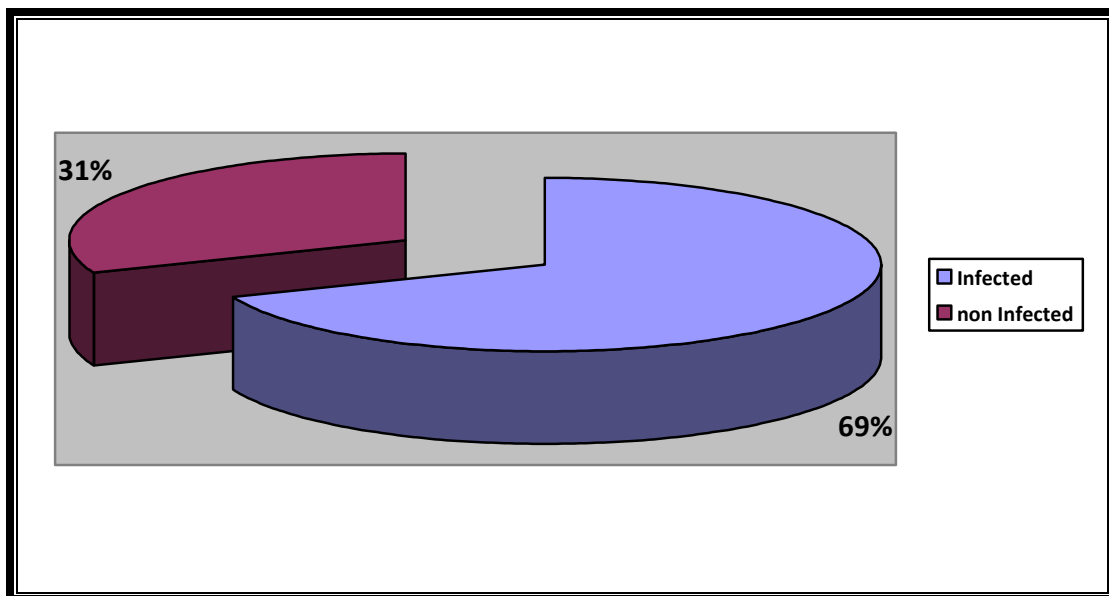


## Results and statistics

**Table (1):** Distribution of parasitic infestation among studied children:

Infected		Non infected		Total	
No.	%	No.	%	No.	%
138	69	62	31	200	100

This table shows that study was done on 200 cases of children; the number of infected children is 138 (69%). And the number of non infected children is 62 (31%).

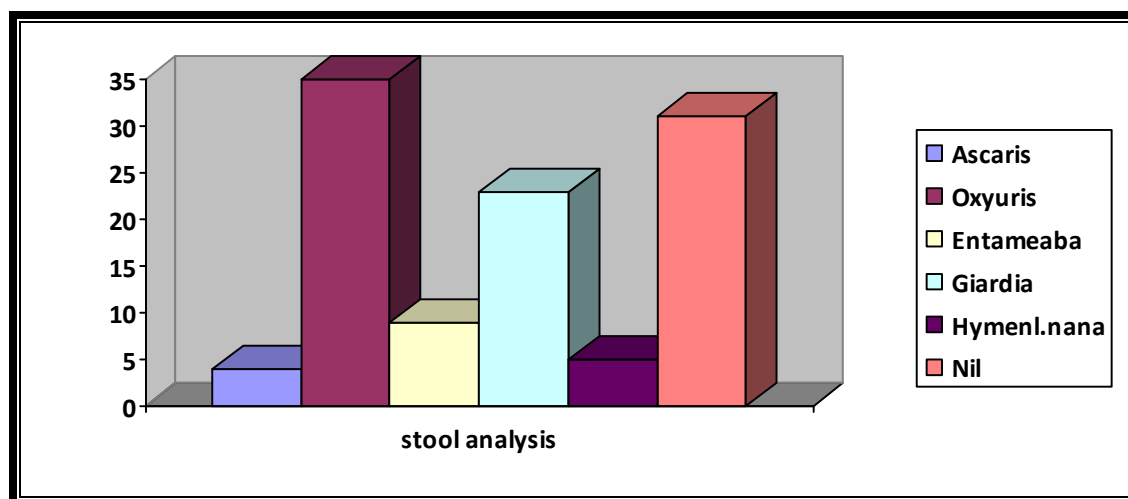


**Figure (1):** Distribution of parasitic infestation among studied children.

**Table (2):** Results of Stool Analysis in All Studied Group:

	No.	%
Ascaris	8	4.0
Oxyuris	70	35.0
Entameaba	18	9.0
Giardia	46	23.0
H.nana	10	5.0
Nil	62	31.0

This table shows different diagnoses of stool analysis in all studied group (200) child; showing the number of infected children with Giardia is 46 child (23%) and the number of infected children with Entameaba is 18 child (9%).



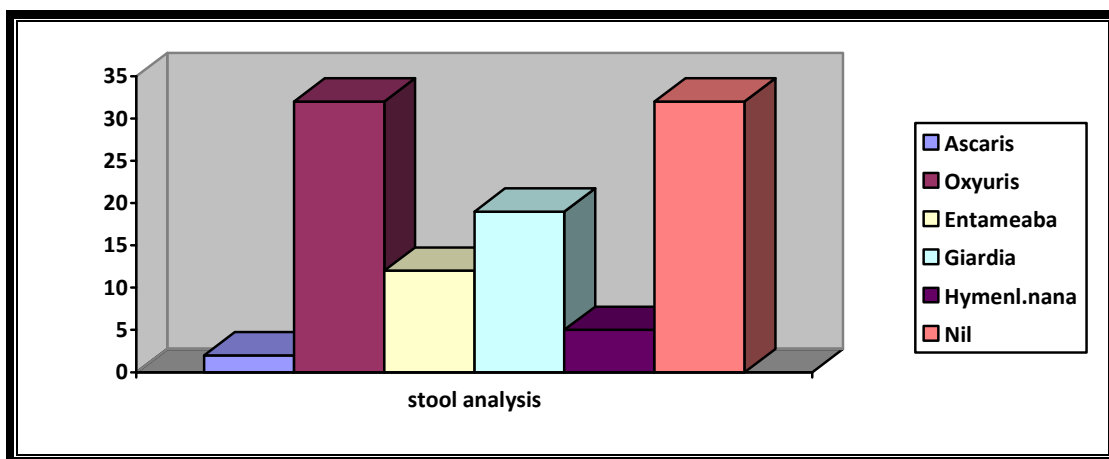
**Figure (2):** Results of Stool Analysis in All Studied Group.

