

ORIGINAL RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING TOILET TRAINING AMONG MOTHERS OF TODDLER AT KALIKA MUNICIPALITY, CHITWAN

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ABSTRACT

Toilet training is the process of teaching toddler to control bowel and bladder. Mother acts as key role in training process. Therefore, the main objective of the study was to find out awareness, attitude and practice regarding toilet training among mothers of toddler. A descriptive cross-sectional study was conducted in 155 mothers of toddler aged between 15 - 36 months from four wards of Kalika Municipality, selected by using probability, simple random sampling technique. Semi-structured interview was used to find awareness, five points Likert scale for attitude and Interview checklist for practice regarding toilet training. Data were collected date from 24th Oct to 22nd Nov, 2016 and entered in EPI 3.1 and IBM SPSS version 20 and was analyzed using descriptive and inferential statistics. The association between two variables was measured by chi-square test. Study revealed that, 48.4% had adequate awareness, 49.70% had satisfactory attitude and 38.1% had satisfactory level of practice on toilet training. Significant association was found awareness and ethnic group ($p=0.045$), education status ($p=0.004$), education level ($p=0.044$), occupation ($p=0.008$), marital status ($p=0.001$), husbands education ($p=0.010$) types of family ($p=0.008$), types of toilet ($p=0.002$) and birth order ($p=0.026$). Level of attitude was associated with marital status ($p=0.004$) while level of practice was associated with economic status ($p=0.024$), number of children ($p=0.043$) and age of toddler ($p=0.028$). It is concluded that less than half of the respondents' have adequate level of awareness and satisfactory level of attitude. But more than one fourth and less than two fourth respondents have satisfactory level of practice regarding toilet training.

Key words: Awareness, Attitude, Practice, Toilet Training, Toddler

INTRODUCTION

Toilet training is a process, where toddlers are taught to teach about controlling of bowel and bladder. It is the first step to make children become self-sufficient. Learning toilet training is based in mainly two ways; teaching by their parents and the child themselves recognizing their body signals and individual ability to control bowel and bladder sphincters.¹ Toilet training involves the mastery of bowel and urinary control while child is awake and asleep.¹

Toilet training is expected to be started and achieved during toddlerhood. It is extremely important period for developmental achievement and intellectual growth.²

Toilet readiness is a combination of both parents

and children willingness to participate for training. Toddlers must be physically and behaviorally responsive for this. By showing some degree of bladder and bowel control is clue for readiness of toilet training. In addition, the parents must be willing for toilet training and be aware of training obstacles, such as the child attending daycare or any physical or mental disabilities the child may have.² Children are expected to grow and learn to their fullest potential. It is also affected by child's maturation level and intellectual capacity, cultural attitude and the psychological makeup of each parent child level. Parents serve as advocates for children in order to meet needs of all children for access to education and health care process.³ Mothers who start toilet training regardless of the toddler readiness may set

themselves up for lots of frustration for themselves and for their children.⁴

Only 50% of children wearing nappies for up to a year, completes daytime toilet training by the age of three.⁵

It was also found that improper age of toilet training might influences developing some problems such as constipation, toilet refusal, voiding problems, urinary tract infection and problems like enuresis and uncorrected toilet training could be causative factor for bladder and bowel disorders, which in turn cause problems to both children and their family.⁶

MATERIALS AND METHODS

A descriptive cross-sectional study design was used for the study. A total of 155 mothers of toddler aged between 15- 36 month were selected from four wards of Kalika Municipality by using probability, simple random sampling technique. Semi-structured interview out schedule used to find awareness, five points Likert scale for attitude and Interview checklist for practice regarding toilet training. Data were collected date from 24th Oct to 22nd Nov, 2016 and entered in EPI 3.1 and IBM SPSS version 20 and analysis was done by using descriptive and inferential statistic.

