

RESULTS

The results obtained from the study were presented in the following sequence.

Part I: Sociodemographic characteristics of enuretic children and their mothers and medical records of enuretic children (Tables 1-3).

Part II: Assessment of home environment of enuretic children (Table 4).

Part III: Assessment of mothers knowledge and their enuretic children about enuresis (Tables 5a-5b & 5c).

Part IV: Assessment of mothers' attitude regarding to their enuretic children (Tables 6-7).

Part V: Assessment of mothers care (practice) through asking questions about daily living activities regarding to their enuretic children (Table 8).

Part VI: Assessment of self concept condition of enuretic children (Tables 9a-9b).

Part VII: Statistical relation among levels of education of mothers and their knowledge about enuresis (Table 10)

Part III : Statistical relation among sociodemographic characteristics of mothers and their attitude toward their enuretic children (Table 11)

Part I: Characteristics of Enuretic children & their Mothers and Medical Record of Enuretic Children (Tables 1-3).

Table (1): Distribution of enuretic children characteristics (n=100)

Sociodemographic Characteristics	No.	%
Age (in years)		
6-	56	56.0
8-	27	27.0
10- 12	17	17.0
Sex		
Male	64	64.0
Female	36	36.0
Order		
1 st	41	41.0
2 nd	40	40.0
3 rd	13	13.0
4 th	6	6.0
Scholastic period		
Succeed with excellence	13	13.0
Succeed with good	19	19.0
Succeed with satisfactory	52	52.0
Succeed with subjects	16	16.0
Who sleeps with Children		
Alone	5	5.0
with parents	52	52.0
with siblings	43	43.0
Sleep Pattern		
Light	10	10.0
Deep	82	82.0
Regular	4	4.0
Interrupted	4	4.0
Follow up		
Private doctor	7	7.0
School doctor	20	20.0
Health insurance doctor	73	73.0

Table (1) showed that more than one half of enuretic children (56.0 %), their age was 6 - < 8 years, less than two thirds of them were males (64%), the majority of them (81.0%) are the 1st and 2nd born child, more than one half of them succeed with satisfactory grade (52.0%), more than one half of them share their parents in bedrooms (52.0%), the majority of them have deep sleep pattern (82.0%), less than three quarters of them (73.0) follow up with health insurance doctors.

Table (2): Distribution of sociodemographic characteristics of studied mothers (n= 100)

Characteristics	No.	%
Age (in years)		
≤30	63	63.0
> 30	37	37.0
Educational level		
Not educated	52	52.0
Secondary	27	27.0
University	21	21.0
Occupation		
Worker	24	24.0
Employee	20	20.0
Does not work	56	56.0
Marital status		
Married	62	62.0
Divorced	12	12.0
Widowed	26	26.0
Family size		
< 3 siblings	16	16.0
3-7 siblings	84	84.0
Income		
Enough (> 400)	33	33.0
Not enough (≤ 400)	67	67.0

Table (2) shows the sociodemographic data of the studied mothers, where more than three fifths of them (63.0%) are of the age ≤ 30 years, more than one half of them (52.0 %) are not educated, and more than one half of them (56.0%) do not work, more than three fifths of them were married (62.0%), the majority of them (84.0%) have 3 - 7 siblings and less than three quarters of them (67.0%) have not enough income.

Table (3) Distribution of the studied enuretic children according to their diagnosis (n=100).