**Table (3):** Results of Stool Analysis in group A:

Parasite	No. of infected patient	%
Ascaris	2	2.0
Oxyuris	32	32.0
Entameaba	12	12.0
Giardia	19	19.0
H.nana	5	5.0
Nil	32	32.0

(age reange 1 to 3 years and its number is 100 child)

This table shows number of infected children and type of parasitic infection in group A; showing the prevalence of Giardia is 19child (19%) and the prevalence of Entameaba 12 child (12%).

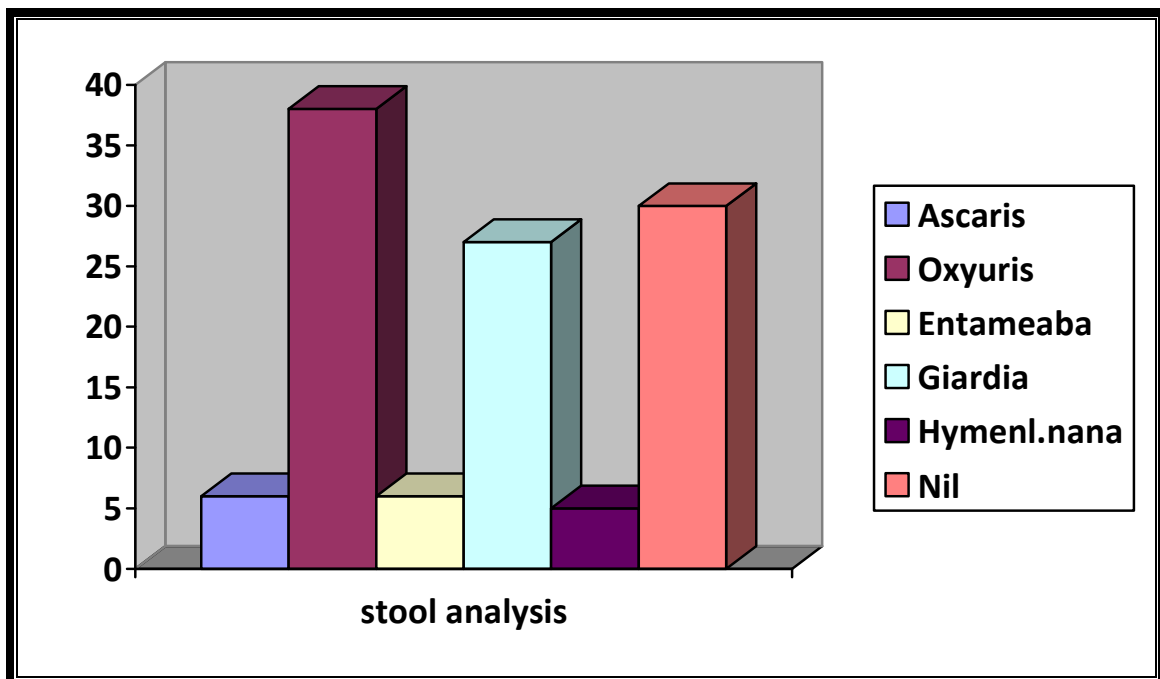
**Figure (3):** Results of Stool Analysis in group A.

**Table (4):** Results of Stool Analysis in group B:

	No.	%
Ascaris	6	6.0
Oxyuris	38	38.0
Entameaba	6	6.0
Giardia	27	27.0
H. Nana	5	5.0
Nil	30	30.0

(age range 4 to 6 years and its number is 100 child)

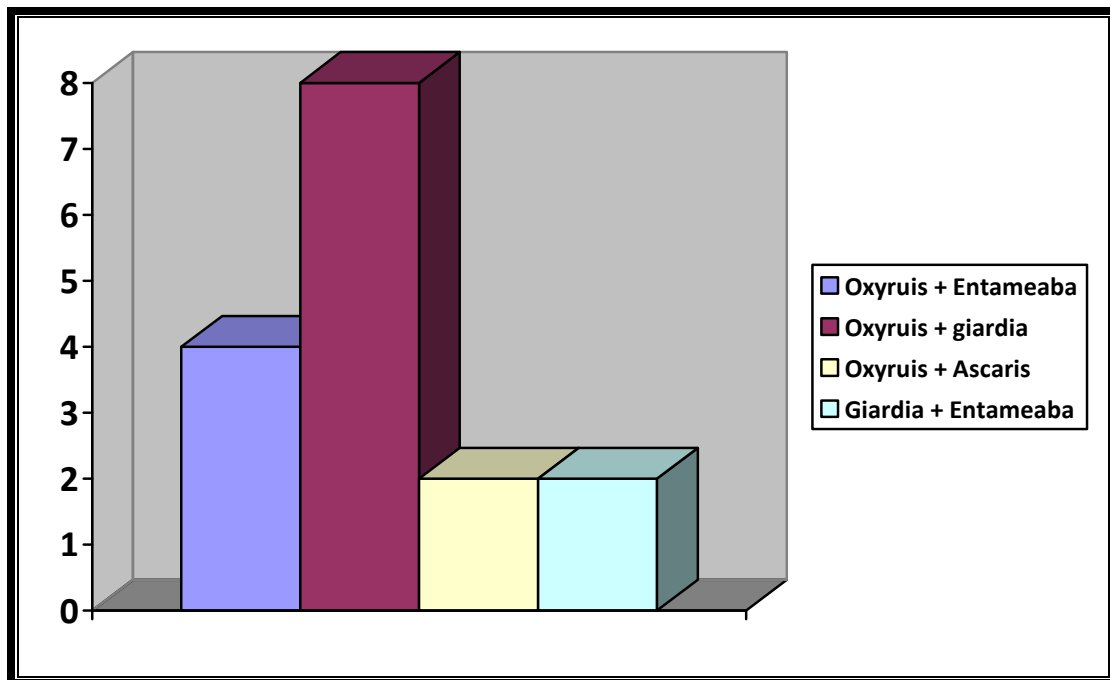
This table shows number of infected children and type of parasitic infection in group B, showing the prevalence of Giardia is 27 child (27%) and the prevalence of Entameaba is 6 child (6%).

