RESULTS

Results of the study will be presented under the following parts:-

Part I : General characteristics of the studied sample (table 1-2).

Part II: Health status of the studied sample (table 3-4).

Part III: Child's families knowledge regarding intestinal parasitic disease (table 5).

Part IV: Practices of the studied sample and their mother's regarding intestinal parasitic disease (table 6,7)**.**

Part V: Relations (tables 8 to 11).

Part I: General Characteristics

Table (1): Distribution of the child's families regarding general characteristics (n = 100).

General characteristics	No.	%
Sex		
Male	50	50.0
Female	50	50.0
Age (year)		
3-	65	65.0
4-	15	15.0
5-	20	20.0
Child order		
1st	35	35.0
2nd	25	25.0
3rd or more	40	40.0
Family members		
3-	51	51.0
5-	34	34.0
≥7	15	15.0
Level of education		
. Mothers Illiterate	25	25.0
Read and write	21	21.0
Intermediate education	33	33.0
Higher education	11	11.0
. Fathers		
Illiterate	33	33.0
Read and write	11	11.0
Intermediate education	40	40.0
Higher education	16	16.0

Count: Distribution of the child's families regarding general characteristics (n = 100).

General characteristics	No.	%
Occupation		
. Mothers Employee	54	54.0
House wife	46	46.0
. Fathers		
Employee	41	41.0
Free work	59	59.0
***Crowding index**		
High	64	64.0
Low	36	36.0

$$\text{* Crowding index} = \frac{\text{Number of persons}}{\text{Number of rooms}}$$

Table (1): shows that nearly two third (65%) of the children with parasitic disease their age was 3-4 years, males and females equally distributed percentage while more than one third (35%) of the first child and (40%) of the third child in the birth order.

As regard to children parents education the results revealed that nearly one third (33%) of the father were illiterate compared to one quarter (25%) of the mothers, on other hand more than half (54%) of the mothers were worked but more than half (59%) of the fathers had free work. Also the nearly two third (64%) of the studied subjects lived in crowded house.

Table (2): Distribution of the families as regards their home environment (n=100).

Home environment	No.	%
House type		
Independent	35	35.0
Shared	65	65.0
Number of rooms		
<3	80	80.0
≥3	20	20.0
Kitchen		
Separate	95	95.0
Shared	5	5.0
Bathroom		
Separate	100	100.0
Shared	0	0.0
Sources of water supply		
Inside house	90	100.0
Outside house	10	0.0
Sewage disposal system		
General drainage system	16	16.0
Trunch	84	84.0
Electricity		
Yes	95	95.0
No	5	5.0
Birds and Animals		
Inside home	59	59.0
Out side home	41	41.0
Insect control methods		
Yes	6	6.0
No	94	94.0

Table (2) shows the home environmental condition of the studied subjects. According the table nearly two third (65%) of the studied children lived in shared house, the majority (80%) of them lived in less than 3rooms, the majority (95%) of studied sample had separate Kitchen and all (100%) of them had bath rooms.

Concerning water supplies and electricity, Almost (90%) of the houses had tap water inside the house. Also all the houses (95%) of this house had electricity, will the majority (84%) of the sewage disposal system was trunch, the most (95%) of them have and more than half (59%) of studied sample put birds and animals inside home and also the majority (94%) of them not used any insect control methods .

Part II : Health status of the studied sample

Table (3): Distribution of the preschool children regarding their general health status (no = 100).

General health status	No.	%
Height		
Normal	55	55.0
Abnormal	45	45.0
Weight		
Normal	53	53.0
Abnormal	47	47.0
Skin color		
Jaundice	40	40.0
Pale	60	60.0
Nails condition		
Unclean	80	80.0
Abnormal with stain	20	20.0
Hair condition		
healthy & Bright	90	90.0
dry & Cafeteria	10	10.0
Eyes condition		
Healthy	85	85.0
Gummy	5	5.0
Inflammatory with secretion	5	5.0
Teeth condition		
Normal condition	95	95.0
Tooth problem	5	5.0

Table (3) Clearfield the general health status of the studied children. According to the table more than half (55%) of the children had normal height and normal weight (53%). And also more than half (60%) of the children in the study sample had pale in skin colour and the majority (90%) of them had healthy bright hair condition.

As regard nails condition, eye and teeth condition, the study reveals that the most (80%) of preschooler had unclean nails and (85%) of the them had normal eyes condition and teeth condition (95%).