RESULTS

TABLE 1: Socio-demographic Characteristics of Respondents' n=155

Variables	Number	Percentage
Age (in years)		
≤ 20	29	18.7
>20	126	81.3
Mean ± SD= 25.57 ± 4.63, min- 18, max- 36		
Religion		
Hindu	94	60.6
Buddhist	45	29.0
Christian	16	10.4
Ethnic group		
Dalit ^o	42	27.1
Disadvantaged janajaties ^{oo}	61	39.4
Relatively advantaged janajaties ^{ooo}	20	12.9
Ungrouped caste ^{oooo}	32	20.6
Education status (Mother)		

Literate	134	86.5
Illiterate	21	13.5
Level of education (n=134)		
General	44	32.8
Primary	33	24.6
Secondary	42	31.3
Higher Secondary and above	15	11.3
Occupation		
Home maker	70	45.2
Agriculture	44	28.4
Business	16	10.3
Daily wages	10	6.5
Service	15	9.6
Marital status		
Living with husband	87	56.1
Husband abroad	68	43.9
Previous experience on toilet training		
Yes	94	60.6
No	61	39.4

^oBK, ^{oo}Pariyar ^{ooo}Chaudhari, ^{oooo}Praja, ^{ooooo}Magar, ^{oooooo}Gharti, ^{oooooo}Kumal, ^{oooooo}Chepang, ^{oooooo}Darai, ^{oooooo}Tamang, ^{oooooo}Rai, ^{oooooo}Limbu, ^{oooooo}Sunuwar. ^{oooooo}Newar, ^{oooooo}Gurung ^{oooooo}Brahman, ^{oooooo}Chhetri, ^{oooooo}Thakuri

Table 1 shows, out of 155 respondents, 81.3% respondents were aged above 20 years and 18.7% were mothers aged equal and below twenty years. Mean age of the respondents was 25.57 years with 4.63 SD.

Regarding religion of the respondents, 60.6% were Hindus, where as 10.4% were Christian. Disadvantaged janajaties caste group respondents were 39.4% followed by relatively advantaged janajaties were 12.9%. While 86.5% were literate and among literates, 32.8% had studied general level of education followed by 11.3% respondents studied up to higher secondary and above level of education. Similarly, 45.2% were homemaker. Regarding marital status 100% respondents were married which was not shown in table and among all married respondents, 56.1% were living with their husband and others were abroad for job. Regarding previous experience, 60.6% respondents had previous experience on toilet training.

TABLE 2: Respondents' Family and Toddlers Characteristics n=155

Variables	Number	Percentage
Education status (Husband)		
Literate	143	92.3
Illiterate	12	7.7
Level of education (Husband) (n=143)		
General	32	22.4
Primary	32	22.4
Secondary	49	34.2
Higher Secondary and above	30	21.0
Economic status of family		
Enough for a year	61	39.4
Not enough for a year	76	49.0
Extra saving	18	11.6
Types of family		
Joint	99	63.9
Nuclear	56	36.1
Types of toilet		
Water seal	136	87.7
Pit Latrine	19	12.3
No of children		
One	50	32.3
Two	58	37.4
Three	30	19.3
Four and above	17	11.0
Age of toddler (in month)		
≤ 18	24	15.5
19-24	59	38.1
25-30	37	23.9
31-36	35	22.6
Mean ±SD= 25.54 ±6.321		
Sex of toddler		
Male	80	51.6
Female	75	48.4
Birth order		
First	51	32.9
Second	57	36.8
Third	32	20.6
Fourth and above	15	9.7

Table 2 shows that husbands of all 155 respondents 92.3% were literate. Among literate, 34.2% had

studied up to secondary level of education. Regarding economic status of family of respondents' 49.0% family did not have sufficient income for whole years followed by 11.6% respondent families had extra saving also. Regarding type of family, 63.9% were lived in joint family followed by nuclear family 36.1%. Water sealed type of toilet were used by 87.7%, followed by pit latrines, which were used by 12.3%. Concerning number of children 37.4% respondents had two children followed by 11.0% who had four or more than four. Similarly, regarding age of toddler, 38.1% toddlers were aged between 19-24 month and 15.5% toddler was aged below 18 months of age. Mean age of toddler was 25.54 months. Likewise, 51.6% toddlers were male and 38.8% current toddlers were second child of respondents.