**Figure (4):** Results of Stool Analysis in group B.

**Table (5):** Distribution of Mixed Infection among Investigated Children:

	Study group (n=200)	
	No.	%
Oxyuris + Entameaba	4	2
Oxyuris + Giardia	8	4
Oxyuris + Ascaris	2	1
Giardia + Entameaba	2	1

This table shows different mixed infection among all study group (200) child with highest prevalence is double infection (Oxyuris + Giardia) 8 (4%).

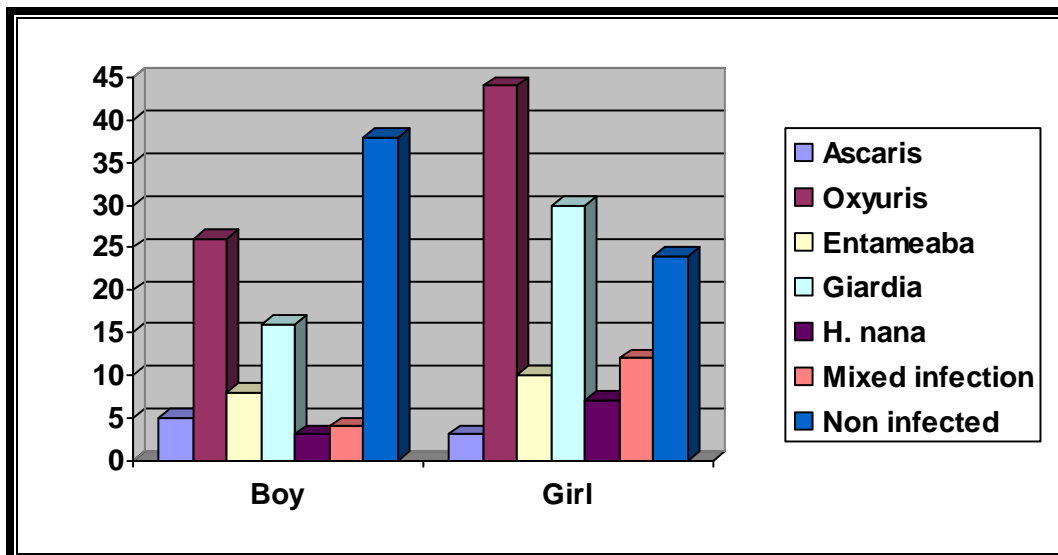


**Figure (5):** Distribution of Mixed Infection among Investigated Children.

**Table (6):** Distribution of Parasitic Infestation according To Sex:

Sex Parasite	NOofBoy	NOofGirl	Total .NO	% In Girl	% In Boy	z	p
Ascaris	5	3	8	37.5	62.2	0.7	>0.05
Oxyuris	26	44	70	62.8	37	2.2	<0.05
Entameaba	8	10	18	55.5	44.4	0.5	>0.05
Giardia	16	30	46	65.2	34	2.2	<0.05
H. nana	3	7	10	70	30	0.7	>0.05
Mixed infection	4	12	16	75	35	2.3	<0.05
Non infected	38	24	62	38.7	61.2	1.8	<0.05

This table shows the percentage of results of stool analysis in both boys and girls. Giardia in girls is (65.2%), in boys is (34%); Entameaba in girls is (55.5%), in boys is (44.4%). Showing statistically significant between Giardia and sex, the same in case of Oxyuris.



**Figure (6):** Distribution of Parasitic Infection According To Sex .

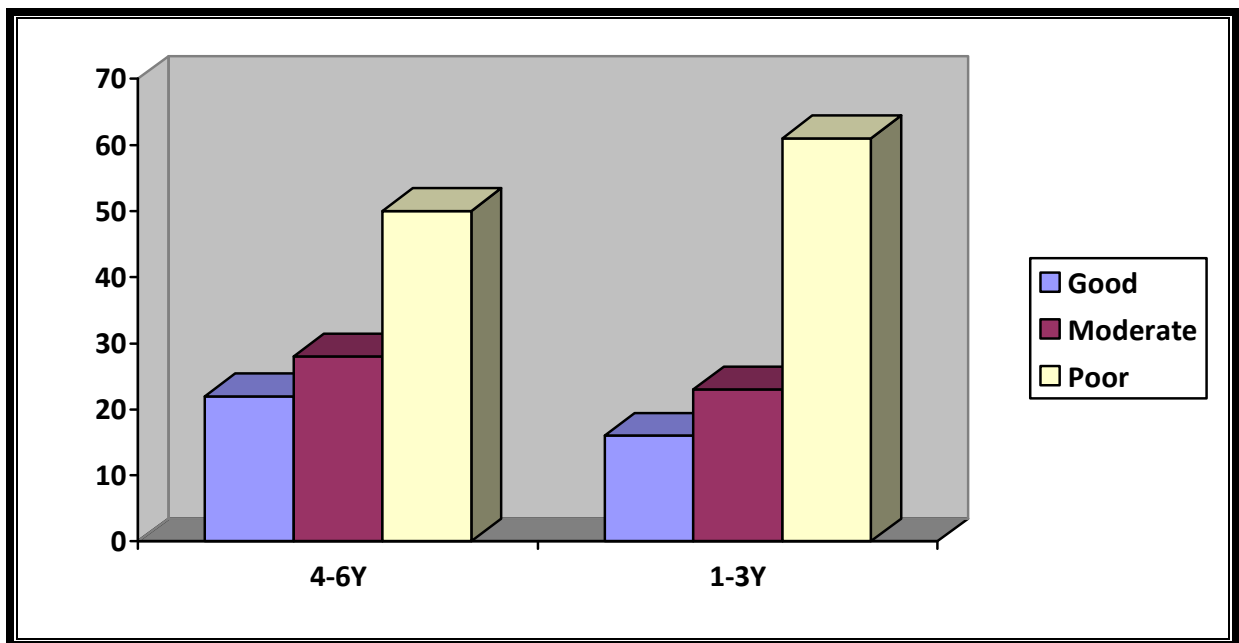
**Table (7):** Age Groups According To Socio Economic Standard

		Group B		Group A		Total	
		No.	%	No.	%	No.	%
Socio Economic Standard	Good	22	22.0%	16	16.0%	38	19.0%
	Moderate	28	28.0%	23	23.0%	51	25.5%
	Poor	50	50.0%	61	61.0%	111	55.5%
	Total	100	100.0%	100	100.0%	200	100.0%

$$X^2 = 18.9$$

$$p < 0.001$$

This table shows percentage of different socioeconomic level (poor, moderate, high) in each age group, group A which is (100 child) and group B which is (100 child). The overall relations were statistically high significant  $p < 0.001$ .



