This Study included two thousand students randomly selected from different primary schools in Benha and surrounding villages between January and May 2009. Their ages ranged between 6 to 12 years. There were 903 (45.15%) boys and 1097 (54.85%) girls (Table 1 and Fig 2, 3).

All the selected children were dermatologically examined. The number of affected children was 1508 (75.4 %), while the number of non affected children was 492 (24.6%), 690 (45.15%) of the diseased children were boys, while 818 (54.24%) were girls (Table 2 and Fig. 4).

510 of diseased children (33.81%) were living in urban residence, 281 (55.1%) were boys and 229 (44.9%) were girls while 998 (66.18%) of the diseased children were from rural residence, 409 (40.98%) of them were boys and 589 (59.02%) of them were girls (Table 2 and Fig. 4).

Number of students in class in urban schools ranged from 35 to 55 with average number 45 ± 5, while that in rural schools ranged from 40 to 70 with average number 55 ± 5.

Number of members of the family for students in urban schools ranged from 3 to 6 with average number 4.5 ± 0.5, while that in rural schools ranged from 3 to 8 with average number 5.5 ± 0.5.

1. Distribution of the eczematous diseases in the studied sample:

Eczematous diseases accounted for 340 children (17%) of the total studied sample. Pityriasis alba was the most common eczematous disease with a 202 (10.1%) from total studied sample, followed by atopic dermatitis 63 (3.15%), Seborrheic dermatitis 52 (2.6%), and lastly contact dermatitis 23 (1.15%) (Table 3 and Fig. 5).

Eczematous diseases were the most common skin diseases in urban sample of Benha with 183 (9.15%) while they accounted for the 2nd most

common group in rural sample 157 (7.85%) from the total number of children in this study. Pityriasis alba was the most common eczematous disease with a percentage of 91 (4.55%) in urban sample and 111 (5.55%) in rural one, followed by atopic dermatitis 42 (2.10%) and 21 (1.05%), then seborrheic dermatitis 32 (1.60%) and 20 (1.00%) and at last contact dermatitis 18 (0.90%) and 5 (0.25%) in urban and rural sample respectively from the total number of studied sample. There were statistically significant differences between the urban and rural samples as regards pityriasis alba, atopic dermatitis, seborrheic dermatitis and contact dermatitis (P-value < 0.05) (Table 4 and Fig. 6).

Eczematous diseases were more common in boys 221 (11.05%) than in girls 119 (5.95%) in the studied sample. Pityriasis alba, atopic dermatitis and seborrheic dermatitis; they were more common in boys with 142 (7.1%), 46 (2.3%) and 27 (1.35%) respectively, while contact dermatitis was more common in girls with a 17 (0.85%). There were statistically significant differences as regards pityriasis alba and atopic dermatitis (P-value < 0.05) (table 5 and Fig. 7).

2. Distribution of the parasitic infestations in the studied sample:

Cutaneous parasitic infestations were the most common skin diseases among the studied group, they accounted for 703 (35.15%) of the total studied sample. Pediculosis capitis was the most common cutaneous parasitic infestations with a 611 (30.55%) from total studied sample, followed by scabies 92 (4.60%) (Table 7 and Fig. 8).

Parasitic infestations came next to eczematous skin diseases in urban sample with a 112 (5.6%) from the total number of studied sample, they represented the most common skin diseases in the rural sample with a 591 (29.55%) from the total number of children examined. Pediculosis capitis was the most prevalent parasitic infestation with a 94 (4.7%) in Benha urban

sample and 517 (25.85%) in Benha rural sample, followed by scabies which represented 18 (0.90%) from the total number of children in urban sample, and 74 (3.70%) in rural one. There were statistically significant differences between the urban and rural samples as regards pediculosis capitis and scabies (P-value < 0.05) (Table 8 and Fig. 9).

Parasitic skin infestations were more common in girls 560 (28%) than

in boys 143 (7.15%). The prevalence of pediculosis capitis was higher in girls 541 (27.05%) than in boys 70 (3.50%), while scabies was more prevalent in boys 73 (3.65%) than in girls 19 (0.95%). There were statistically significant differences as regards pediculosis capitis and scabies (P-value < 0.05) (Table 9 and Fig. 10).

3. Distribution of the superficial bacterial infections in the studied sample:

Superficial bacterial infections accounted for 90 (4.50%) of the total studied sample. Impetigo contagiosum was the most common superficial bacterial infection with a 69 (3.45%) from total studied sample, followed by bacterial folliculitis with 18 (0.90%) then erysipales with 3 (0.15%) (Table 10 and Fig. 11).

Superficial bacterial skin infections in urban sample was 39 (1.95%) and in rural sample was 51 (2.55%) from the total number of children. Impetigo contagiosum was the most common bacterial infection with a percentage of 29 (1.45%) and 40 (2.00%), followed by bacterial folliculitis 8 (0.40%) and 10 (0.50%) and erysipales with a number of cases and percentage of 2 (0.10%) and 1 (0.05%) from urban and rural sample respectively. There were statistically significant differences between the urban and rural samples as regards impetigo contagiosum (P-value < 0.05) (Table 11 and Fig. 12).

Bacterial skin infections were more prevalent in boys 63 (3.15%) than in girls 27 (1.35%). Impetigo contagiosum was more common in boys 51

(2.55%) than in girls 18 (0.9%). As regard folliculitis; it was equal in boys and girls in the studied sample (0.45%), and 3 cases of erysipelas were recorded in boys (0.15%). There was a statistically significant difference as regards impetigo contagiosum (P-value < 0.05) (Table 12 and Fig. 13).

4. Distribution of the superficial fungal infections in the studied sample:

Superficial fungal infections accounted for 63 (3.15%) of the total studied sample. Tinea capitis was the most common superficial fungal infection with a 45 (2.25%) from total studied sample, followed by tinea corporis with 9 (0.45%) then pityriasis versicolor with 5 (0.25%) and finally candidiasis 4 (0.20%) (Table 13 and Fig. 14).

Superficial fungal infections were 21 (1.05%) in urban sample and 42 (2.10%) in rural sample from the total number of children respectively. Tinea capitis accounted for the highest prevalence among the fungal infections with a percentage of 13 (0.65%) in urban sample and 32 (1.60%) in rural sample. Tinea corporis came next with a 4 (0.20%) in urban sample and 5 (0.25%) in rural sample, then pityriasis versicolor with a 2 (0.10%) in urban sample and 3 (0.15%) in rural samples from total number of studied sample respectively. The least prevalent was candidiasis 2 cases (0.10 %) in both urban and rural samples of this study. There were statistically significant differences between the urban and rural samples as regards tinea capitis (P-value < 0.05) (Table 14 and Fig. 15).

Fungal skin infections were more prevalent in boys 51 case (2.55%) than in girls 12 (0.60%) in the current studied sample. Tinea capitis and pityriasis versicolor were more common in boys with a prevalence of 39 (1.95%) and 4 (0.20%) respectively. There were 9 cases of tinea corporis, 8 cases were boys (0.4%) and 1 case is in girls group (0.05%). Only 4 cases were diagnosed as candidiasis and they were girls (0.20%). There were statistically significant difference between the two age groups regarding tinea

capitis, tinea corporis and pityriasis versicolor in the examined sample (P-value >0.05) (table 15 and Fig. 16).

5. Distribution of the viral infections in the studied sample:

Viral infections accounted for 53 (2.65%) of the total studied sample. Warts were the most common viral infection with a 24 (1.20%) from total studied sample, followed by chicken pox with 19 (0.95%) then herpes simpex with 9 (0.45%) and finally molluscum contagiosum 1 (0.05%) (Table 16 and Fig. 17).

Viral skin infections accounted for 31 (1.55%) and 22 (1.10%) in urban and rural sample respectively from the total number of children. Warts accounted for the highest prevalence among the viral infections with 12 cases (0.60%) in both urban and rural samples. Chicken pox came next with a 12 cases (0.60%) and 7 cases (0.35%), then herpes simplex with a 6 (0.30%) and 3 (0.15%) in urban and rural samples respectively. The least prevalent was Molluscum contagiosum with single case (0.05%) recorded in urban sample and no recorded cases in rural sample of this study. There were statistically significant differences between the urban and rural samples as regards warts (P-value < 0.05) (Table 17 and Fig. 18).

Viral skin infections were more common in boys 40 (90.32%) than in girls 13 (2%) in this study studied sample. Warts, chicken pox and herpes simplex were more prevalent in boys 18 (0.9%), 14 (0.7%) and 8 (0.4%) respectively than in girls 6 (0.3%), 5 (0.25%) and 1 (0.05%) respectively. As regards molluscum contagiosum only single case was present in girls group (0.05%). There were statistically significant differences as regards warts, chicken pox and herpes simplex (P-value < 0.05) (Table 18 and Fig. 19).

6. Distribution of the allergic skin diseases in the studied sample:

Allergic skin diseases accounted for 151 (7.55%) of the total studied sample. Popular urticaria was the most common allergic

skin disease with 123 (6.15%) from total studied sample, followed by urticaria and angioedema with 15 (0.75%) and finally drug eruptions 13 (0.65%) (Table 19 and Fig. 20).

Allergic skin diseases represented 70 (3.50%) from studied sample in urban and 81 (4.05%) in rural study. Papular urticaria was the most common with 51(2.55%) in urban and 72 (3.60%) in rural studied samples. Urticaria accounted 11 (0.55%) and 4 (0.20%) in urban and rural samples, drug eruptions were 8 (0.40%) and 5 (0.25%) in urban and rural samples respectively. There were statistically significant differences between the urban and rural samples as regards popular urticaria, urticaria and drug eruptions (P-value < 0.05) (Table 20 and Fig. 21).

Allergic skin diseases were more common in boys 110 (5.50%) than in girls 41 (2.05%). Papular urticaria, urticaria and drug eruptions were all more prevalent in boys with 90 (4.5%), 10 (0.5%) and 10 (0.5%) than in girls respectively. There were statistically significant differences as regards popular urticaria, urticaria and drug eruptions (P-value < 0.05) (Table 21 and Fig. 22).

7. Distribution of hair diseases in the studied sample:

Hair diseases accounted for 64 (3.20%) of the total studied sample. Alopecia areata was the most common hair disease with 51 (2.55%) from total studied sample, followed by traction alopecia with 13 (0.65%) (Table 22 and Fig. 23).

Hair diseases represented 33 (1.65%) from studied sample in urban and 31 (1.55%) in rural sample. Alopecia areata was the commonest with a percentage of 27 (1.35%) in urban and 24 (1.20%) in rural studied samples. Traction alopecia prevalence was 6 cases (0.30%) and 7 cases (0.35%) in urban and rural samples respectively. There were statistically significant differences between the urban and rural samples as regards alopecia areata (P-value < 0.05) (Table 23 and Fig. 24).

Hair diseases were more common in girls 34 (1.7%) than in boys 32 (1.5%) in this study studied sample. As regards alopecia areata, it was more prevalent in boys 32 (1.60%) than in girls 21 (1.05%). All the 13 cases of traction alopecia were girls (0.65%). There was no statistically significant difference as regards alopecia areata (P-value > 0.05) (Table 24 and Fig. 25).

8. Distribution of miscellaneous group of skin diseases in the studied sample:

Acne accounted for 11 (0.55%) of the total studied sample. Pityriasis rosea prevalence was 28 (1.40%) and psoriasis prevalence was 3 cases from the total 2000 studied children (0.15%). 2 cases of vitiligo were recorded in the sample (0.10%) (Table 25 and Fig. 26).