Medical History	No	%
Age at onset of enuresis:		
4 years	11	11.0
5 years	30	30.0
6 years	59	59.0
Age of toilet training:		
< 1 year	63	63.0
1-1½ years	13	13
1½ - 2 years	24	24
Time of enuresis:		
Diurnal only	20	20.0
Nocturnal only	70	70.0
Diurnal & nocturnal	10	10.0
Health problems:		
Urinary tract infection	10	10.0
Psychological problems	60	60.0
Social problems	30	30.0
Family History of enuresis:		
Parents	40	40.0
Siblings	36	36.0
Relatives	24	24.0
Diagnosis type:		
Primary	41	41.0
Secondary	59	59.0
Medication:		
Tofranil	57	57.0
Ditroban	26	26.0
Emprissem	17	17.0

Table (3) showed that less than three fifths of enuretic children (59.0%) their age at onset of enuresis was at 6 years and less than two thirds of them (63.0%) reported that age of toilet training started below one year. According to time of enuresis for more than two thirds (70.0%), it was nocturnal enuresis and one fifth (20.0%) was diurnal enuresis while one tenth (10.0%) was both. Three fifths (60.0%) of enuretic children have psychological problems, more than two third of enuretic children have positive family history (76.0%). Concerning types of enuresis, slightly less than three fifths (59.0%) of enuretic children had secondary enuresis, more than two fifths (41.0%) of children had primary enuresis, and less than three fifths (57.0%) take Tofranil medication.

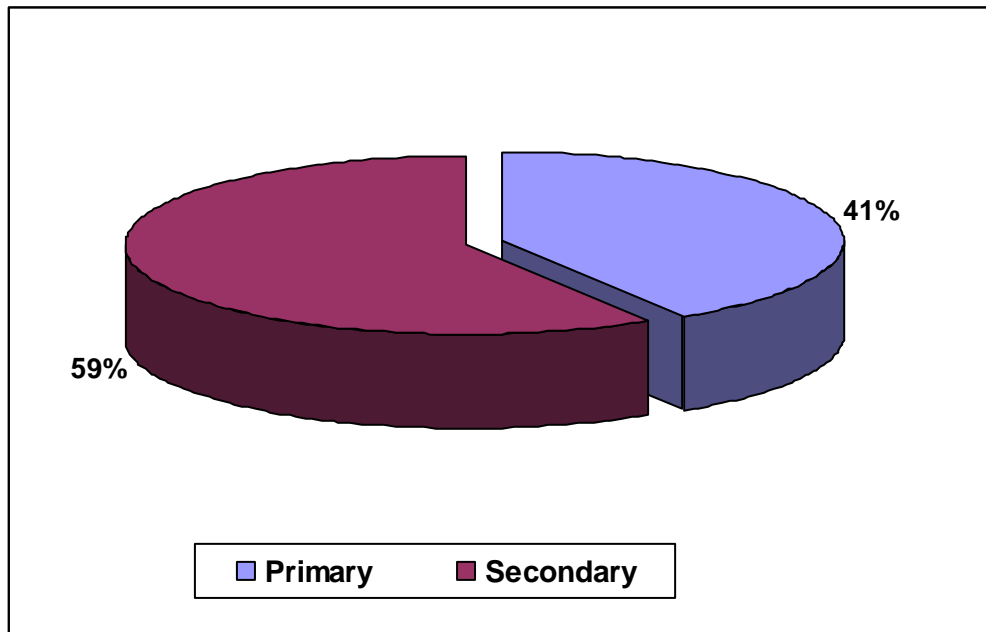
Distribution of enuretic children according to their type of enuresis:

Fig. (1): Showed that (41.0%) have primary enuresis and (59.0%) have secondary. Distribution of enuretic children according to their time of enuresis.