**Figure (7)** Age Groups According To Socio Economic Standard.

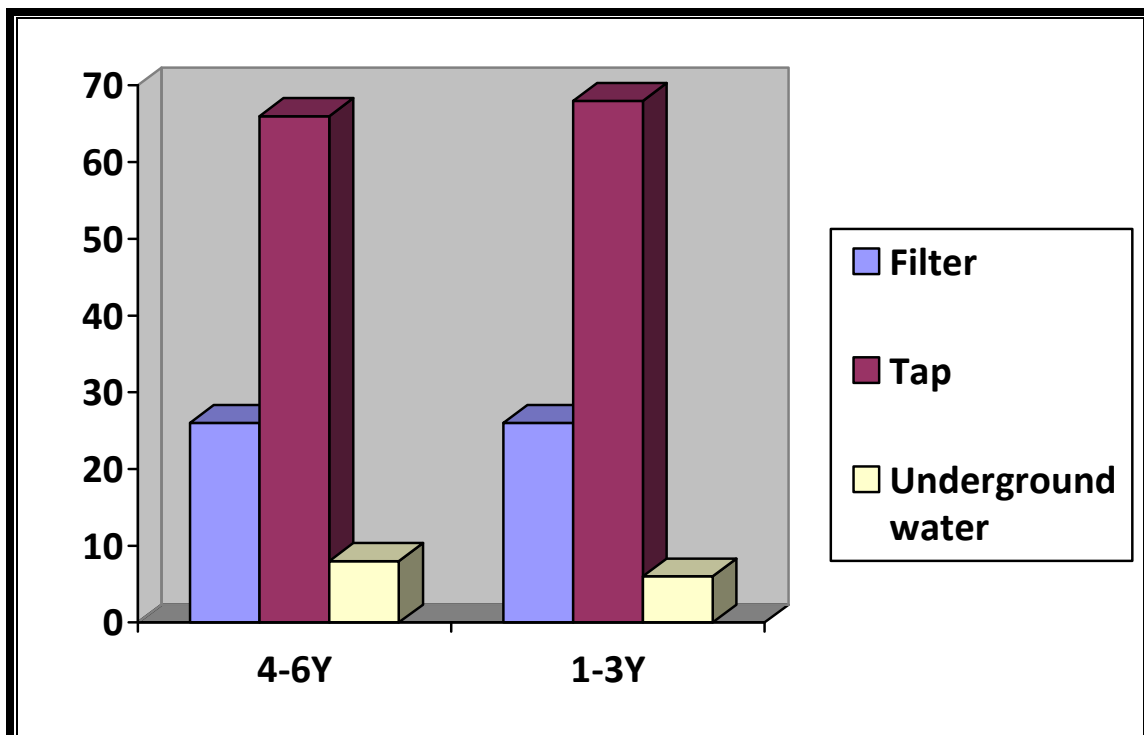
**Table (8):** age groups according to Source of water supply

		Group B		Group A		Total	
		No.	%	No.	%	No.	%
Source of water supply	Filtered water	26	26.0%	26	26.0%	56	26.0%
	Tap water	66	66.0%	68	68.0%	134	67.0%
	Underground water	8	8.0%	6	6.0%	14	7.0%
	Total	100	100.0%	100	100.0%	200	100.0%

$$X^2 = 18.9$$

$$p < 0.001$$

This table shows percentage of each source of water supply (filter, tap, under ground) in each age group. The overall relations were statically high significant  $p < 0.001$ .



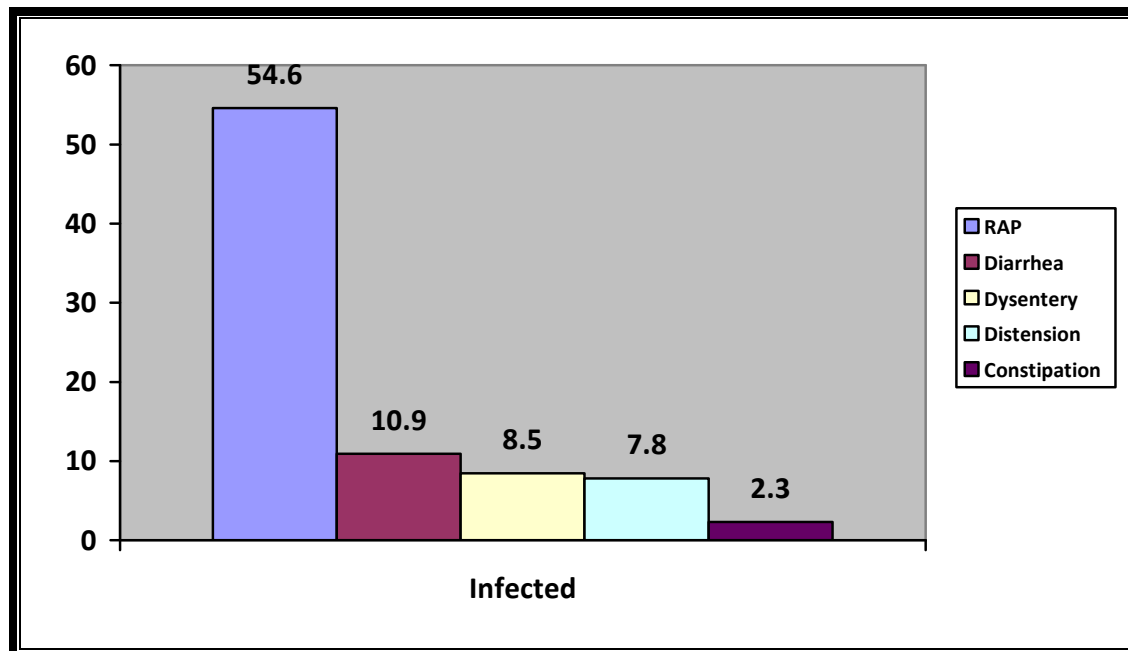
**Figure (8):** age groups according to Source of water supply



**Table (9):** common symptoms associated with parasitic manifestations:

	Infected	
	No.	%
RAP	70	54.6
Diarrhea	14	10.9
Dysentery	11	8.5
Distension	10	7.8
Constipation	3	2.3

This table shows the percentage of common symptoms in all studied groups; showing the highest percentage is RAP (recurrent abdominal pain) 54.6 % in infected children.