Acne represented 8 (0.40%) from studied sample in urban and 3 (0.15%) in rural study. Pityriasis rosea was 9 (0.45%) in urban and 19 (0.95%) in rural studied samples. Psoriasis accounted 2 (0.10%) and single case (0.05%) in urban and rural samples respectively, while 2 cases of vitiligo was reported (0.10%) in urban sample and no reported cases in rural sample from total number of studied sample. There were statistically significant differences between the urban and rural samples as regards acne and pityriasis rosea (P-value < 0.05) (Table 26 and Fig. 27).

Acne vulgaris was much more common in boys 9 (0.45%) than in girls 2 (0.10%). As regards pityriasis rosea; it was also more common in boys with a prevalence of 19 (0.95%). 3 cases of psoriasis and 2 cases of vitiligo were recorded in this sample, all of them were boys except one case of psoriasis (0.05%). There was a statistically significant difference as regards acne vulgaris and pityriasis rosea (P-value < 0.05) (Table 27 and Fig. 28).

9. Distribution of associated or complicated skin disease in the studied sample:

470 (23.50%) of diseased children have one skin disease in urban sample and 927 (26.35%) in rural sample, while 40 (2%) of diseased children had more than one skin disease in urban sample and 71 (3.55%) in rural sample of this study (Table 28 and Fig. 29).

26 (1.30%) of cases with pediculosis had secondary impetigo on top in urban sample while the number was 54 (2.70%) in rural sample, 2 (0.10%) of scabitic cases had secondary impetigo on top in urban sample, 11(0.55%) in rural sample, 9 (0.45%) of atopic children had secondary impetigo on top in urban sample and 4 (0.20%) in rural sample, 2 (0.10%) in both urban and rural samples had chicken pox complicated with 2ry bacterial infection. As regards vitiligo; 1 case (0.05%) of the urban sample has associated alopecia areata (Table 29 and Fig. 30).

Distribution of the studied sample:

Table (1): Distribution of total number of studied children according to sex.

Studied sample characters		No. of cases = (2000)	Percentage (%)
Sex	Boys	903	**45.15**
	Girls	1097	**54.85**
Total		**2000**	**100**
P-value		***<0.05***	**-----**
Residence	**Urban**	**1000**	**50**
	Rural	**1000**	**50**
Total		**2000**	**100**
P-value			

<0.05: S. Significant, >0.05: NS .Insignificant

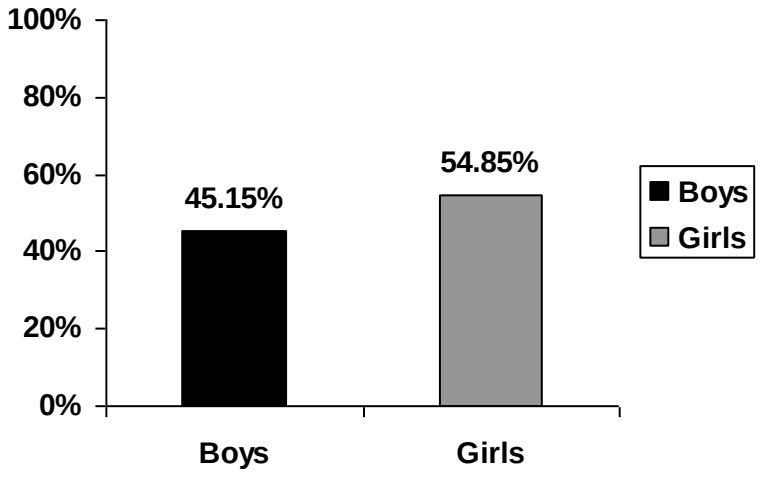

Fig.(2): Distribution of the total number of studied children according to sex.

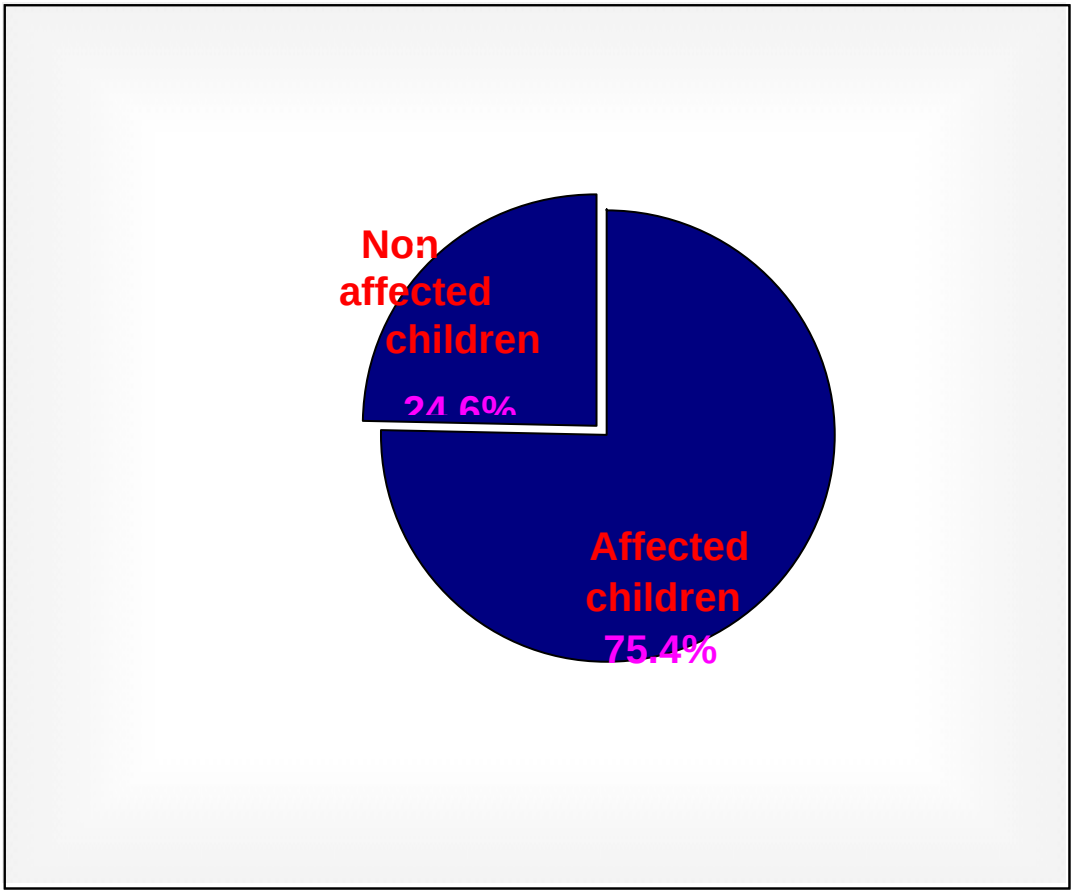

Fig (3): Distribution of the study sample according to affection by skin diseases.

Table (2): Distribution of affected children according to residence and sex.

Character	Urban	(%)	Rural	(%)	Total
Affected boys	281	14.05%	409	20.45%	**690**
Affected girls	229	11.45%	589	29.45%	**818**
Total	**510**	**25.50%**	**998**	**49.90%**	**1508**
P-value	***<0.05***		***<0.05***		***<0.05***

<0.05: S. Significant, >0.05: NS .Insignificant

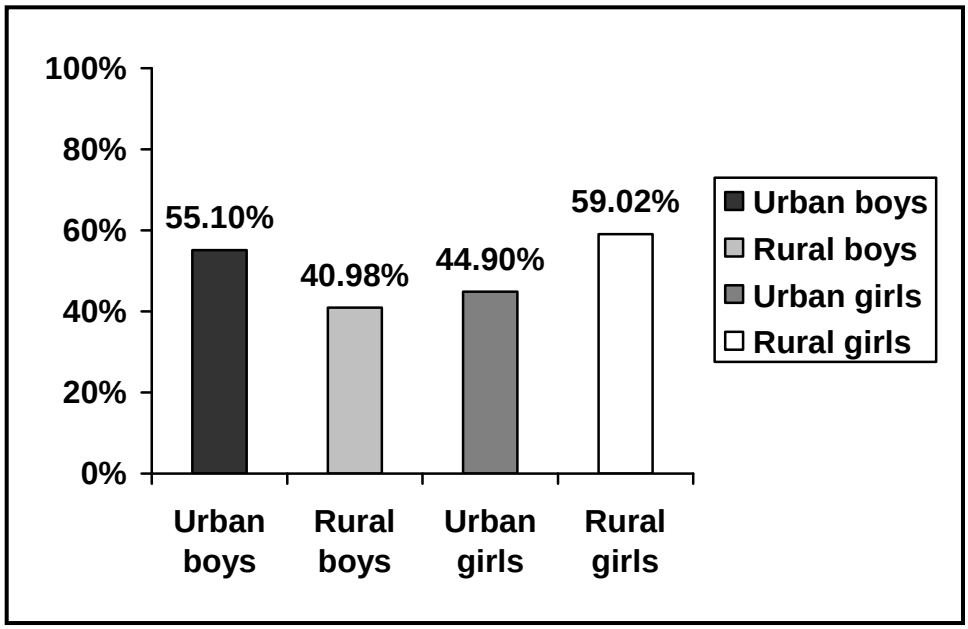

Fig. (4): Distribution of affected children according to residence and sex.

1. Eczematous diseases.

Table (3): Distribution of ezcematous diseases in the total studied sample:

Eczematous diseases.	No. of cases	Percentage (%)
Pityriasis alba	202	10.1%
Atopic dermatitis	63	3.15%
Seborrheic dermatitis	52	2.6%
Contact dermatitis	23	1.15%
Total	340	17%

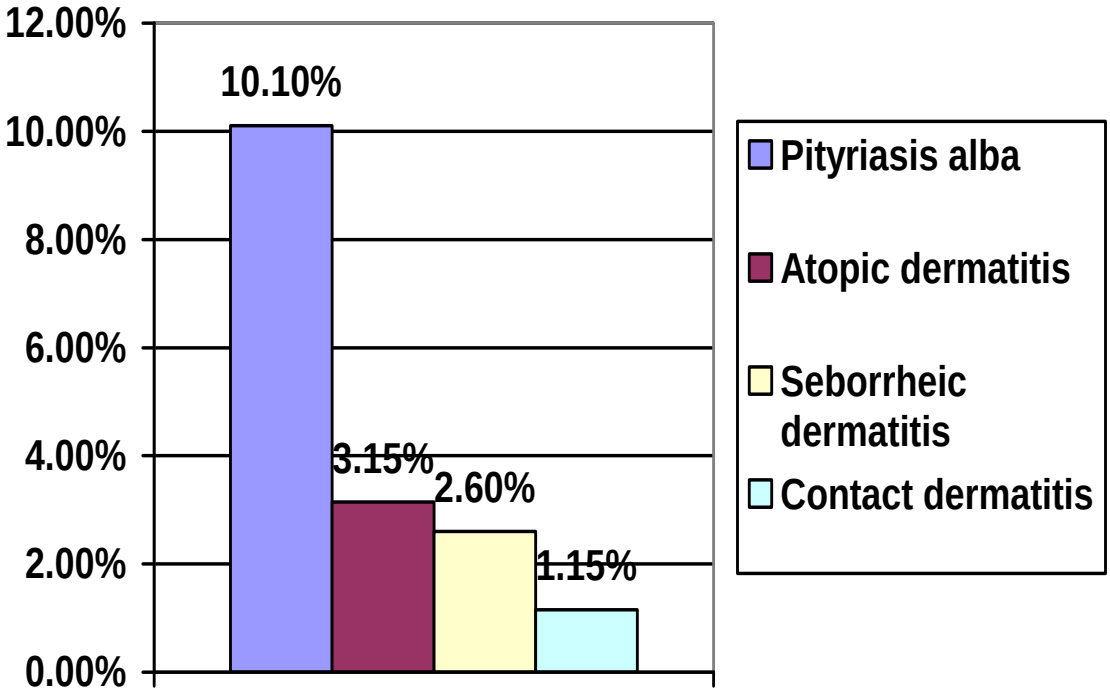

Fig.(5): Distribution of ezcematous diseases in the total studied sample:

Table (4): Comparison between distribution of eczematous diseases in urban and rural studied sample.