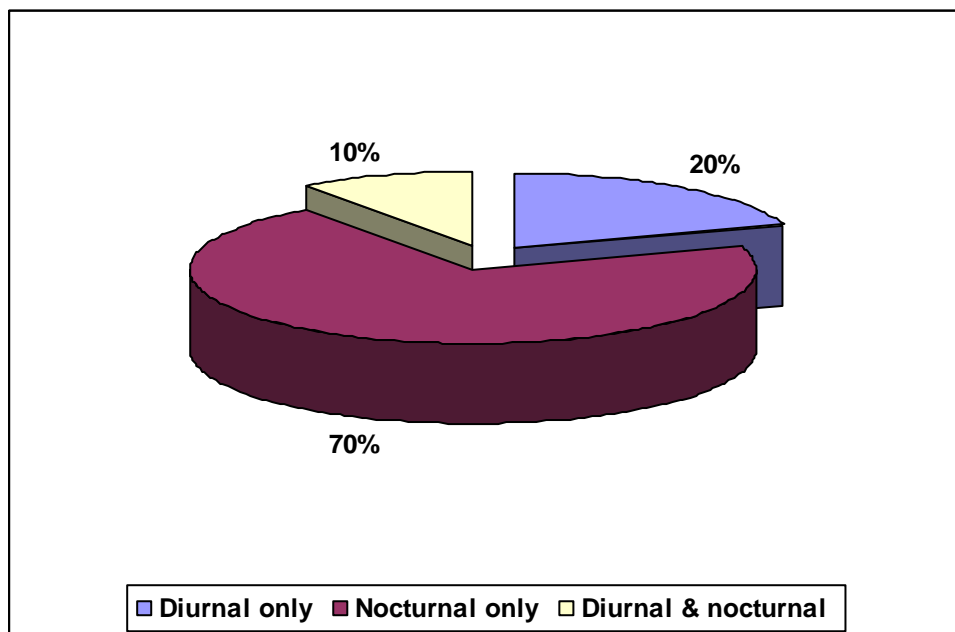


Fig. (2): Showed that (70.0%) from enuretic children have nocturnal enuresis, (20.0%) of them have diurnal enuresis and (10.0%) of them have diurnal and nocturnal enuresis.

Part II: Assessment of Home Environment of Enuretic Children (Table 4).**Table (4)** Distribution of the studied subjects regarding to their homes' environment (n=100).

Variables	No.	%
Residence		
Urban	2	2.0
Rural	98	98.0
House condition		
Independent	72	72.0
Shared	28	28.0
Sewage disposal		
Present	31	31.0
Not appropriate	69	69.0
Safe water		
Tape water	82	82.0
Water pump	18	18.0
Bathroom close to child's bedroom		
Present	18	18.0
Not present	82	82.0
Presence of bathroom		
Present	80	80.0
Not present	20	20.0
Light in bathroom		
Enough	49	49.0
Not enough	51	51.0
Light outside bedroom		
Enough	18	18.0
Moderate	23	23.0
Not enough	59	59.0

Table (4) showed that the living environment of the studied participants, with most of them living in rural areas (98.0%), less than three quarters of them live in independent houses (72.0 %). More than two thirds of them have not sewage disposal (69.0%). The majority of children have tape water, as well as bathrooms (82%, 80% respectively). More than half of them (51.0%) have not enough light in the bathroom, almost three fifths of them (59.0%) have not enough light outside the bedroom and for the majority of them (82.0%) bathrooms are not close to their bedrooms.

Part III: Assessment of Mother's Knowledge and their Enuretic Children about the Enuresis (Tables 5a-5b & 5c).

Table (5a): Mean and SD of the studied mothers' knowledge regarding to definition, causes signs, symptoms, and problems of enuresis (n=100)

Mothers' Knowledge	Score
	Mean \pm SD
Definition of enuresis	0.65 \pm 8.45
Causes	
Physical	2.46 \pm 1.789
Social	2.60 \pm 6.36
Psychological	4.15 \pm 1.313
Emotional	2.65 \pm 7.57
Reaction of child regarding to enuresis	1.62 \pm 0.814
Signs of enuresis	1.11 \pm 3.45
Symptoms of enuresis	2.02 \pm 0.681
Problems	
Social problems	2.54 \pm 0.626
Psychological problems	3.84 \pm 1.405
Economic problems	2.77 \pm 1.406
Total mean score of mother's knowledge	25.70 \pm 2.8

Table (5a) showed that the score of different items of mother's knowledge related to enuresis with a total mean score of 25.7 ± 2.8 .