Table (4): Distribution of the preschool children regarding to present medical history (no = 100).

Present medical history	No.	%
Child temperature		
Normal	95	95.0
Abnormal	5	5.0
Nature of defecation		
Normal	13	13.0
Diarrhea	54	54.0
Constipation	33	33.0
Stool colour		
Normal	30	30.0
Abnormal	70	70.0
Stool with mucosal		
Absent	25	25.0
Present	75	75.0
Itching around the rectum		
Present	50	50.0
Absent	50	50.0
Abdominal pain with colic		
Present	60	60.0
Absent	40	40.0
Parasite type		
Ascaris	5	5.0
Oxuriasis	35	35.0
H.nana	5	5.0
Amebiasis	55	55.0
Investigation after medication for follow up		
Yes	75	75.0
No	25	25.0
Recurrence of infection		
Yes	80	80.0
No	20	20.0

Table (4) shows that the most (95 %) of the children had normal temperatures, diarrhea & abdominal pain with colic. Also, three quarters (75%) of them had stool with mucosal and more than two third (70%) of them had abnormal colour of the stool but equally (50%) of the child studied had itching around the rectum in the morning but anther (50%) children had itching around the rectum at night.

The investigation reveals that the types of parasitic affected the studied samples were Amoebas, Oxyurous, Ascaris and H. nana(55%, 35%, 5% and 5%) respectively and three quarters (75%) of them performed lab test post finish medication for follow up. Also, the most (80%) of them had re infection with parasitic disease.

Part III: Child's mothers knowledge regarding intestinal Parasitic disease.

Table (5): Distribution of the child's families knowledge about intestinal parasitic types, ways of spread and symptoms and signs**.**

knowledge	No.	%
Definition of parasitic diseases		
Correct and complete	90	90.0
Correct but incomplete	0	0.0
Did not know	10	10.0
Types of parasitic		
Correct and complete	45	45.0
Correct but incomplete	0	0.0
Did not know	55	55.0
Ways of spread		
Correct and complete	75	75.0
Correct but incomplete	5	5.0
Did not know	20	20.0
Symptoms and signs		
Correct and complete	0	0.0
Correct but incomplete	30	30.0
Did not know	70	70.0

Table (5) illustrates that the most (90%) of the sample reported complete correct answer about definition of parasitic disease, More than half of them (55%) didn't know parasitic type, three quarter of the mothers 75% mentioned correctly but incomplete correct answer about the Way spread of parasitic diseases, and More than two third of them(70%) did not know the parasitic signs and symptom .

Fig. (1): Mothers knowledge about prevention and complications of parasitic disease.

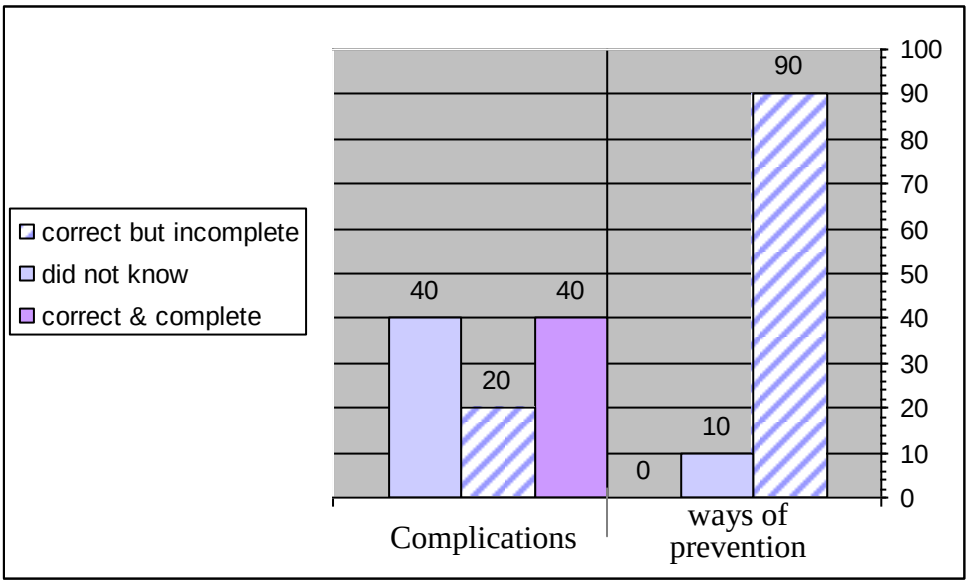

Fig. (1) Shows 90% of the study mother reported incomplete correct answer about measure to be follow for preventions the occurrence of parasitic diseases.