Eczematous diseases.	Urban		Rural		P-value	Total	
	No.	%	No.	%		No	%
Pityriasis alba	91	4.55	111	5.55	*<0.05*	202	10.1
Atopic dermatitis	42	2.10	21	1.05	*<0.05*	63	3.15
Seborrheic dermatitis	32	1.60	20	1.00	<0.05	52	2.60
Contact dermatitis	18	0.90	5	0.25	*<0.05*	23	1.15
Total	183	9.15	157	7.85	*<0.05*	340	17.0

<0.05: S. Significant, >0.05: NS .Insignificant

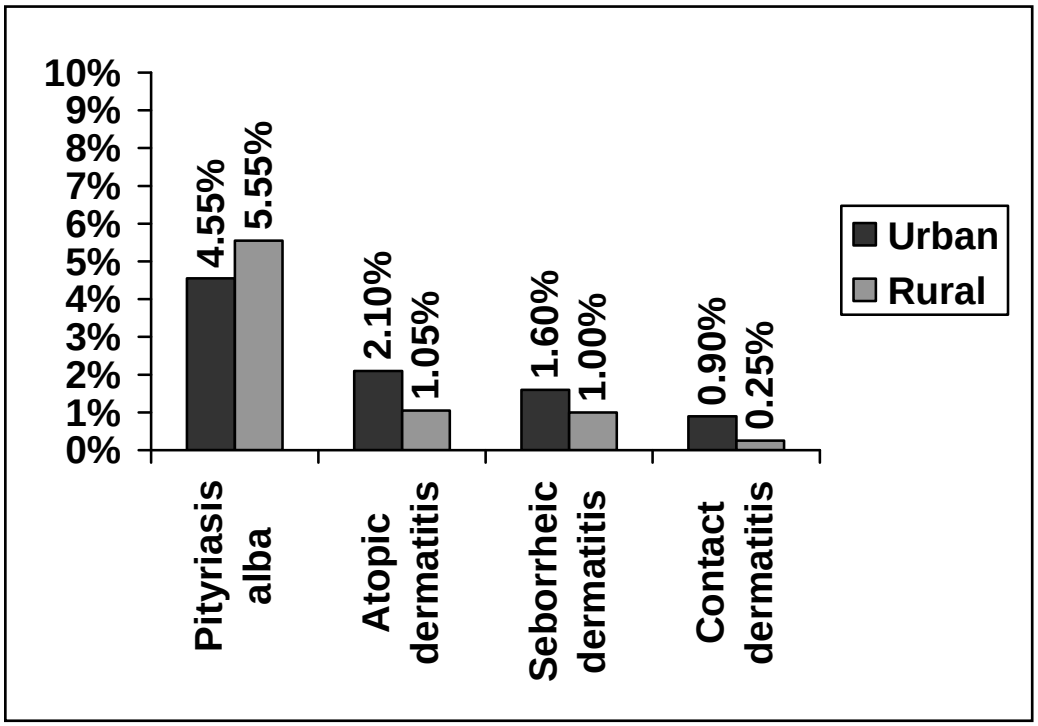

Fig. (6): Comparison between distribution of eczematous diseases in urban and rural studied sample.

Table (5): Relationship between sex distribution of the studied sample and eczematous diseases.

Diseases / Sex	Pityriasis alba		Atopic dermatitis		Seborrheic dermatitis		Contact dermatitis		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Boys	142	7.1	46	2.3	27	1.35	6	0.3	221	11.05
Girls	60	3.0	17	0.85	25	1.25	17	0.85	119	5.95
Total	202	10.1	63	3.15	52	2.6	23	1.15	340	17.0
Z test	*15.5*		*8.1*		*0.9*		*0.4*		*5.8*	
P-value	*<0.05*		*<0.05*		*>0.05*		*>0.05*		*<0.05*	

<0.05: S. Significant, >0.05: NS .Insignificant

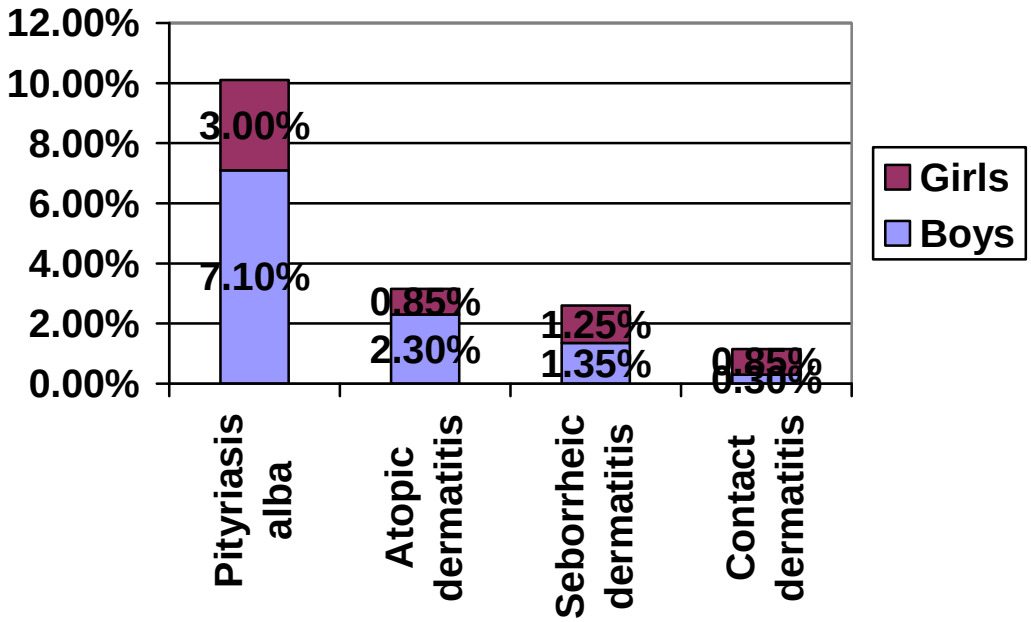

Fig.(7): Relationship between sex distribution of the studied sample and eczematous diseases.

2. Parasitic infestations.

Table (7): Distribution of the superficial parasitic infestations in the total studied sample.

Parasitic infestations	No. of cases	Percentage (%)
Pediculosis capitis	611	30.55%
Scabies	92	4.60%
Total	703	35.15

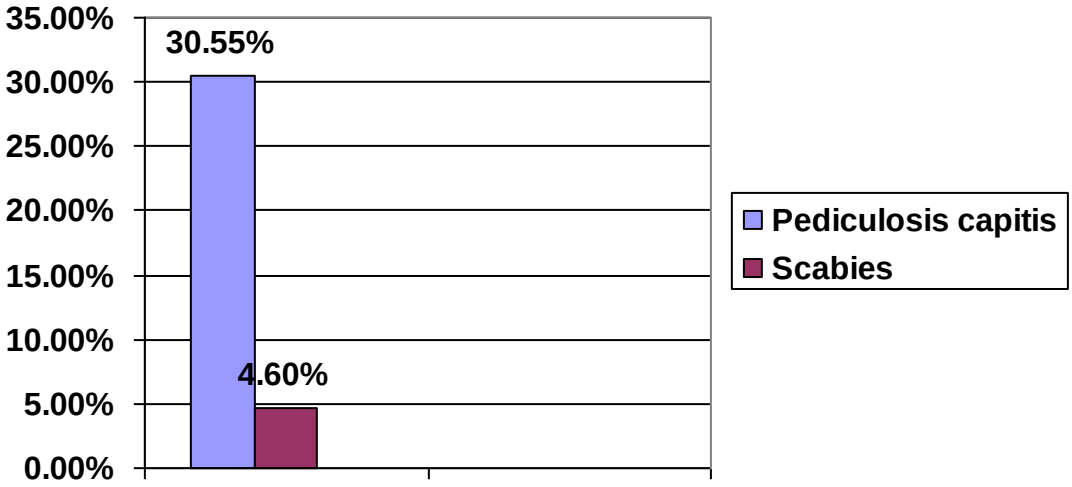

Fig.(8): Distribution of the superficial parasitic infestations in the total studied sample.

Table (8): Comparison between distribution of parasitic skin infestations in urban and rural studied sample.

Parasitic infestations	Urban		Rural		P-value	Total	
	No.	%	No.	%		No.	%
Pediculosis capitis	**94**	**4.7**	**517**	**25.85**	***<0.05***	**611**	**30.55**
Scabies	**18**	**0.9**	**74**	**3.7**	***<0.05***	**92**	**4.60**
Total	**112**	**5.6**	**591**	**29.55**	***<0.05***	**703**	**35.15**

<0.05: S. Significant, >0.05: NS .Insignificant

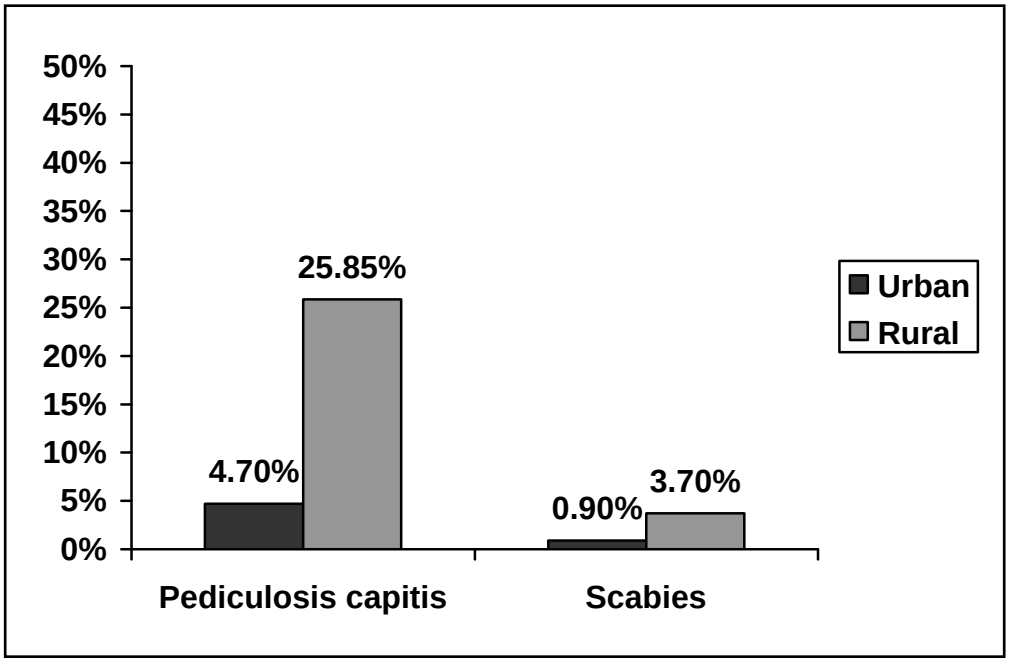

Fig. (9): Comparison between distribution of parasitic skin infestations in urban and rural studied sample.

Table (9): Relationship between sex distribution of the studied sample and parasitic infestations.