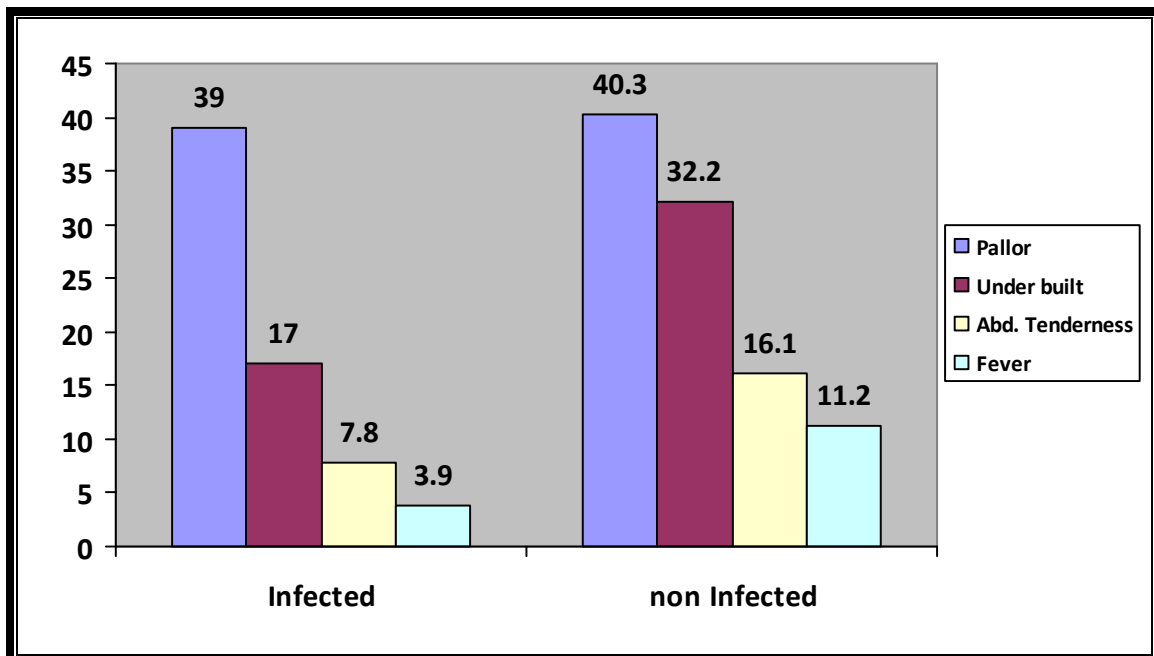


**Figure (9):** common symptoms associated with parasitic manifestations.

**Table (10):** Common Signs Associated With Parasitic Manifestations:

	Infected		Non infected	
	No.	%	No.	%
Pallor	50	39	25	40.3
Under built	23	17	20	32.2
Abd. Tenderness	10	7.8	10	16.1
Fever	5	3.9	7	11.2

This table shows the percentage of common signs in all studied group (infected and non infected); showing the highest is pallor (39%) in infected children and (25%) in non infected children.

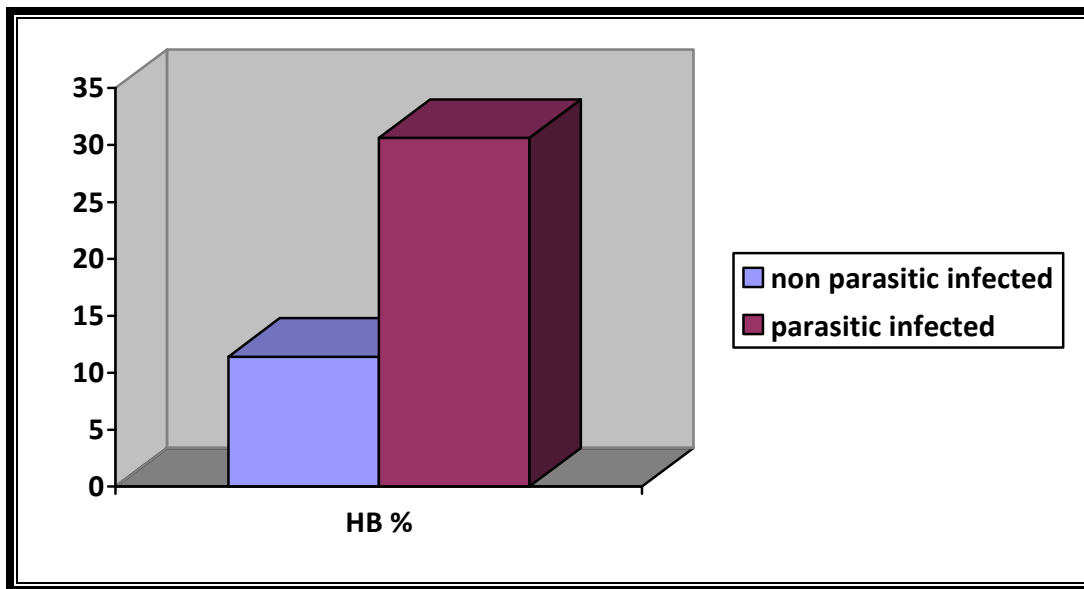


**Figure (10):** Common Signs Associated With Parasitic Manifestations.

**Table (11):** Comparison of HB Level in blood of infected and non infected children in All Studied Groups:

		N	%	Mean	Std. Deviation	t	p
HB % in dl	Non parasitic infected	62	30	11.353	1.0053	1.3	>0.05
	parasitic infected	138	70	11.106	1.3093		

This table shows there is no statistically significant difference between non parasitic and parasitic infected children in all study group as regards to aneamia  $p > 0.05$ .