Concerning complications of parasitic diseases 40% of mothers reported complete correct answer 25% incomplete correct answer and 40% don't know.

Fig. (2):Distribution of the families as regards their source of knowledge (n=100).

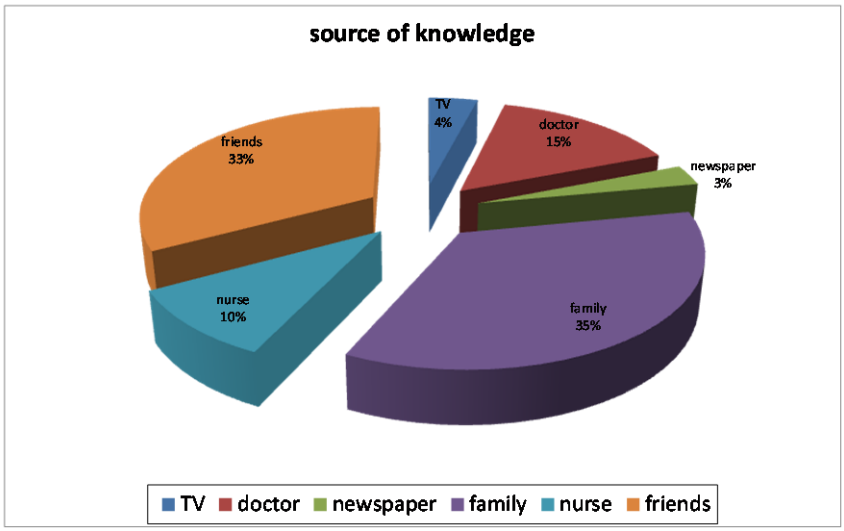

Fig. (2) shows that Distribution of the families as regards their source of knowledge about parasitic diseases, more than one quarters 35% of them know from the family and minority 3% of them know from newspaper

Part IV: **Practices of the studied sample and their families regarding intestinal parasitic disease**

Table (6): Distribution of the child's mothers by the care provided to their children (no=1000).

Family practice	No.	%
Mother follow proper personal hygiene measure		
Correct and complete	10	10.0
Correct but incomplete	85	85.0
Did not know	5	5.0
The clean of the food and the drink		
Correct and complete	10	10.0
Correct but incomplete	65	65.0
Did not know	25	25.0
Clean of the house		
Correct and complete	5	5.0
Correct but incomplete	15	15.0
Did not know	80	80.0

Table (6) shows hat more than three quarter (85%) of the mothers had incomplete correct practice related to specific personal hygiene, less than two third (65%) of the mothers had correct but incomplete practice about the clean of the food and drink and the more than three quarter (80%) of the mothers did not know how to clean their house.

Table (7): Distribution of the parasitic preschool children practice by the family regards their disease (no=100).

Child practice	No.	%
Follow proper personal hygiene		
Correct and complete	0	0.0
Correct but incomplete	60	60.0
Did not know	40	40.0
Food condition and drink		
Correct and complete	5	5.0
Correct but incomplete	25	25.0
Did not know	70	70.0
Play in clean place		
Correct and complete	0	0.0
Correct but incomplete	5	5.0
Did not know	95	95.0

Table (7) Illustrated that more than half (60%) of the studied children had incompetent correct personal hygiene, less than three quarters (70%) of the studied children didn't know important of taken clean food and drink, also the most (95%) of them didn't know they should play in clean area.

Part V: Relations

Table (8): Relation between total knowledge of studied children and their general characteristics (no = 100).

General characteristics		Un satisfactory (n=61)		Satisfactory (n=39)		Total		X^2	p
		no	%	no	%	no	%		
Sex	Male	30	60.0%	20	40.0%	50	50.0%	0.1	>0.05
	Female	31	62.0%	19	38.0%	50	50.0%		
Order of child	The 1st	28	80.0%	7	20.0%	35	35.0%	9.6	<0.05*
	The middle	15	60.0%	10	40.0%	25	25.0%		
	The smallest	18	45.0%	22	55.0%	40	40.0%		
Family's in come	Insufficient	50	71.4%	20	28.6%	70	70.0%	9.3	<0.05*
	Sufficient	11	36.7%	19	63.3%	30	30.0%		
Mother education	Illiterate	21	70%	9	30%	30	30.0%	5.8	>0.05
	Read and write	16	69.6%	7	30.4%	23	23.0%		
	Intermediate education	20	57.1%	15	42.9%	35	35.0%		
	higher education	4	33.3%	8	66.7%	12	12.0%		
Mother occupation	Employee	31	57.4%	23	42.6%	54	54.0%	0.6	>0.05
	House wife	30	65.2%	16	34.8%	46	46.0%		
Crowding index	High	49	76.6	15	23.4	64	64.0%	16.3	<0.001**
	Low	12	33.3	24	66.7	36	36.0%		