TABLE 3: Respondents' Awareness Mean Score on Different Aspect of Toilet Training

Areas of Awareness	Maximum Possible Score	Mean Score ±SD	Mean Score %	Range
General components	4	2.90±0.67	72.50	2-4
Toddler readiness	13	5.92±2.64	45.53	1-12
Parental components	13	6.12±2.12	47.07	2-12
Time component, and Parental action	4	1.84±0.89	46.00	0-3
Effective signs, Hygiene, Reasons for withholding	13	5.78±1.79	44.40	1-10
Effects Reasons of accidental wetting	8	5.78±1.79	44.40	1-10
Action needed for toddler negative reaction.	2	0.36±0.50	18	0-2
Total	57	25.47±6.2	43.91	6-48

Table 3 shows, respondents' awareness on different aspect of toilet training. Overall mean score regarding toilet training was 43.91% where overall mean score regarding general component mean score was 72.50% with mean±SD, 2.90±0.67. It shows that mothers were more aware regarding meaning, age of initiation and age for completion of toilet training. The parental aspect of toilet training mean score was 47.07% whereas effects of early and

late initiation of toilet training was 33.78% followed reasons of accidental wetting and action for toddler negative reaction where mean score was 18.0%.

TABLE 4: Respondents' Attitude regarding Toilet Training Statements**n=155**

Statements	Responses					Mean±SD
	SA	A	UD	DA	SDA	
Mothers' Aspect						
Toilet training is job for mother.	17.4	43.9	18.1	18.7	1.9	2.43±1.04
Mother /family should also ready for toilet training.	12.9	68.4	10.3	4.5	3.9	3.63±0.99
Praise and incentives are important for toilet training to toddler.	4.5	15.5	15.5	38.1	26.5	3.48±0.98
Toddler needs to punish for regular toilet habits.	30.3	46.5	14.2	7.1	1.9	2.02±0.93
Toddler should allow selecting training accessories.	3.2	23.2	31.0	35.5	7.1	3.83±0.99
Perineal hygiene and excreta disposal should include in toilet training.	11.6	28.4	39.4	19.4	1.3	3.15± 1.03
It is better to give toilet training in toilets.	10.3	55.5	18.1	12.3	3.9	3.29± 1.16
Toddler should train everyday whatever the condition.	9.0	33.5	18.7	34.8	3.9	2.82±1.14
Enough time should be given for toilet training.	19.4	50.3	21.3	7.1	1.9	3.60± 1.10
Regular and correct toilet training saves money and time.	4.5	35.5	36.8	21.3	1.9	2.83± 1.04
Toddlers' Aspect						
Regular toilet training is important for toddler.	48.4	41.9	8.4	1.3	0	4.37±0.69
Appropriate age for toilet training is after 15 months	5.2	34.8	17.4	33.5	9.0	2.72±1.18
Siblings can increase success rate of toilet training.	30.3	38.7	19.4	9.7	1.9	3.78±1.08
Toilet training automatically happens as toddler grows.	1.9	23.9	25.2	40.6	8.4	3.16±1.03
Toddlers verbalize for their readiness for toilet training.	4.5	15.5	15.5	38.1	26.5	3.38± 1.30
Repeated pulling of innerwear is symbol of manner lessness.	6.5	18.7	36.1	32.3	6.5	2.85±1.05
Emotional weak toddler usually wets bed.	11.6	47.1	25.2	14.2	1.9	2.47±0.94
Use of diapers promotes physical appearance of toddler.	3.9	30.3	41.3	18.1	6.5	2.92± 0.94
Temper tantrum is also associated with delay toilet training.	3.2	15.5	46.5	25.8	9.0	2.81±0.95
Early toilet training means early growth and development of toddler	25.2	43.9	20.0	8.4	2.6	2.16±0.99

SA-Strongly agree A-agree UD-Undecided DA-Disagree SDA-Strongly disagree

Table 4 shows that, out of 155 respondents, 43.9% respondents were agreed on toilet training is job for mother, mothers readiness for toilet training, 68.4% respondents were agreed. Concerning praise and incentives 38.1% respondents were disagreed, 46.5% respondents were agreed on need of punishment

for regular toilet training followed by 35.5% respondents were disagreed on selecting training accessories. Regarding perineal hygiene and excreta disposal in toilet training, 39.4% respondents were agreed, 55.5% were agreed on giving toilet training on toilet followed by 34.8% were disagreed on training daily in spite of toddlers' condition. Similarly 50.3% respondents were agreed on enough time needed for toilet training and 36.8% were undecided on saving money and time by toilet training.