Table (5b): Mean and SD of the studied children's knowledge regarding to causes signs, symptoms, and problems of enuresis (n=100)

Knowledge	Child
	Mean \pm Std. Deviation
Definition of enuresis	0.94 \pm 0.489
Causes:	
Physical causes of enuresis	1.91 \pm 1.386
Social causes of enuresis	2.37 \pm 0.706
Psychological causes of enuresis	3.71 \pm 1.328
Emotional causes of enuresis	2.50 \pm 0.674
Signs of enuresis	0.90 \pm 0.302
Symptoms of enuresis	1.43 \pm 0.624
Problems	
Social problems of enuresis	2.62 \pm 0.599
Psychological problems of enuresis	3.76 \pm 1.207
Economic problems of enuresis	2.84 \pm 1.245
Total mean score of child's knowledge	23.0 \pm 4.3

Table (5b) shows the score of different items of children's knowledge with a total mean score of 23.0 ± 4.3 .

Table (5c): Number and percentage distribution of the mothers of enuretic children according to the source of their information about enuresis.

Item	No	%
- Private physician	12	12.0
- Nurse	9	9.0
- Book/magazine	12	12.0
- Mass media	17	5.0
Relatives/friends	50	50.0

Table (5c) showed that half of mothers (50.0%) reported that relatives/friends were source of their information, while the other half (50.0%) of mothers reported other sources of information as private physicians, nurses, books/magazines and mass media (12.0%, 9.0%, 12.0% & 5.0% respectively).

Part IV: Assessment of Mothers' Attitude Regarding to their Enuretic Children (Tables 6-7).

Table (6): Distribution of studied mother's attitude regarding to their enuretic children

Items	Always		Sometimes		Never	
	No	%	No	%	No	%
Accept sleeping outside your house	15	15.0	25	25.0	60	60
Take over dressing during sleeping outside the house.	73	73.0	21	21.0	6	6.0
Feel embarrassed regarding to child problem	67	67.0	30	30	3	3.0
A wake up child at night to void	10	10.0	8	8.0	82	82.0
Punish enuretic child	79	79.0	17	17.0	4	4.0
Reassure enuretic child and change his clothes if gets up wet	15	15.0	54	54.0	31	31.0
Encourage enuretic child when getting up unwet.	25	25	55	55.0	20	20
Follow up enuretic child regularly.	15	15.0	18	18.0	67	67.0

Table (6) showed that mothers' attitude toward their enuretic children. Less than three quarters always are taking over dressing (73%), slightly more than two thirds of mothers feel embarrassed regarding to their children problem (67.0%). More than three quarters of mothers punish their children (79.0%). However, more than half of mothers (54.0%) sometimes reassure their children if they get up wet, more than half if them (55.0%) encourage their enuretic children when they get up unwet and three fifths less than two third of them (60.0%) never accept sleeping outside their house; the majority of them (82.0%) never a wake up their children at night to void and more than two thirds of them (67.0%) never follow up their enuretic children regularly.

Table (7): Relation between mothers' attitude and their children types of enuresis (n=100)

Attitude	Type of Enuresis		Total		χ^2	p-value
	Primary	Secondary	No	%		
Positive	10	17	27	27.0	2.9	> 0.05
Negative	41	32	73	73.0		
Total	51	49	100	100.00		

Table (7) reveals the relation of mothers' attitude regarding to type of enuretic children. The table shows that 73% of the mothers reported negative attitude, while 27% of them reported positive attitude. The Statistically insignificant difference was detected between mothers' attitude and types of enuresis ($P > 0.05$).

Part V: Assessment of mothers care immediate through asking Questions about daily living activities regarding their enuretic children (Table 8).