Diseases / Sex	Pediculosis capitis		Scabies		Total	
	No.	%	No.	%	No.	%
Boys	70	3.5	73	3.65	143	7.15
Girls	541	27.05	19	0.95	560	28.0
Total	611	30.55	92	4.6	703	35.15
Z test	*29.9*		*14.8*		*19.5*	
p-value	*<0.05*		*<0.05*		*<0.05*	

<0.05: S. Significant, >0.05: NS .Insignificant

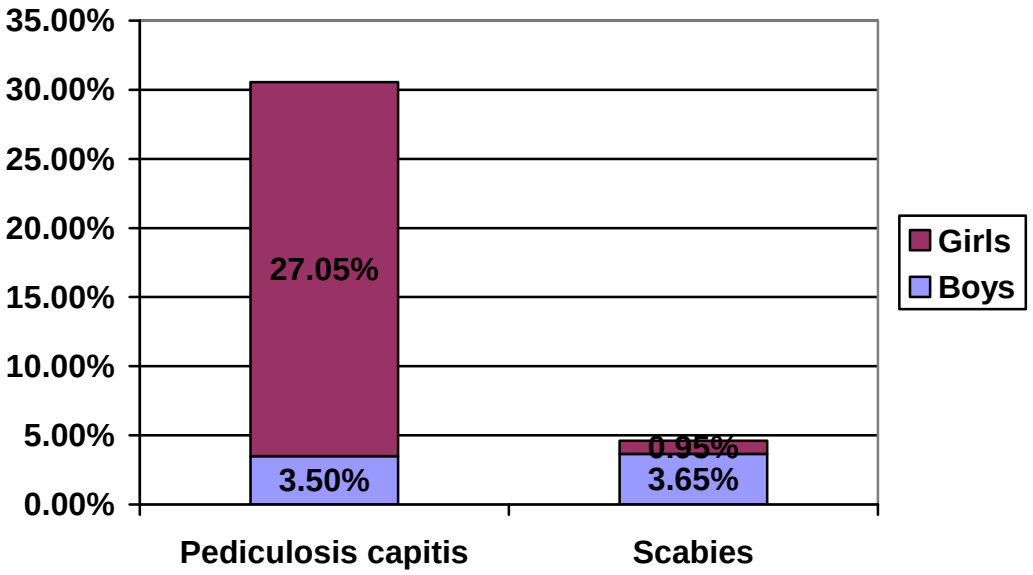

Fig. (10): Relationship between sex distribution of the studied sample and parasitic infestations.

3. Bacterial infections

Table (10): Distribution of the bacterial infections in the total studied sample.

Bacterial infections	No. of cases	Percentage (%)
Impetigo	69	3.45%
Folliculitis	18	0.90%
Erysipales	3	0.15%
Total	90	4.50%

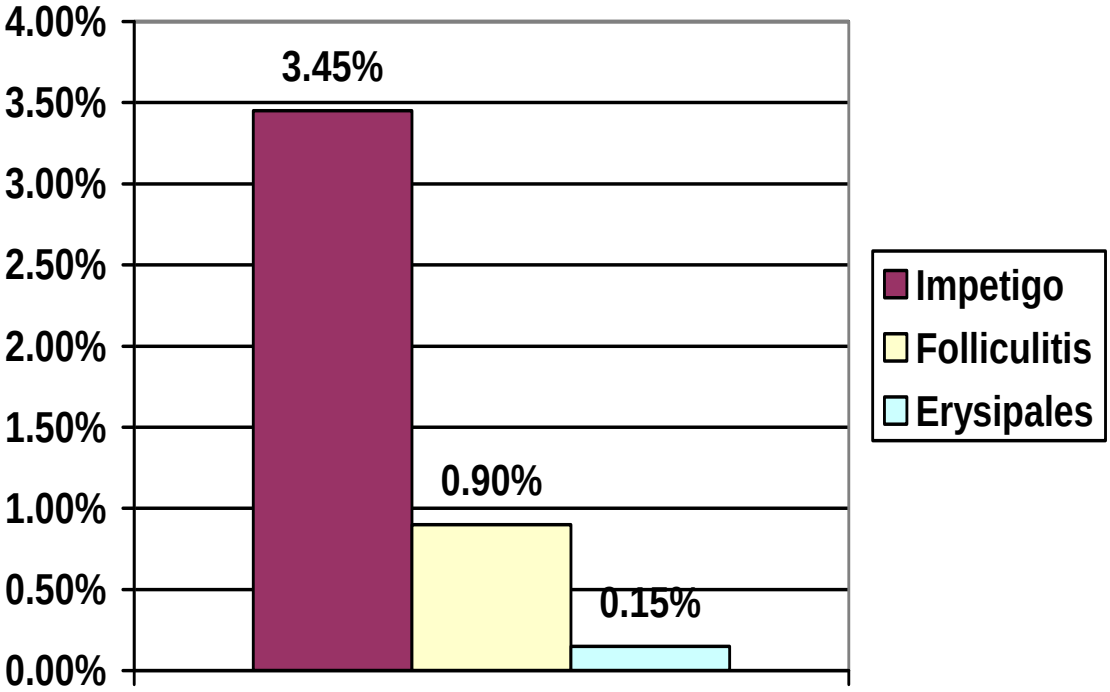

Fig. (11): Distribution of the bacterial infections in the total studied sample.

Table (11): Comparison between distribution of bacterial skin infections in urban and rural studied sample.

Bacterial skin infections	Urban		Rural		P-value	Total	
	No.	%	No.	%		No.	%
Impetigo contagiosum	**29**	**1.45**	**40**	**2.00**	***<0.05***	**69**	**3.45**
Folliculitis	**8**	**0.40**	**10**	**0.50**	***>0.05***	**18**	**0.90**
Erysipales	**2**	**0.10**	**1**	**0.05**	***>0.05***	**3**	**0.15**

Total	**39**	**1.95**	**51**	**2.55**	***<0.05***	**90**	**4.50**

<0.05: S. Significant, >0.05: NS .Insignificant

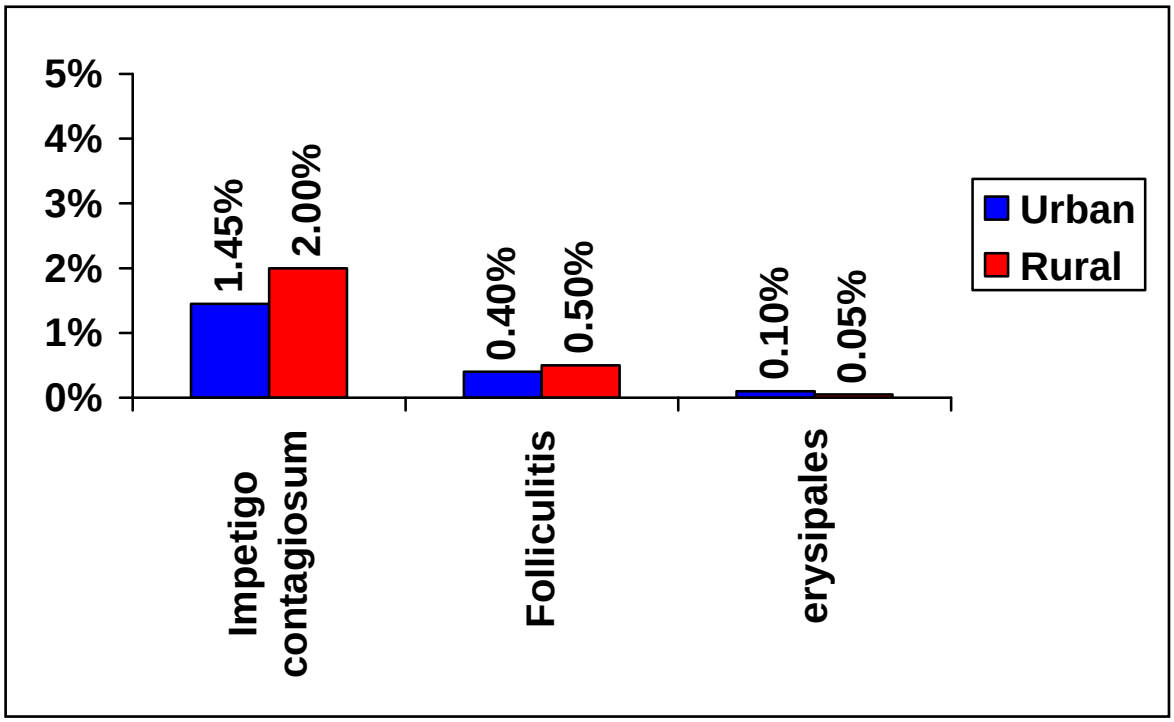

Fig. (12): Comparison between distribution of bacterial skin infections in urban and rural studied sample.

Table (12): Relationship between sex distribution of the studied sample and bacterial skin infections.

Diseases / Sex	Impetigo contagiosum		Folliculitis		Erysipelas		Total	
	No.	%	No.	%	No.	%	No.	%
Boys	51	2.55	9	0.45	3	0.15	63	3.15
Girls	18	0.90	9	0.45	0	0	27	1.35
Total	69	3.45	18	0.90	3	0.15	90	4.50
Z test	*4.5*		*0.3*		----		*4.1*	

p-value	*<0.05*	*>0.05*	----	*<0.05*

<0.05: S. Significant, >0.05: NS .Insignificant

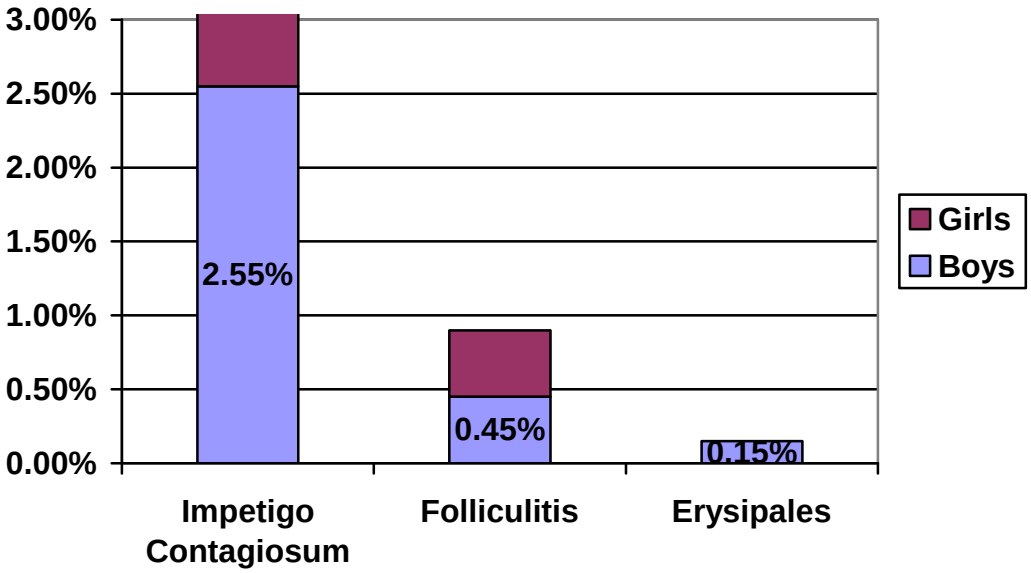

Fig.(13): Relationship between sex distribution of the studied sample and bacterial skin infections.

4. Superficial fungal infections.

Table (13): Distribution of the fungal infections in the total studied sample.