Concerning toddler aspect, 48.4% respondents were agreed on importance of toilet training, 34.8% were agreed on appropriate age for training followed by 38.7% agreed on involvement of sibling in toilet training process. Similarly, 40.6% respondents were disagreed on automatically happening of toilet training as toddlers grow. Verbalization of readiness by toddlers by themselves, 38.1% were disagreed and 36.1% respondents were undecided on pulling repeatedly innerwear is symbol of mannerlessness. Concerning accidental wetting 47.1% were agreed, 41.3% were undecided on increasing physical appearance by use of diapers. Similarly 46.5% were undecided on association of temper tantrums with delay toilet training and 43.9% were agreed on early toilet training means early growth and development.

TABLE 5: Respondents' Practice on Toilet Training**n=155**

Statements	Number	Percentage
Performed toilet training 18-24 month	35	22.6
Trained toddler in morning time	100	64.5
Praised toddler for not wetting innerwear for 2 hours	56	36.1
Took toddler only after he/she verbalized	48	31.0
Took toddlers' siblings help for toilet training	86	55.5
Allowed toddler to select his/her accessories	55	35.5
Make familiar toddler with toilet accessories	53	34.2
Make time schedule for toilet training to your toddler	41	26.5
Spend enough time with toddler while training	98	63.2
Spend minimum 5-10 minute for practice session	108	69.7
Taught to sit in toilets	66	42.6
Allowed toddler to play in potty chair/pots while toileting	85	54.8
Motivate toddler to go toilet regularly	75	48.4
Taught toddler to clean perineal area and hand with soap and water	53	34.2
Used to urinate toddler before sleep	121	78.1
Scold toddler for becoming wet their innerwear	121	78.1
Become angry and show it while training	61	39.4
Performed toilet training every day, whatever the condition of toddler	34	21.9

Table 5 shows, respondents practice regarding toilet training. Only 22.6% respondents performed toilet training between 18-24 months. Regarding the statement training in morning time, 64.5% practiced it. For not wetting the innerwear 36.1% respondents praised their toddler. Likewise 31.0% respondents took their toddler to toilet only after they verbalized. Respondent who took toddlers siblings help were 55.5%. And 35.5% of respondents allowed their toddler to select their training accessories. Respondents who practiced making familiar toddler with accessories were 34.2%. Making regular training schedule, were followed by 26.5% of respondents. Concerning spending enough time with toddler for training, 63.2% respondent were practiced it, where, 69.7% respondents spend minimum 5-10 minute with their toddler in practice session. Similarly 42.6% respondents used to taught how to sit in toilets and 54.8% allowed to play while toileting. Respondents who used to motivate their toddler to go toilet were 48.4%. Only 34.2% respondents used to taught perineal hygiene while toilet training. Regarding practice of urination to toddler before sleep, it was carried out by 78.1% respondents. Scolding their toddler for becoming wet was done by 78.1%. Likewise respondents who become angry and showed it to toddler and performed toilet training ever day

in spite of toddlers' condition were 39.4% and 21.9% respectively

TABLE 6: Relationship between Awareness, Attitude and Practice Score of Respondents' on Toilet Training

Variables	Relationship		
	Awareness	Attitude'	Practice
Awareness	1		
Attitude	0.102	1	
Practice	0.277*	0.257*	1

*Significance level at 0.05

Table 6 shows that, Spearman's rank correlation, which was calculated to find out bivariate relationship among respondents awareness, attitude and practice. There was significant relationship found between mothers awareness and practice ($r=0.277$ $p<0.001$) and also significant relationship was found between attitude and practice of mother ($r=0.257$ $p<0.001$). The strength of this relationship was moderate. This indicates that the respondents who had adequate awareness possess satisfactory practice and respondents who had satisfactory attitude possess satisfactory practice regarding toilet training and vice versa.

DISCUSSION

According to findings of the study, less than half of respondents (48.4%) had adequate level of awareness. Mean score of awareness was 25.47 ± 6.20 out of total 57 score with 43.91% mean percentage. This result is lower than study by Jain (2015) who reported 59.7%. Concerning meaning of toilet training only 40.6% had awareness. This finding is contrast with study by (Hidayat, 2010) where 81% had knowledge. In this study 41.3% had awareness about age for initiation of toilet training. This finding was supported by results of the study by Denada et al. (2015) who reported 42.1% had knowledge. Whereas regarding age of completion of toilet training, in this study 2.6% respondents had awareness.