Table (8) presents the relation between child general characteristics and their total knowledge about the disease. According the table 40% of male had satisfactory level of knowledge about the disease compared to 38% of female. Also 55% of children their rank birth order was youngest one had satisfactory level of knowledge. Also the child who family income sufficient level of knowledge graduated from university, and worked and live in noncroweded house had high level of knowledge (63.3% , 66.7% , 42.6% and 66.7% respectively) , than other child who family had insufficient income their mother was illiterate, house wife and lived in over crowded house.

The result also reveals a statistical significant difference between the child total level of knowledge about parasitic disease and their birth order, family income and crowding index (p= <0.05)

Table (9): Relation between total practice of studied child and their general characteristics (no = 100).

general characteristics		Un satisfactory (n=73)		Satisfactory (n=27)		Total		X^2	p
		no	%	no	%	no	%		
Sex	Male	38	74.0%	12	24.0%	50	50.0%	0.50	>0.05
	Female	35	70.0%	15	30.0%	50	50.0%		
Order of child	The 1st	26	74.3%	9	25.7%	35	35.0%	3.2	>0.05
	The middle	15	60.0%	10	40.0%	25	35.0%		
	The smallest	32	80.0%	8	20.0%	40	40.0%		
Family's in come	Insufficient	57	81.4%	13	18.6%	70	70.0%	8.4	<0.05*
	Sufficient	16	53.3%	14	46.7%	30	30.0%		
Mother education	Illiterate	28	93.3%	2	6.7%	30	30.0%	18.8	<0.001**
	Read and write	19	82.6%	4	17.4%	23	23.0%		
	Intermediate education	22	62.9%	13	37.1%	35	35.0%		
	higher education	4	33.3%	8	66.7%	12	12.0%		
Mother occupation	Employee	39	72.2%	15	27.8%	54	54.0%	0.1	>0.05
	House wife	34	73.9%	12	26.1%	46	46.0%		
Crowding index	High	54	84.4	10	15.6	64	64.0%	10.1	<0.001**
	Low	19	52.8	17	47.2	36	36.0%		

Table (9) portray the relation between the child total level of practice and their general personal characteristic. The results should present of statistical significant difference between the child family income, mother education and house crowded index and the child general level of satisfactory practice (p=<0.05)

The finding also shows that the total satisfactory level of practice was among female than male (30%, 24% respectively) . Also the child belonged to family with sufficient income, their mother gradated from university, worked and lived in non crowded house had high level of total satisfactory practice than the other children (48.7% , 66.7% and 47.2% respectively).

Concerning child birth order the results illustrates the middle rank child had better level of total satisfactory practice than other children (40%)

Table (10): Relation between total home environment and total practice (no = 100)

total practice / Home environment	Un satisfactory (n=73)		Satisfactory (n=27)		Total		X^2	p
	no	%	no	%	no	%		
Poor	8	88.9%	1	11.1%	9	100.0%	42.7	<0.001**
Average	63	86.3%	10	13.7%	73	100.0%		
Good	2	11.1%	16	88.9%	18	100.0%		

Table (10) Indicates that highly a statistically significant difference between the home environment condition and mother total of satisfactory practice relation between the family their total, it was found that, their was highly (P < 0.001).

The result also reveals the high level of satisfactory practice were found among mothers had good environment condition (88.98 %).

Table (11): Relation between total Knowledge and Total practice (no = 100).

Total practice	Total Knowledge						r	P
	unsatisfactory		satisfactory		Total			
	no	%	no	%	no	%		
unsatisfactory	44	72.1%	29	74.4%	73	73.0%	0.39	<0.05*
satisfactory	17	27.9%	10	25.6%	27	27.0%		
Total	61	100.0%	39	100.0%	100	100.0%		

Table (11) Indicates that a statistically significant difference between total Knowledge about parasitic diseases and total level of practice P= <0.05.