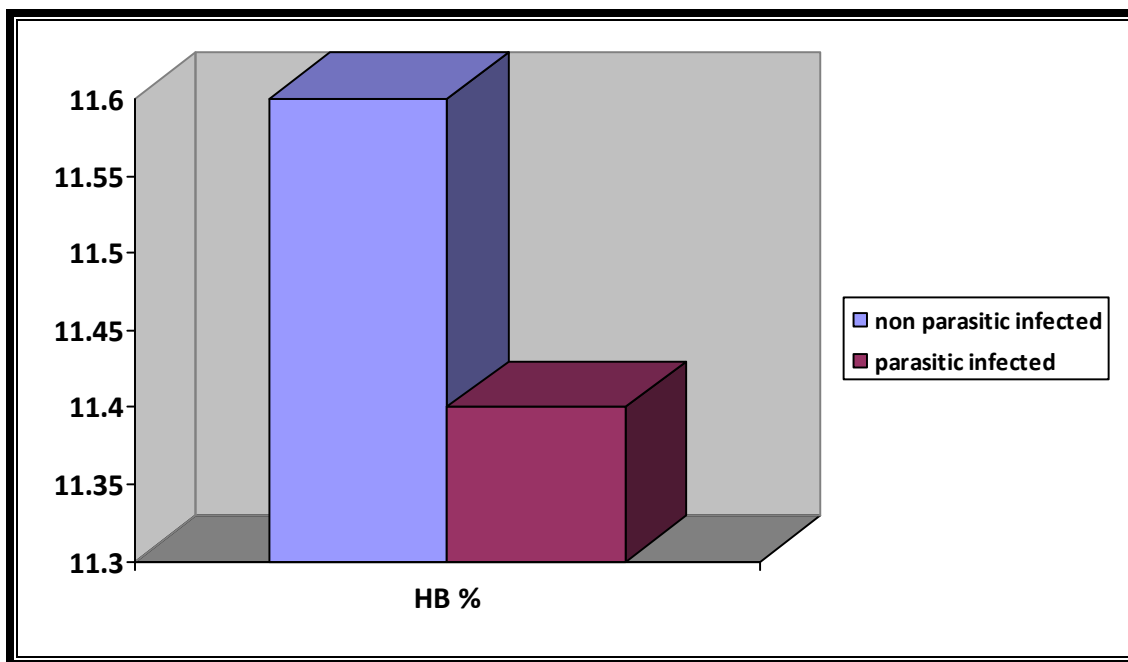


**Figure (11):** Comparison of HB Level in blood of infected and non infected children in All Studied Group:

**Table (12):** Comparison of HB Level in blood of infected and non infected children in Group B:

		N	%	Mean	Std. Deviation	t	p
HB %	non parasitic infected	28	28	11.643	.6806	1.6	>0.05
	parasitic infected	72	72	11.369	.8451		

This table shows there is no statistically significant difference between non parasitic and parasitic infected children in studied group(4-6y) as regards to aneamia  $p>0.05$ .

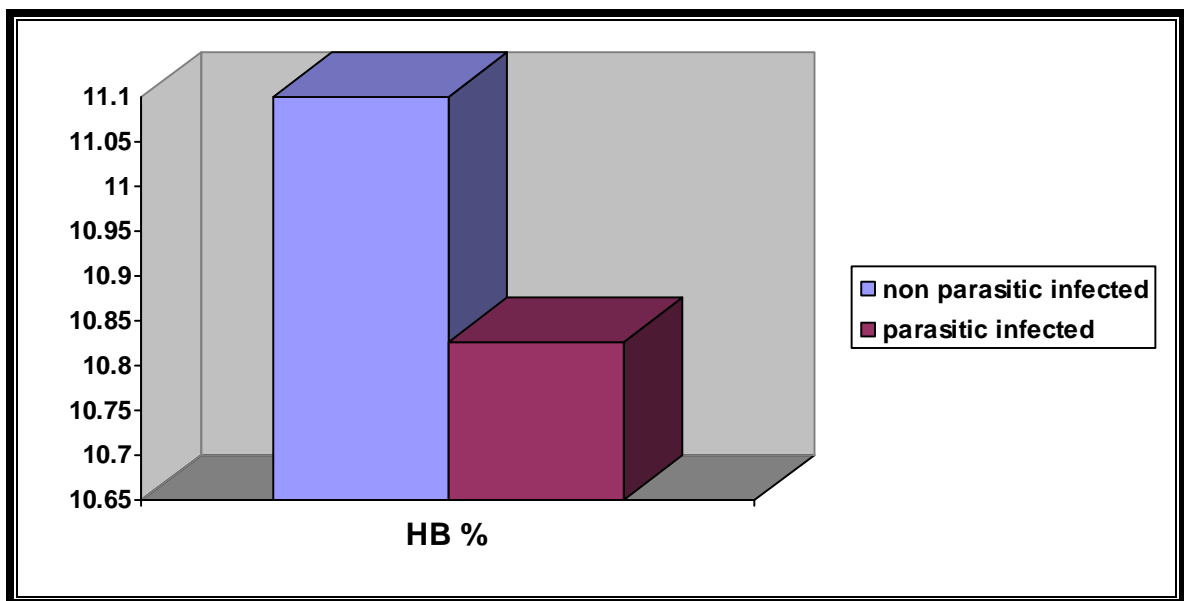


**Figure (12):** Comparison of HB Level in blood of infected and non infected children in Group B.

**Table (13):** Comparison of HB Level in blood of infected and non infected children in group A:

		N	%	Mean	Std. Deviation	t	p
HB %	non parasitic infected	32	32	11.100	1.1739	0.9	>0.05
	parasitic infected	68	68	10.826	1.6265		

This table shows there is no statistically significant difference between non parasitic and parasitic infected children in studied group (1-3y) as regards to aneamia  $p>0.05$ .