Table (8): Distribution of the mother's immediate care toward their enuretic children (n=100)

Items	Correct %	Incorrect %
Bathing their enuretic children	45.0	55.0
Change clothes and linen during day when wet	34.0	66.0
Perineal care	37.0	63.0
Taking medication according to medical advice	25.0	75.0
Measures followed by mothers to decrease their enuretic children problem	25.0	75.0
Type of drink before sleep	37.0	63.0
Time of last drink before sleep	35.0	65.0
Kind of diet before sleep	42.0	58.0

Table (8) shows that more than half of mothers were not bathing their children (55.0%), two thirds of them were not changing clothes and linen (66.0%), more than half of them were not performing correctly perineal care (63.0%), three quarters of them were not giving medication as doctor's advice (75.0%), three quarters of mothers don't know control measures of enuresis (75.0%), less than two thirds of them were giving tea, coffee and soda of fluid to child (63.0%), less than two thirds of them were drinking long time before bed time (65.0%), less than three fifths of enuretic children (58.0%) took diet rich in spices before sleep.

Part VI: Assessment of Self Concept Condition of Enuretic children (Tables 9a-9b).

Table (9a): Distribution of the enuretic children according to their self concept (n=100)

Variable	Yes %	No %
I am happy	29.0	71.0
I am intelligent	61.0	39.0
I do not like my appearance	39.0	61.0
I have good moral in class	72.0	28.0
I have good ideas	29.0	71.0
I am sad	70.0	30.0
I am shy	84.0	16.0
I do friendships hardly	55.0	45.0
I am sometimes worried and nervous	90.0	10.0
I do bad things	92.0	8.0
I am the most important person in the family	19.0	81.0
I solve my problems easily	34.0	66.0

Table (9a) displayed the self concept questionnaire, which revealed that less than three quarters (71.0 %) feel not happy, more than three fifths of them (61.0%) feel intelligent, more than three fifths of them (61.0 %), don't like their appearance less than two thirds of them (72.0%) have good moral in class, an equal percentage of less than tree quarters of them (71.0% & 78%) do not have good ideas and feel sad respectively. The majority of enuretic children (84.0 %) feel shy, more than half of them (55.0 %) do friendships hardly, most of them (90.0%) are sometimes worried and nervous. Most of them (92.0 %) do bad things, and the majority of them (81.0 %) feel they are not the most important person in the family and, less than two thirds of them (66.0%) do not solve their problems easily.

Table (9b): Level of self concept among enuretic children under study.

Type	No	%
Low self concept (-ve)	76	76.0
High self concept (+ve)	24	24.0

Table (9b) shows types of self concept toward enuretic children with approximately three quarters of them (76.0%) have low (-ve) self concept while only less than one quarter of them (24.0%) have high (+ve) self concept .

Part VII: Statistical relation between levels of mothers' education and their knowledge about enuresis (Table 10)

According to the research question (1): Is mothers' level of education affect their knowledge regarding to their enuretic children?

Table (10): Statistical relation between educational level of studied mothers and their knowledge about enuresis (n = 100)

Mothers Knowledge	Mothers' Educational Level						Total		χ^2	p-value
	Not educated (n=52)		Secondary (n=27)		University (n=21)					
	No	%	No	%	No	%	No	%		
Good	0	0.0	6	22.2	21	100.0	27	27.0	76.3	< 0.001
Poor	52	100.0	21	77.8	0	0.0	73	73.0		

Table (10) showed a highly statistically significant relationship between mothers' educational level and their knowledge. It reveals that the highly educated mothers (university education) the higher their levels of showed high levels of knowledge toward enuretic children (good 100%) ($p < 0.001$).