Regarding practice of toilet training, mean practice of present study was 53.04% with mean score 9.54. This finding is almost similar with study by Mallapa et al. (2014) where mean percent was 65.71% with mean score 11.9. In current study 22.6% mother performed toilet training aged after 18-24 month. This finding is lowered in comparison to study by

Denada et al. (2015) where 42.1% implemented toilet training at age of 18-24 month

In this study, level of awareness in to two categories on basis of median value, in this study 51.6% had inadequate level of awareness and 48.4% had adequate level of awareness. In comparison, in the study by (Jain, 2015), 28.3% had inadequate and 71.7% had moderate level of knowledge and study by Mallapa et al. (2014) revealed that 17% had adequate, 68% had moderately adequate, 15% had inadequate level of knowledge regarding toilet training. Present study revealed, in this study 50.30% had unsatisfactory level of attitude and 49.70% had satisfactory level of attitude. In comparison the study by Elgawad and El-khedr, (2014), revealed 97% had poor level of attitude, and the study by Syari et al. (2015) revealed 35.4% had positive. 60.8% had neutral and 3.8% had negative level of attitude towards toilet training.

This study showed that 61.9% had unsatisfactory level and 38.1% had satisfactory level whereas study by Mallapa et al. (2014) 26% respondents had better practice, 63% had good and 11% had poor level of practice. In another similar study by Elgawad and El-khedr, (2014). 5% had poor practice, 78.33% had average and 16.66% had good level of practice regarding toilet training. The current study finding showed that respondents' awareness had statistically significant association with mother educational status ($p=0.004$), level of education (0.044), occupation ($p=0.008$), and types of family ($p=0.008$). This finding is supported with the result of study by Jain (2015), where p value of these variables was < 0.05 .

In the findings of current study regarding attitude level and respondents' socio-demographic characteristics, there was no significant association between respondents' age ($p=0.66$), religion ($p=0.80$), ethnicity ($p=0.37$), education ($p=0.50$), husband education ($p=0.32$), economic status ($p=0.91$), types of family ($p=0.53$), number of children ($p=0.70$), age of toddler ($p=0.52$), birth order ($p=0.69$) and past experiences ($p=0.81$). This finding is supported study by Elgawad and El-khedr, (2014).

Regarding association between level of practice and respondents' socio-demographic characteristics

and number of children had significant association ($p=0.043$). This finding is consistent with the study by Mallapa et al. (2014) ($p<0.05$). Other variables like age of mother, religion, ethnic group, education level, occupation, marital status husband education, and types of family, types of toilet, sex of toddler and previous experience on toilet training was not significant with level of practice. This finding is consistent with the study by Jain (2015) ($p>0.05$). In the present study, there was statistically significant positive ($r=0.277$) relationship between awareness and practice score of the respondents', which is similar ($r=0.62$) to the study findings of Mallapa et al. (2014). But there was no relationship between awareness and attitude ($r=0.257$) of respondents. This is contradictory to the findings ($r=0.53$) of Elgawad & El-khedr, (2014). Similarly, present study showed significant positive ($r=0.257$) relationship between practice score and attitude score, and this finding is similar with the study by Elgawad & El-khedr, (2014).

CONCLUSION

Based on the findings of the study conclusion has been drawn. It is concluded that less than half of the respondents' have adequate level of awareness and satisfactory level of attitude. But more than one fourth and less than two fourth respondents have satisfactory level of practice regarding toilet training. Mothers' awareness level was limited on signs of readiness, time component, possible effects and reasons for wetting and parental action for negative reaction of toddlers. There was significant association between respondents' level of awareness and. educational status and levels of education, occupation, marital status, education status and level of husband, types of family, types of toilet and birth order. Those mothers who were literate, studied higher level of education, engaged in service had more adequate of awareness. Whereas level of attitude was significant with marital status of respondents and economic status, number of children and age of toddler with level of practice. Furthermore, there is correlation between awareness and practice score, practice score and attitude score but, no correlation between awareness and attitude score regarding toilet training among mothers of toddler. Therefore regular counseling programme is needed to enhance mothers' awareness and make

their attitude and practice satisfactory regarding toilet training and avoid possible effects associated with early and late, improper toilet training.

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