Fungal infections	No. of cases	Percentage (%)
Tinea capitis	45	2.25%
Tinea corporis	9	0.45%
Pityriasis versicolor	5	0.25%
Candidiasis	4	0.20%
Total	63	3.15%

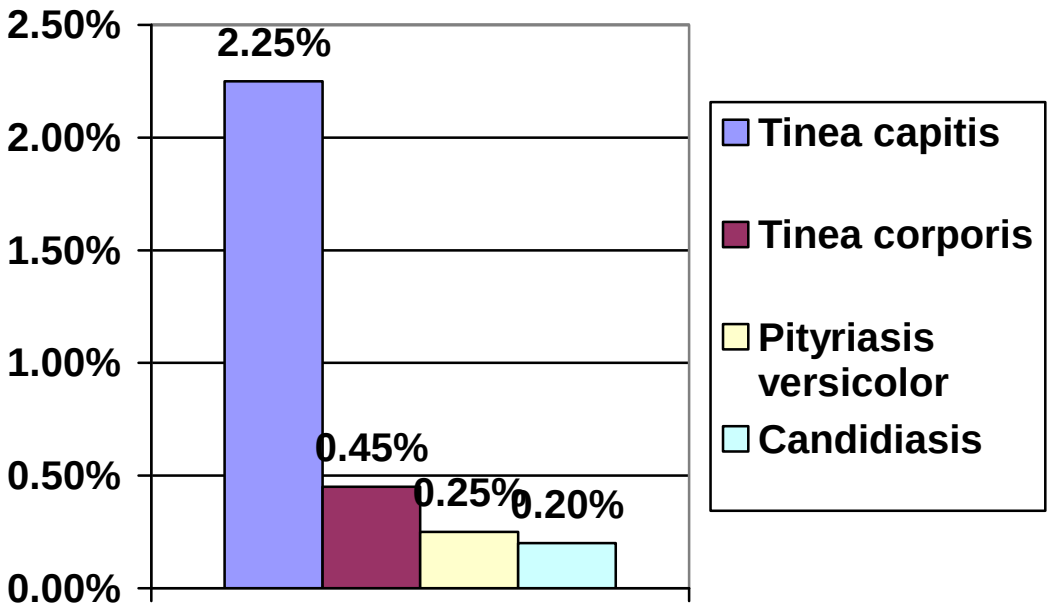

Fig.(14): Distribution of the fungal infections in the total studied sample.

Table (14): Comparison between distribution of fungal skin infections in urban and rural communities in this study.

Fungal skin infections	Urban		Rural		P-value	Total	
	No.	%	No.	%		No.	%
Tinea capitis	**13**	**0.65**	**32**	**1.60**	***<0.05***	**45**	**2.25**
Tinea corporis	**4**	**0.20**	**5**	**0.25**	***>0.05***	**9**	**0.45**

Pityriasis versicolor	**2**	**0.10**	**3**	**0.15**	***>0.05***	**5**	**0.25**
Candidiasis	**2**	**0.10**	**2**	**0.10**	***>0.05***	**4**	**0.20**
Total	**21**	**1.05**	**42**	**2.10**	***<0.05***	**63**	**3.15**

<0.05: S. Significant, >0.05: NS .Insignificant

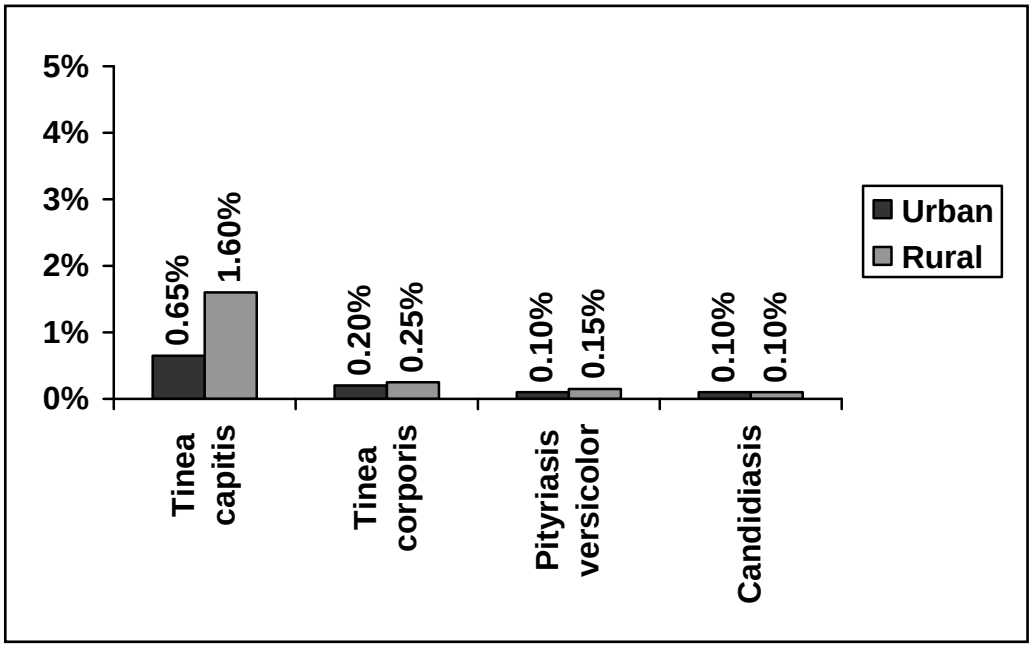

Fig.(15): Comparison between distribution of fungal skin infections in urban and rural communities in this study.

Table (15): Relationship between sex distribution of the studied sample and fungal skin infections.

Diseases / **Sex**	**Tinea capitis**		**Tinea corporis**		**Pityriasis versicolor**		**Candidiasis**		**Total**	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Boys	39	1.95	8	0.40	4	0.20	0	0	51	2.55
Girls	6	0.30	1	0.05	1	0.05	4	0.20	12	0.60
Total	45	2.25	9	0.45	5	0.25	4	0.20	63	3.15

Z test	*9.9*	*6.5*	*2.3*	----	*6.3*
p-value	*<0.05*	*<0.05*	*<0.05*	----	*<0.05*

<0.05: S. Significant, >0.05: NS .Insignificant

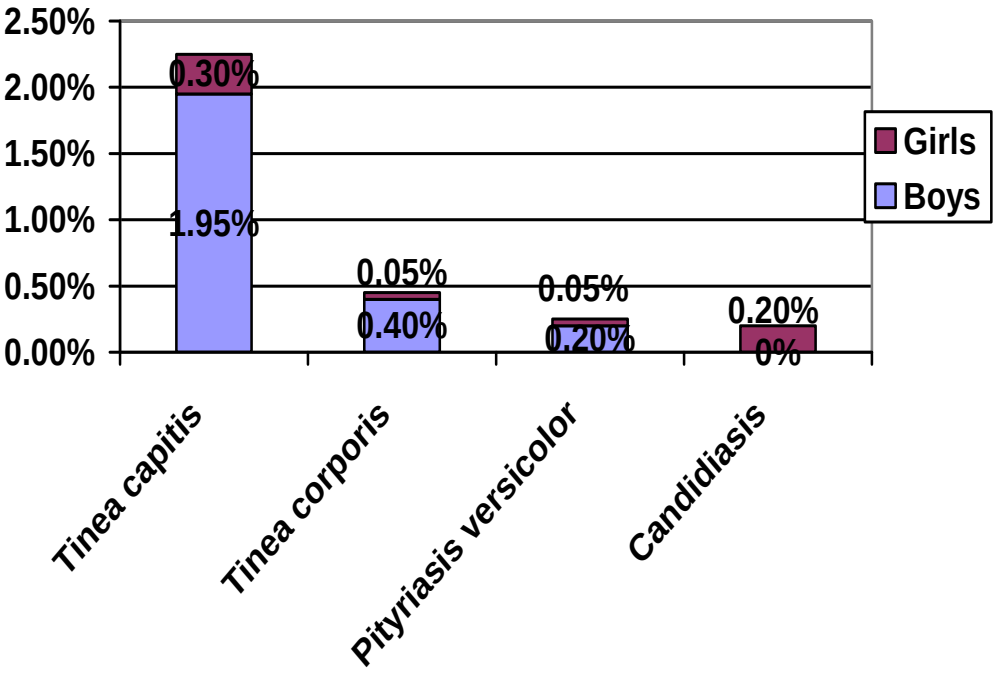

Fig.(16): Relationship between sex distribution of the studied sample and fungal skin infections.

5. Viral infections

Table (16): Distribution of the viral infections in the total studied sample.

Viral infections	No. of cases	(%)
Warts	24	1.20%
Chicken pox	19	0.95%
Herpes simplex	9	0.45%

Molluscum contagiosum	1	0.05%
Total	53	2.65%

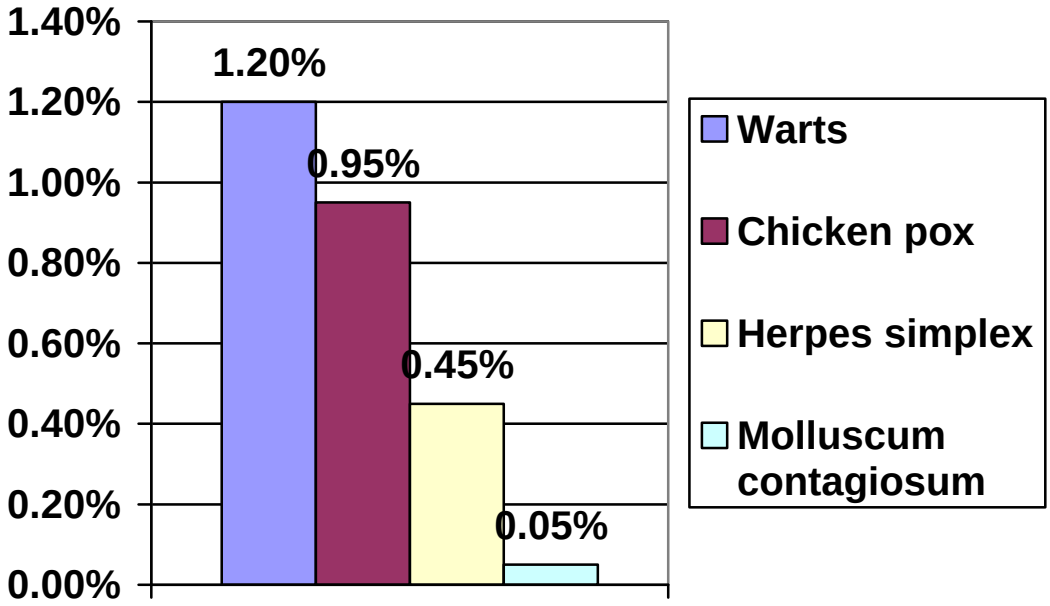

Fig.(17): Distribution of the viral infections in the total studied sample.

Table (17): Comparison between distribution of viral skin infections in urban and rural studied samples.

Viral skin infections	Urban		Rural		P-value	Total	
	No.	%	No.	%		No.	%
Warts	**12**	**0.60**	**12**	**0.60**	***>0.05***	**24**	**1.20**
Chicken pox	**12**	**0.60**	**7**	**0.35**	***<0.05***	**19**	**0.95**

Herpes simplex	**6**	**0.30**	**3**	**0.15**	***<0.05***	**9**	**0.45**
Molluscum contagiosum	**1**	**0.05**	**0**	**0.00**	**----**	**1**	**0.05**
Total	**31**	**1.55**	**22**	**1.10**	***<0.05***	**53**	**2.65**

<0.05: S. Significant, >0.05: NS .Insignificant

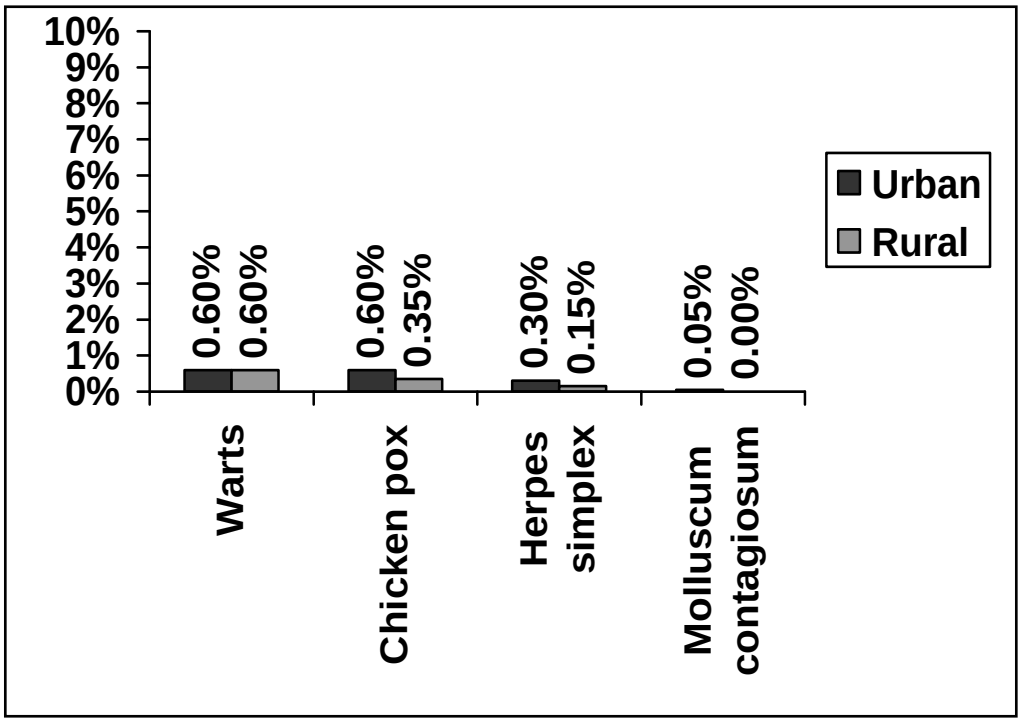

Fig. (18): Comparison between distribution of viral skin infections in urban and rural studied samples.