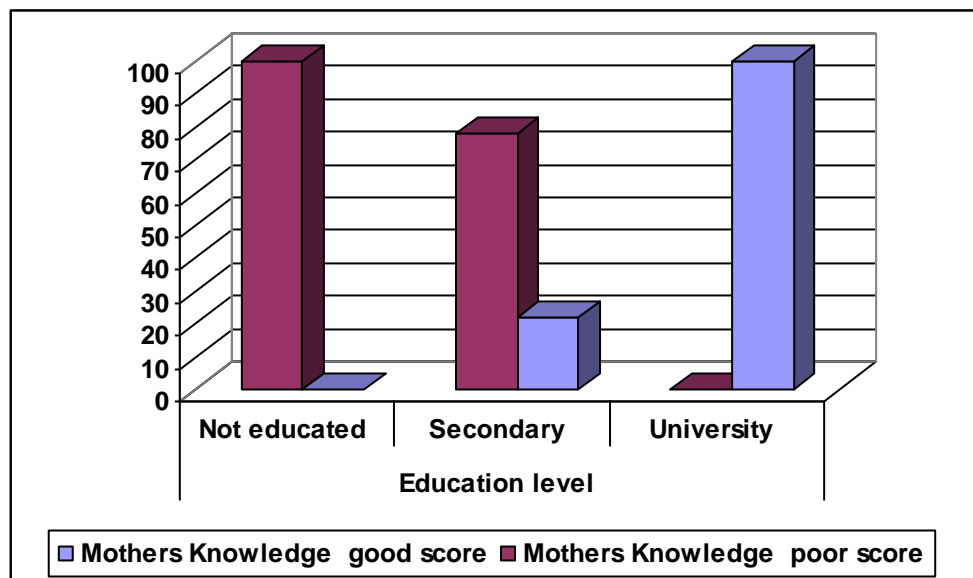


Fig. (3): Relation between educational level of mothers and their knowledge about enuresis

Part VIII : Statistical relations among sociodemographic characteristics of mothers and their attitude toward to their enuretic children (Table 11).

According to the research to question (2): Is sociodemographic characteristics of mothers affect their attitude toward their enuretic children?

Table (11): Statistical relations between sociodemographic characteristics of mothers and their attitude toward their enuretic children (n = 100)

Sociodemographic characteristics		Attitude				Total		X ²	p-value
		Unsatisfied (n=73)		Satisfied (n=27)					
		No.	%	No.	%	No.	%		
Age	≤ 30	52	71.33	11	40.74	63	63.0	11.1	<0.05 [*]
	> 30	20	27.40	17	62.96	37	37.0		
Educational level	Not educated	50	68.29	2	7.40	52	52.0	6.3	< 0.05 [*]
	Secondary	20	27.39	7	25.92	27	27.0		
	University	3	4.10	18	66.66	21	21.0		
Occupation	Worker	14	19.17	10	37.3	24	24.0	45.7	< 0.001 ^{**}
	Employee	6	8.21	14	51.85	20	21.0		
	Does not work	53	72.60	3	11.11	36	56.0		
Marital status	Married	38	52.05	24	88.88	62	62.0	12.0	< 0.05 [*]
	Divorced	10	13.70	2	7.41	12	12.0		
	Widowed	25	34.25	1	3.70	26	26.0		
Family number	< 3 siblings	4	5.48	12	44.44	16	16.0	22.3	< 0.001 ^{**}
	3-7 siblings	69	94.52	15	55.55	84	84.0		
Income	Enough	13	17.80	20	74.07	33	33.0	28.2	< 0.001 ^{**}
	Not enough	60	82.19	7	25.92	73	73.0		

* Significant

** Highly significant

Table (11) showed, significant relationships between attitude of the studied mothers of enuretic children, and their sociodemographic status where there are more positive mothers among older mothers ($p < 0.05$), with higher educational level ($p < 0.05$), employer ($p < 0.001$), married ($p < 0.05$), with smaller number of siblings ($p < 0.001$), and with enough income ($p < 0.001$).

In general from the findings this study, mothers and their enuritic children need more information about enuresis problems to meet their enuretic children needs to improve care and attitude toward their enuretic children.

The research question was answered and revealed that:

- 1- Mothers and their enuretic children lack of knowledge regarding to enuresis and predisposing factors of enuresis. Care given to enuretic children such as washing, personal hygiene, perineal care and medication was incorrect for the highest percentages.
- 2- The socioeconomic standard has a significant impact on mothers' attitude toward their enuretic children.