding toilet training. After 7 days post test was conducted. In post test 13 (21.7%) of them having moderate knowledge and 47 (78.3%) of them having adequate knowledge. The results of the study stated that in post-test after administering structured teaching programme mothers gained 42.67% knowledge score, mean differences were 12.80% by using students paired t-test and generalized McNemar's.

In above study, it is shown that the structured teaching programme was effective in increasing the knowledge of mothers. After administration of structured teaching programme the study revealed that 13(21.7%) of them having moderate knowledge and 47 (78.3%) of them having adequate

knowledge. There was a significant association between knowledge about Toilet Training of Children with age of mothers of toddler, education, monthly income, previous exposure to bowel training programme.

Hence, structured teaching programme was effective, appropriate and feasible. It helps the mothers to give training to toddlers and prevent enuresis and functional constipation among children.

CONCLUSION

Thus, it was concluded that pamphlet on knowledge regarding Toilet Training of Children among mothers of toddler in selected rural areas was found to be effective as a teaching strategy. Hence, based on the above cited findings, it was concluded undoubtedly that the educational intervention by the investigator in the form of pamphlet helped the mothers of toddler to increase knowledge regarding Toilet Training of Children.

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