Table (18): Relationship between sex distribution of the studied sample and viral skin infections.

Diseases / Sex	Warts		Chicken pox		Herpes simplex		Molluscum contagiosum		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Boys	18	0.90	14	0.70	8	0.40	0	0	40	2.0
Girls	6	0.30	5	0.25	1	0.05	1	0.05	13	0.65

Total	24	1.20	19	0.95	9	0.45	1	0.05	53	2.65
Z test	*4.9*		*2.8*		*5.1*		----		*4.3*	
p-value	*<0.05*		*<0.05*		*<0.05*		----		*<0.05*	

<0.05: S. Significant, >0.05: NS .Insignificant

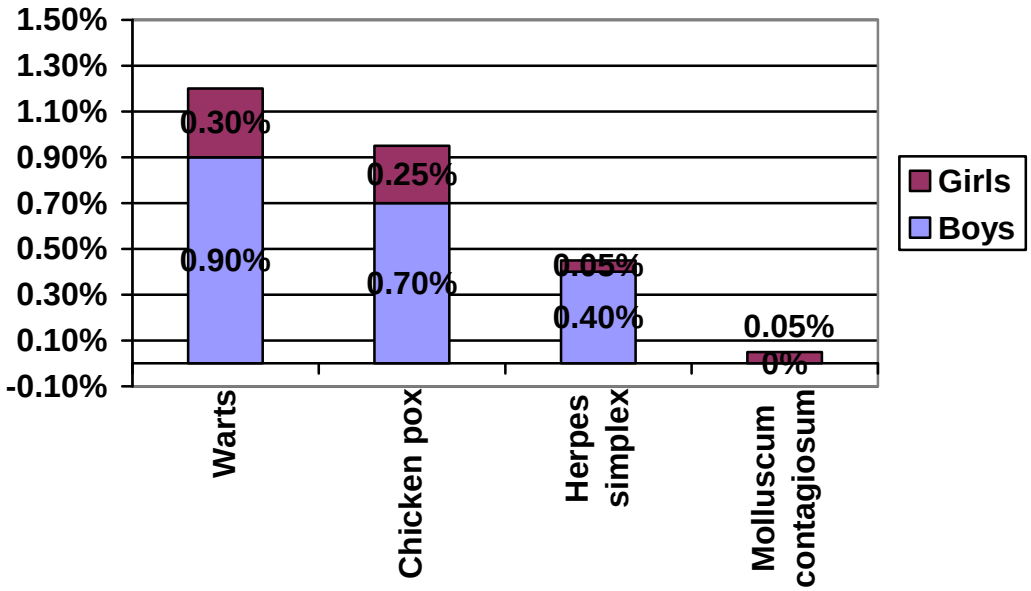

Fig.(19): Relationship between sex distribution of the studied sample and viral skin infections.

6. Allergic skin diseases.

Table (19): Distribution of allergic skin diseases in the total studied sample.

Allergic skin diseases	No. of cases	(%)
Papular urticaria	123	6.15%
Urticaria & angioedema	15	0.75%

Drug eruptions	13	0.65%
Total	151	7.55%

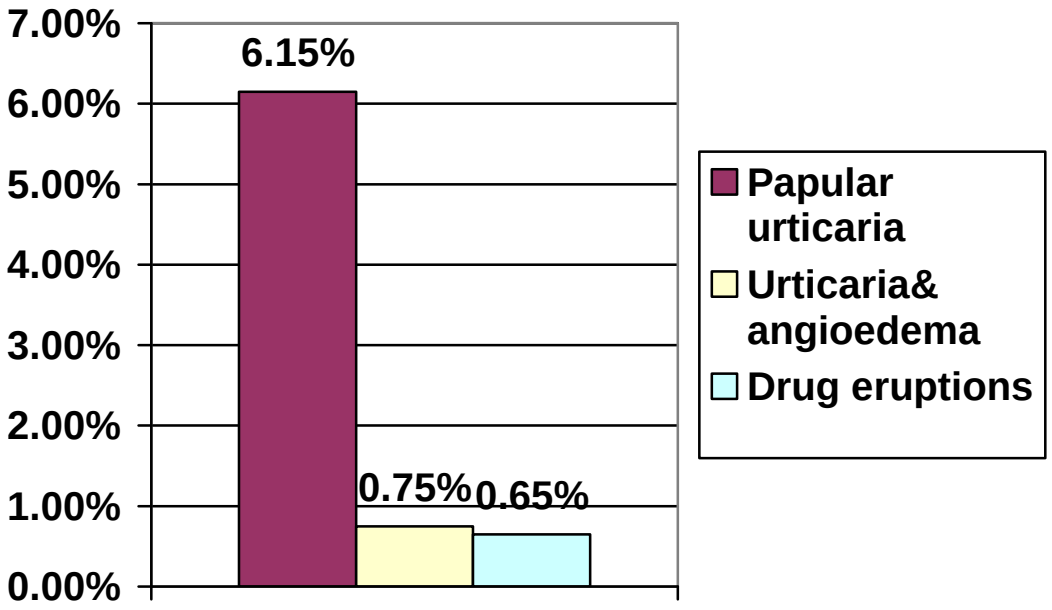

Fig.(20): Distribution of the allergic skin diseases in the total studied sample.

Table (20): Comparison between distribution of allergic skin diseases in urban and rural studied samples.

Allergic skin diseases	Urban	Rural	P-value	Total	
				No.	%

	No.	%	No.	%			
Papular urticaria	**51**	**2.55**	**72**	**3.60**	***<0.05***	**123**	**6.15**
Urticaria & angioedema	**11**	**0.55**	**4**	**0.20**	***<0.05***	**15**	**0.75**
Drug eruptions	**8**	**0.40**	**5**	**0.25**	***<0.05***	**13**	**0.65**
Total	**70**	**3.5**	**81**	**4.05**	***<0.05***	**151**	**7.55**

<0.05: S. Significant, >0.05: NS .Insignificant

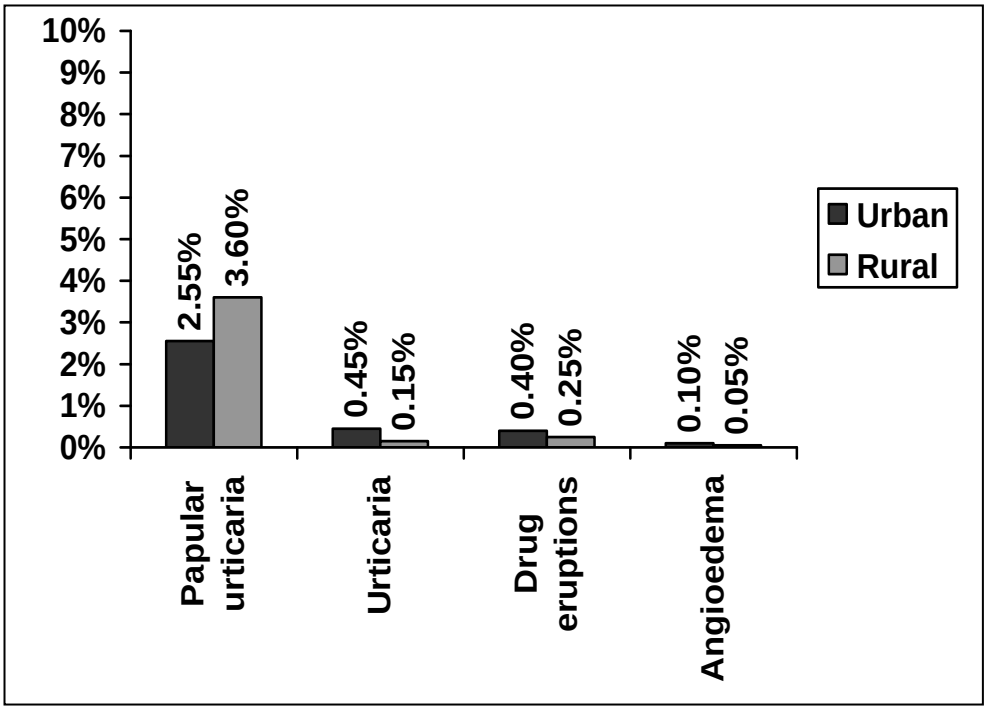

Fig. (21): Comparison between distribution of allergic skin diseases in urban and rural studied samples.

Table (21): Relationship between sex distribution of the studied sample and allergic skin diseases.

Disease / Sex	Papular urticaria		Urticaria & angioedema		Drug eruption		Total	
	No.	%	No.	%	No.	%	No.	%
Boys	90	4.50	10	0.50	10	0.50	110	5.50
Girls	33	1.65	5	0.25	3	0.15	41	2.05
Total	123	6.15	15	0.75	13	0.65	151	7.55
Z test	*2.2*		*4.03*		*2.2*		*6.3*	
p-value	*<0.05*		*<0.05*		*<0.05*		*<0.05*	

<0.05: S. Significant, >0.05: NS .Insignificant

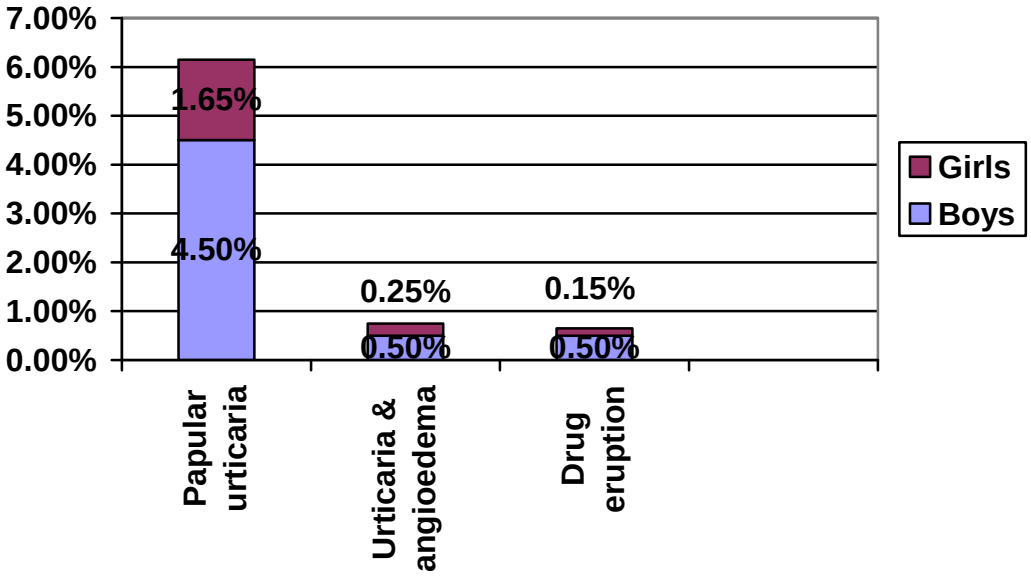

Fig.(22): Relationship between sex distribution of the studied sample and allergic skin diseases.