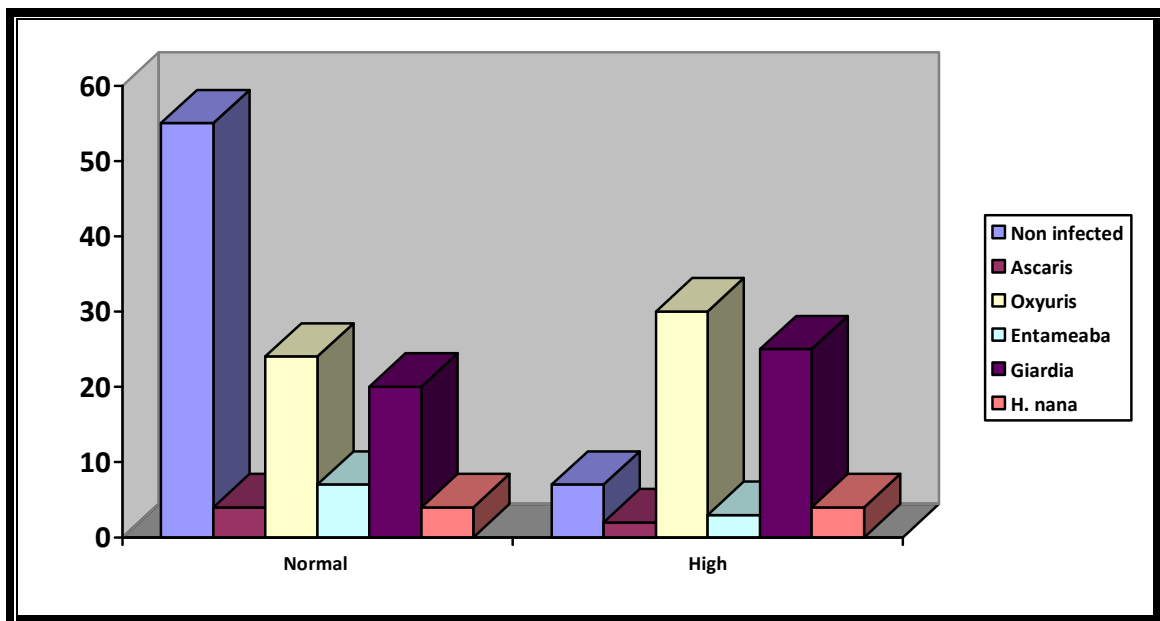


**Figure (13):** Comparison of HB Level in blood of infected and non infected children in group A.

**Table (14):** Relation between Eosinophilia and Final Diagnosis:

Diagnosis	No. Normal	No. High	Total	% of eosinophilia
Non infected	55	7	62	11
Ascaris	6	2	8	25
Oxyuris	40	30	70	43
Entameaba	11	7	18	39
Giardia	20	26	46	57
H. nana	6	4	10	40

This table shows the highest percentage of eosinophilia was in Giardia infection (57 %) and in entameaba was (39%).



**Figure (14):** Relation between Eosinophilia and Final Diagnosis.

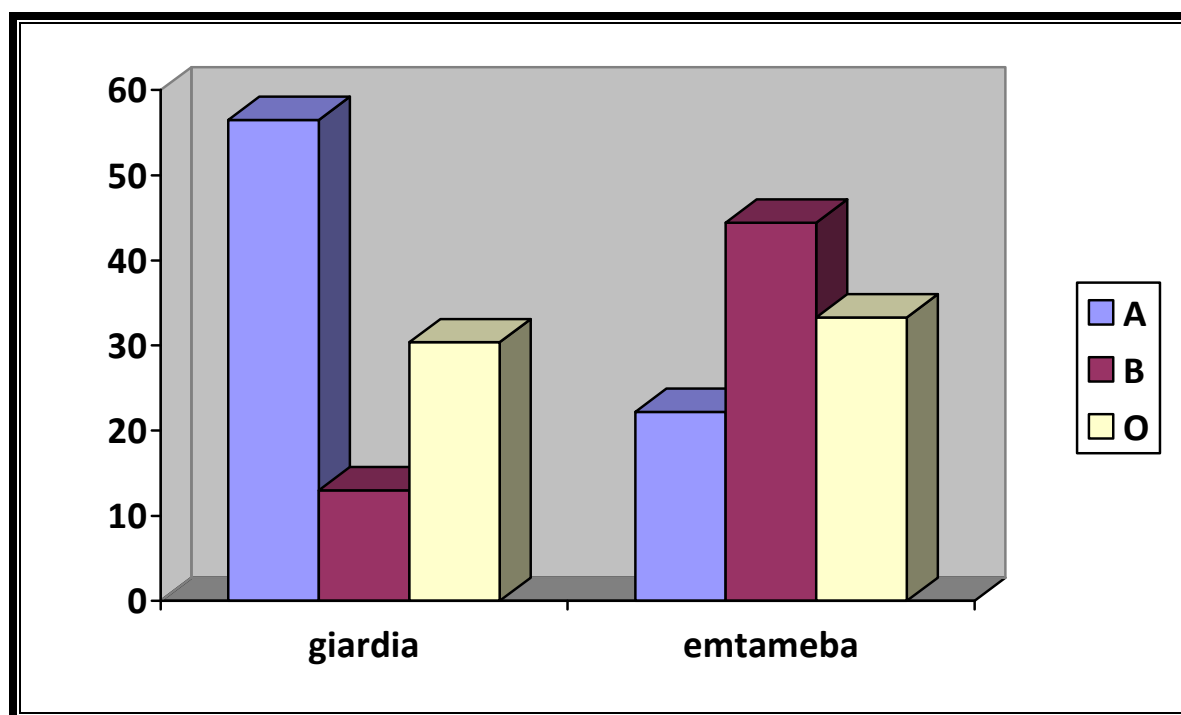
**Table (15):** Distribution of Giardia & Entameaba According To Blood Group:

		Giardia		Entameaba		Total	
		No.	%	No.	%	No.	%
Blood group	A	26	56.5%	4	22.2%	30	46.9%
	B	6	13.0%	8	44.4%	14	21.9%
	O	14	30.4%	6	33.3%	20	31.2%
	Total	46	100.0%	18	100.0%	64	100.0%

$$X^2 = 9.2$$

$$p < 0.05$$

This table shows there is statistically significant difference between Giardia and entameaba infection as regard to type of blood group  $p < 0.05$ .