8. Hair disorders

Table (22): Distribution of hair disorders in the total studied sample.

Hair disorders	No. of cases	(%)
Alopecia areata	51	2.55%
Traction alopecia	13	0.65%
Total	64	3.20%

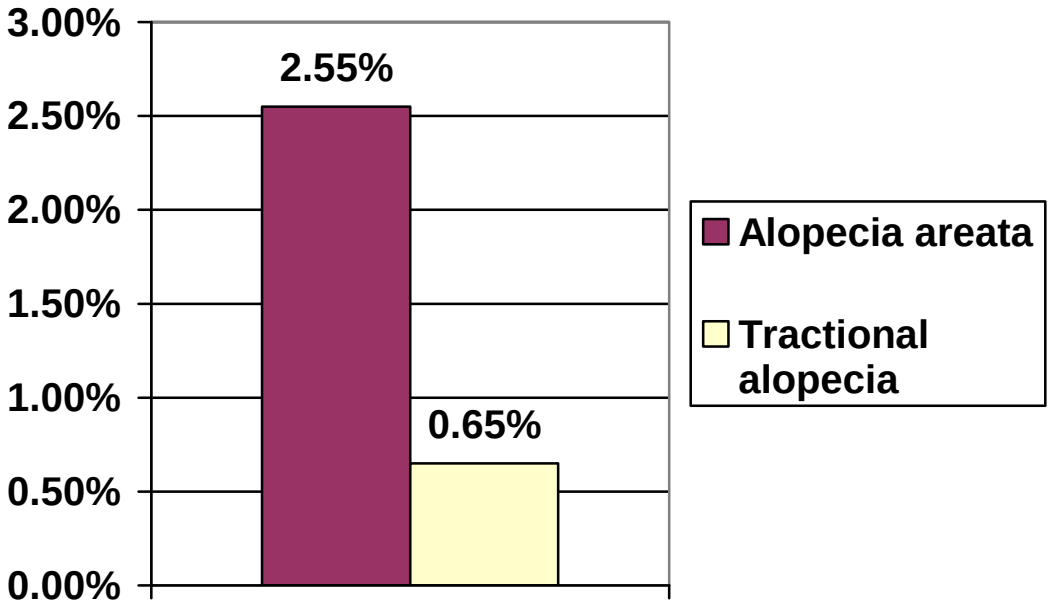

Fig.(23): Distribution of the allergic skin diseases in the total studied sample.

Table (23): Comparison between the distribution of hair diseases in urban and rural studied samples.

Hair diseases	Urban		Rural		P-value	Total	
	No.	%	No.	%		No.	%
Alopecia areata	**27**	**1.35**	**24**	**1.20**	***<0.05***	**51**	**2.55**
Traction alopecia	**6**	**0.30**	**7**	**0.35**	***>0.05***	**13**	**0.65**
Total	**33**	**1.65**	**31**	**1.55**	***>0.05***	**64**	**3.20**

<0.05: S. Significant, >0.05: NS .Insignificant

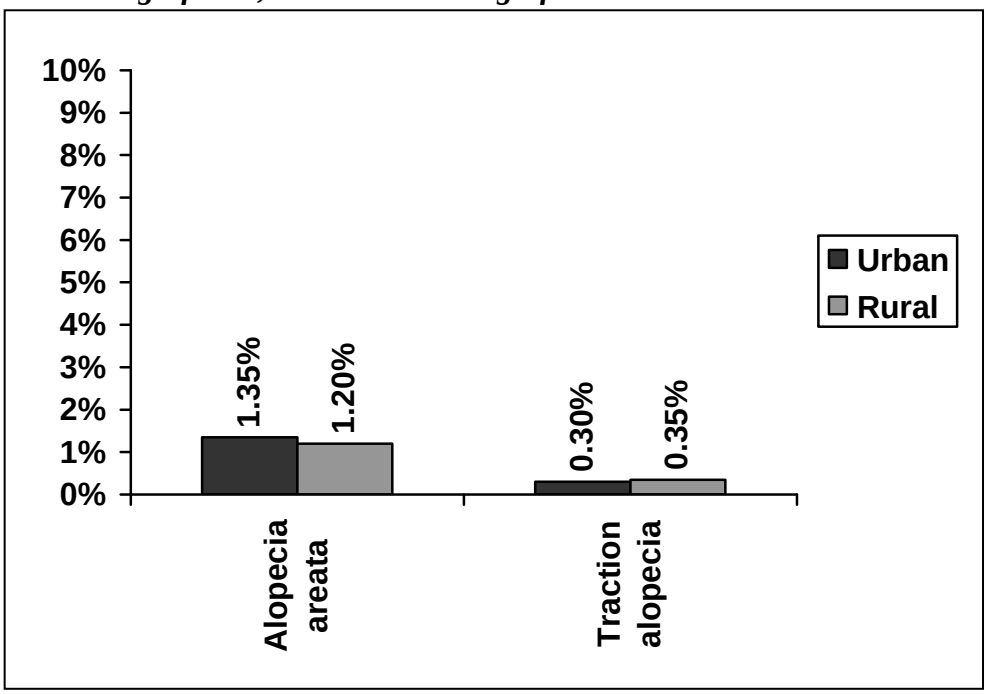

Fig. (24): Comparison between the distribution of hair diseases in urban and rural studied samples.

Table (24): Relationship between sex distribution of the studied sample and

hair diseases.

Disease / Sex	Alopecia areata		Traction alopecia		Total	
	No.	%	No.	%	No.	%
Boys	32	1.60	0	0	32	1.60
Girls	21	1.05	13	0.65	34	1.70
Total	51	2.55	13	0.65	64	3.20
Z test	*1.3*		----		*1.7*	
p-value	*>0.05*		----		*<0.05*	

<0.05: S. Significant, >0.05: NS .Insignificant

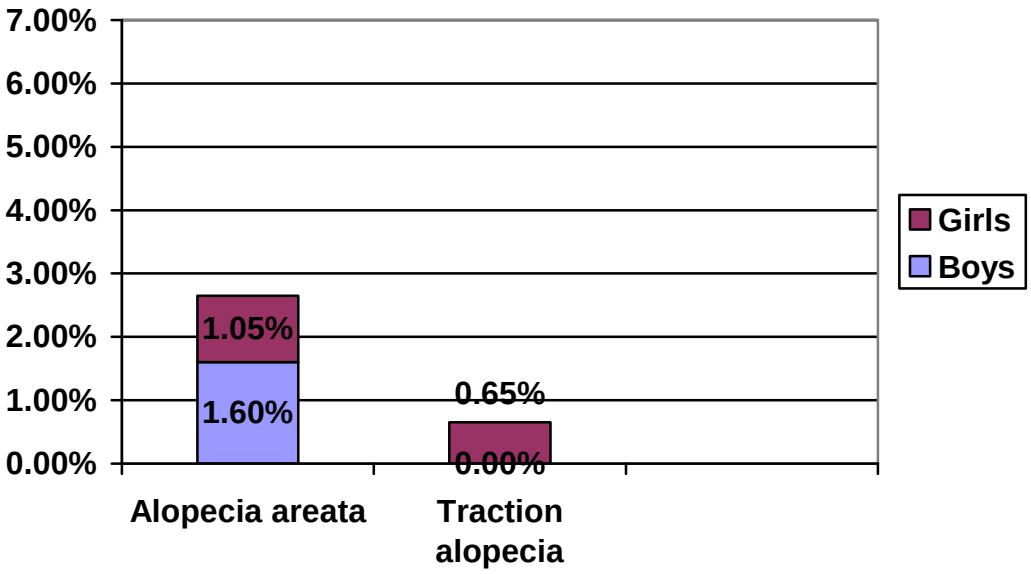

Fig.(25): Relationship between sex distribution of the studied sample and hair diseases.

9. Miscellaneous group.

Table (25): Distribution of miscellaneous group in the total studied sample.

Miscellaneous group	No. of cases	(%)
Sebaceous gland giseases: ◆**Acne**	11	0.55%
Papulosquamous diseases: ◆**Pityriasis rosea** ◆**Psoriasis**	28 3	1.40% 0.15%
Pigmentary diseases: ◆**Vitiligo**	2	0.10%
Total	44	2.20%

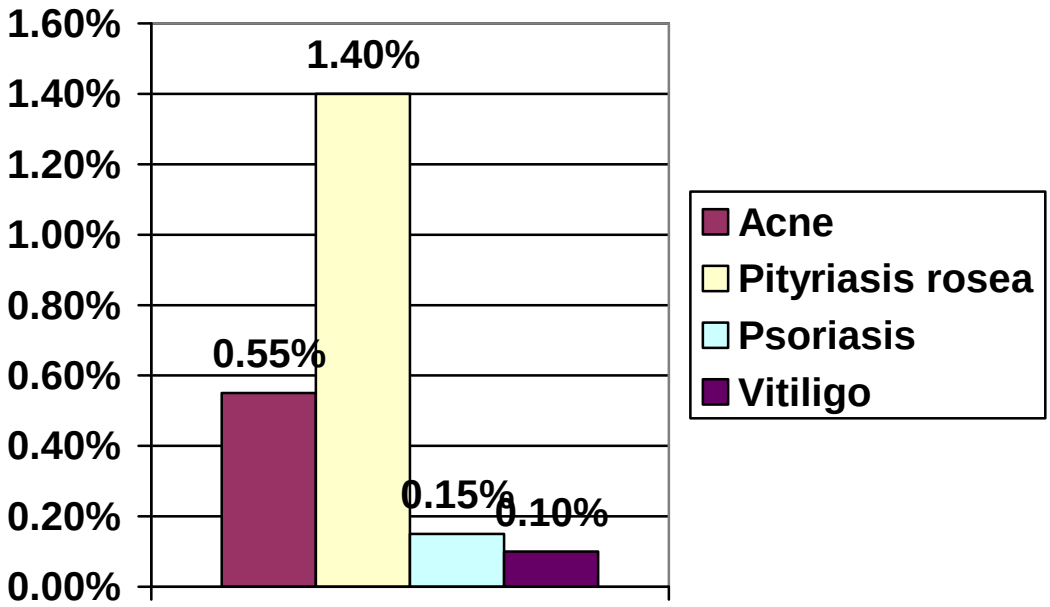

Fig.(26): Distribution of miscellaneous group of skin diseases in the total studied sample.

Table (26): Comparison between distribution of miscellaneous group of skin diseases in urban and rural studied sample.