**Figure (15):** Distribution of Giardia & Entameaba According To Blood Group.

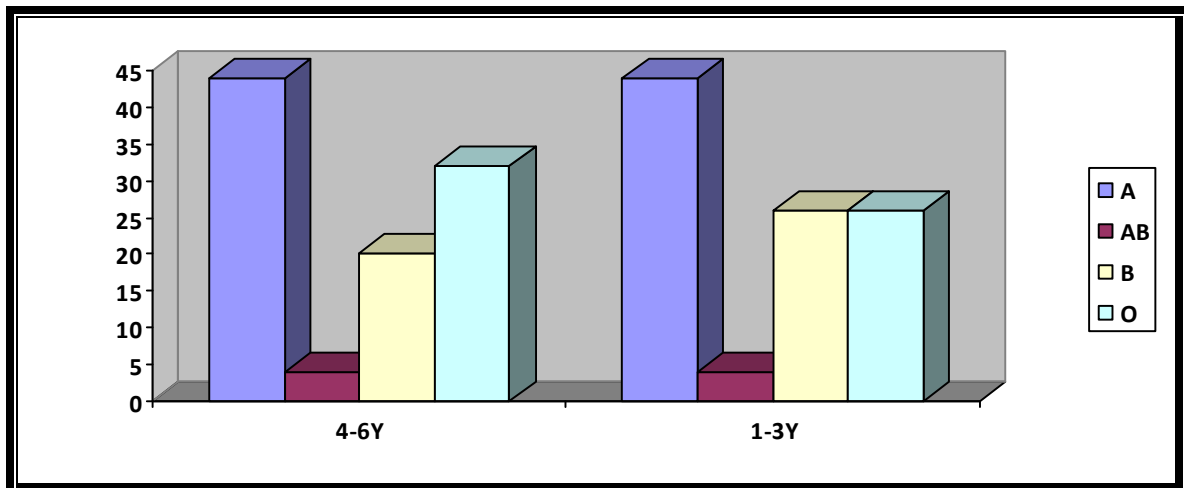
**Table (16):** age groups according to Blood group:

		Group B		Group A		Total	
		No.	%	No.	%	No.	%
Blood group	A	44	44.0%	44	44.0%	88	44.0%
	AB	4	4.0%	4	4.0%	8	4.0%
	B	20	20.0%	26	26.0%	46	23.0%
	O	32	32.0%	26	26.0%	58	29.0%
	Total	100	100.0%	100	100.0%	200	100.0%

$$X^2 = 1.4$$

$$p > 0.05$$

This table shows there is no statistically significant difference between different age groups as regards to type of blood group.



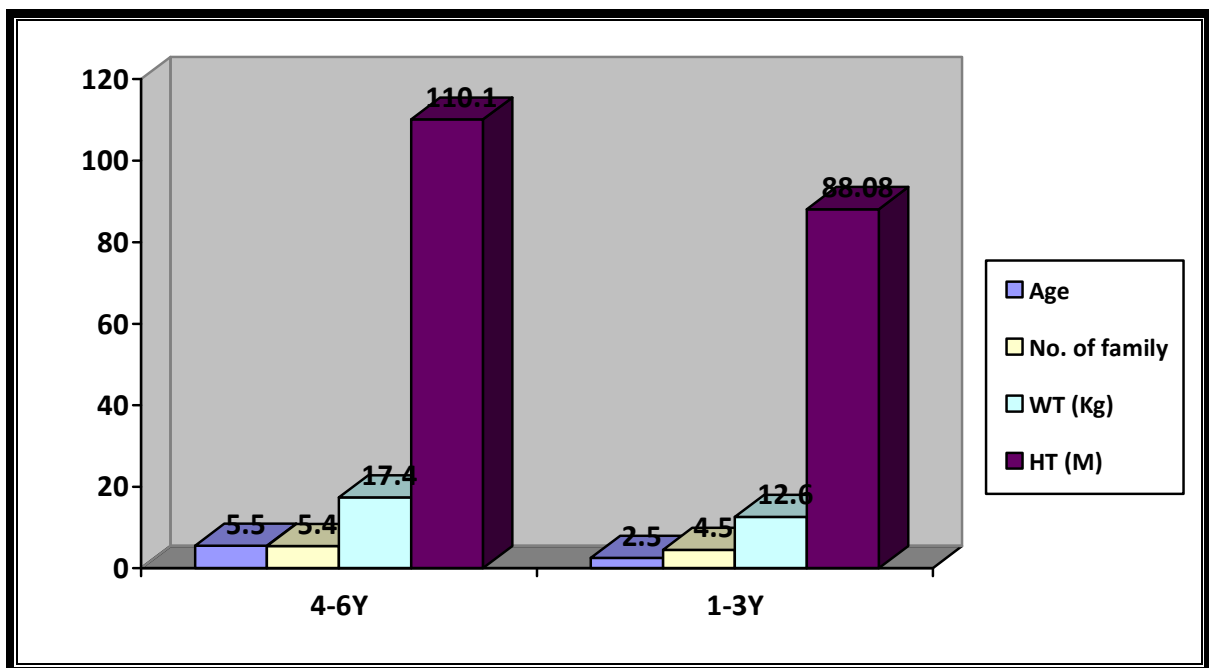
**Figure (16):** Age Groups According To Blood Group.



**Table (17):** Age Groups according To: No. of family; Wt and Ht:

		N	Mean	Std. Deviation	T	p
Age	4-6Y	100	5.47	.685	33.6	<0.001
	1-3Y	100	2.47	.572		
No. of family member	4-6Y	100	5.38	1.117	5.1	<0.001
	1-3Y	100	4.54	1.226		
WT (Kg)	4-6Y	100	17.43	2.238	16.4	<0.001
	1-3Y	100	12.64	1.872		
HT (M)	4-6Y	100	110.10	6.442	24.7	<0.001
	1-3Y	100	88.08	6.143		

This table shows the relation between (No. of family, Wt, Ht) is statistically high significant as regards to different age group  $p < 0.001$



**Figure (17):** Age Groups according To: No. of family; Wt and Ht.