Miscellaneous group of skin dis.	Urban		Rural		P-value	Total	
	No.	%	No.	%		No.	%
◆Acne	8	0.40	3	0.15	*<0.05*	11	0.55
◆Pityriasis rosea	9	0.45	19	0.95	*<0.05*	28	1.40
◆Psoriasis	2	0.10	1	0.05	*>0.05*	3	0.15
◆Vitiligo	2	0.10	0	0	-----	2	0.10
Total	21	1.05	23	1.15	*>0.05*	44	2.20

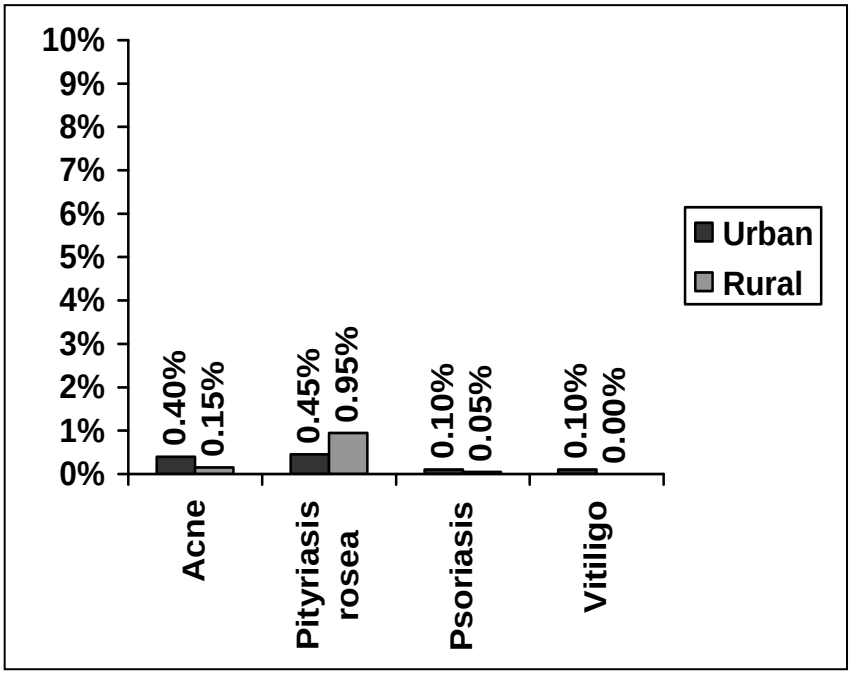

Fig. (27): Comparison between distribution of miscellaneous group of skin diseases in urban and rural studied sample.

Table (27): Relationship between sex distribution of the studied sample and miscellaneous skin diseases group.

Disease / Sex	Acne vulgaris		Pityriasis rosea		Psoriasis		Vitiligo		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Boys	9	0.45	19	0.95	2	0.10	2	0.10	32	1.60
Girls	2	0.10	9	0.45	1	0.05	0	0	12	0.60
Total	11	0.55	28	1.20	3	0.15	2	0.10	44	2.2
Z test	*6.2*		*2.02*		*1.6*		----		*1.9*	
p- value	*<0.05*		*<0.05*		*>0.05*		----		*<0.05*	

<0.05: S. Significant, >0.05: NS .Insignificant

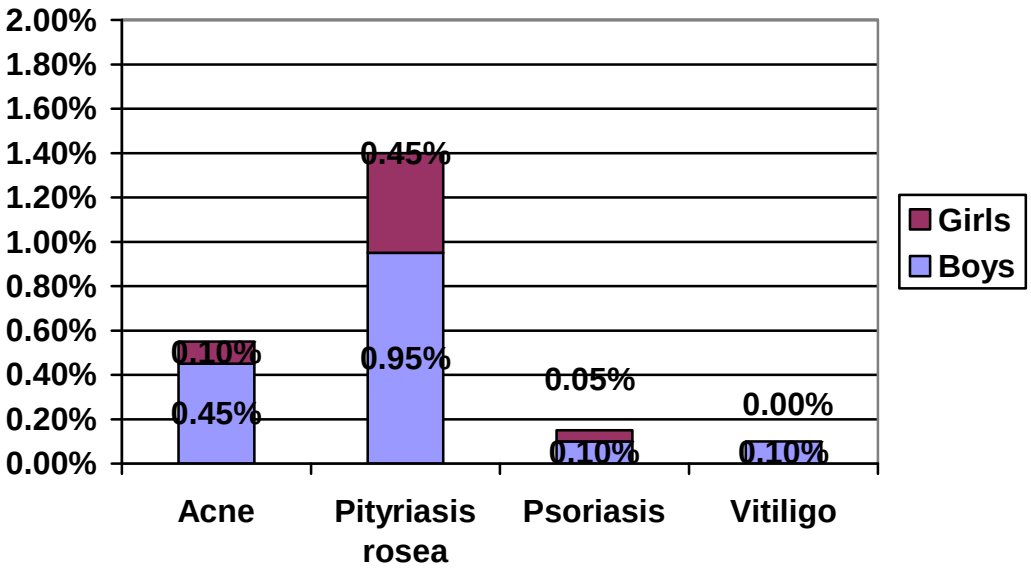

Fig.(28): Relationship between sex distribution of the studied sample and miscellaneous skin diseases group.

Table (28): Distribution of children with more than one skin disease in the studied sample.

No. of diseases	Number (No.) In urban sample	%)	No. in rural sample	%	P-value
One disease	470	**23.50**	927	**26.35**	***<0.05***
More than one diseases	40	**2.00**	71	**3.55**	***<0.05***
Total	**510**	**25.50**	**998**	**29.90**	***<0.05***

<0.05: S. Significant, >0.05: NS .Insignificant

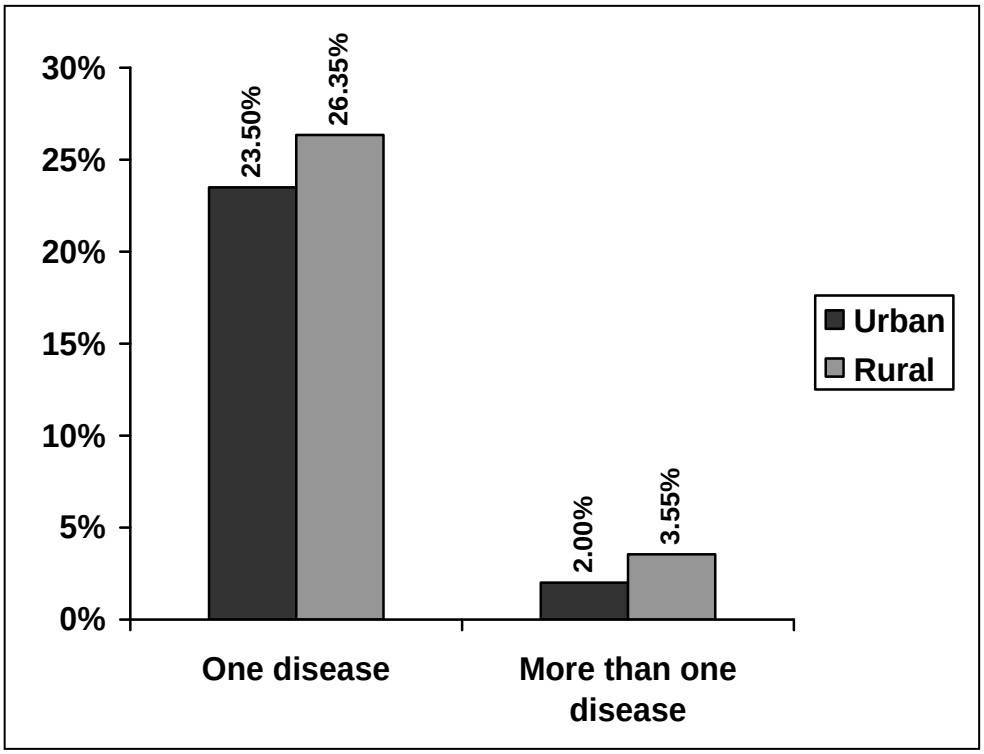

Fig. (29): Distribution of children with more than one skin disease in the studied sample.

Table (29): Distribution of the etiology of skin diseases among children with more than one skin disease in studied sample.

Skin diseases	No. of cases in urban sample	%	No. of cases in rural sample	%
Pediculosis complicated with secondary bacterial infection	26	**1.30**	54	**2.70**
Scabies complicated with secondary bacterial infection	2	**0.10**	11	**0.55**
Atopic dermatitis complicated with secondary bacterial infection	9	**0.45**	4	**0.20**
Chicken pox complicated with secondary bacterial infection	2	**0.10**	2	**0.10**
Vitiligo associated with alopecia areata	1	**0.05**	0	**0**
Total	**40**	**2.00**	**71**	**3.55**

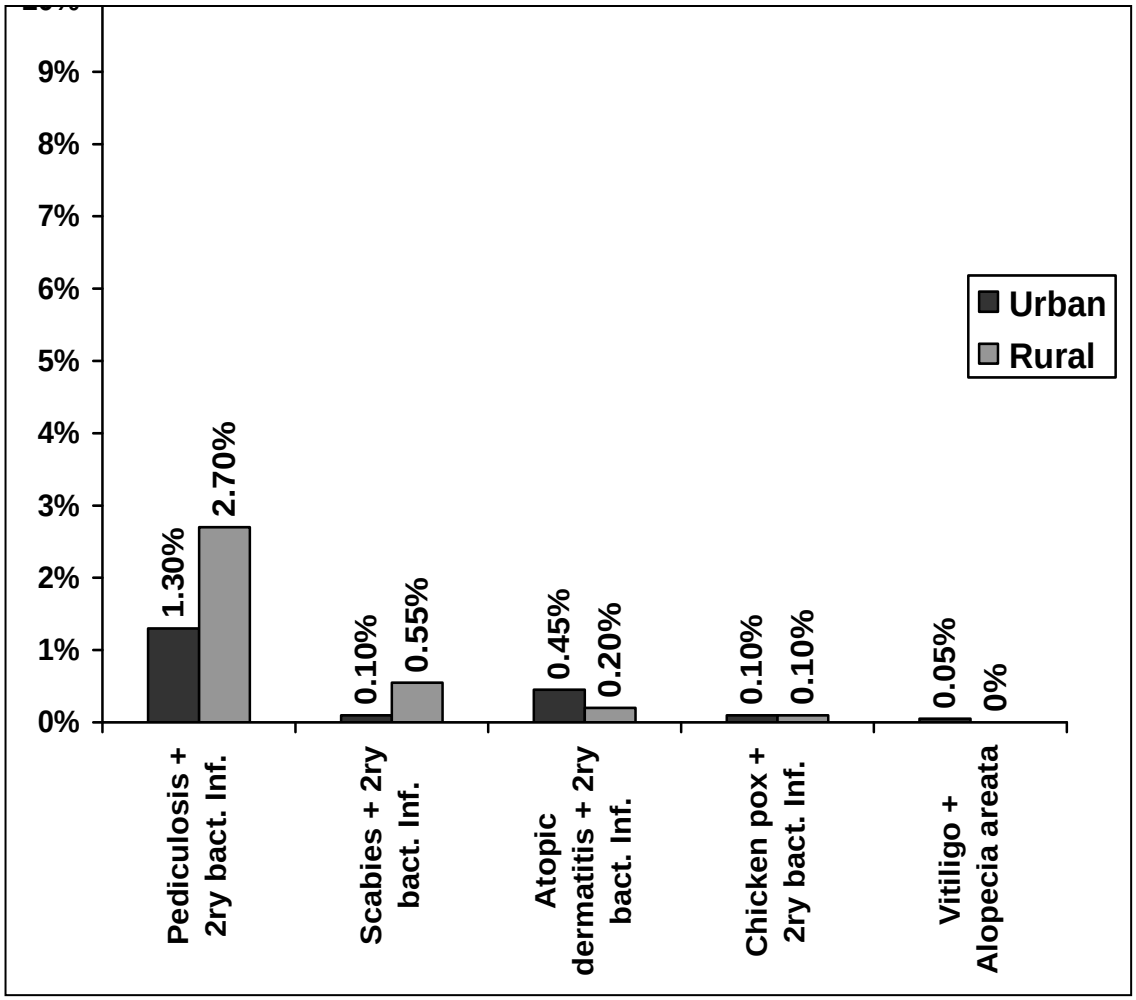

Fig. (30): Distribution of the etiology of skin diseases among children with more than one skin disease in studied sample.

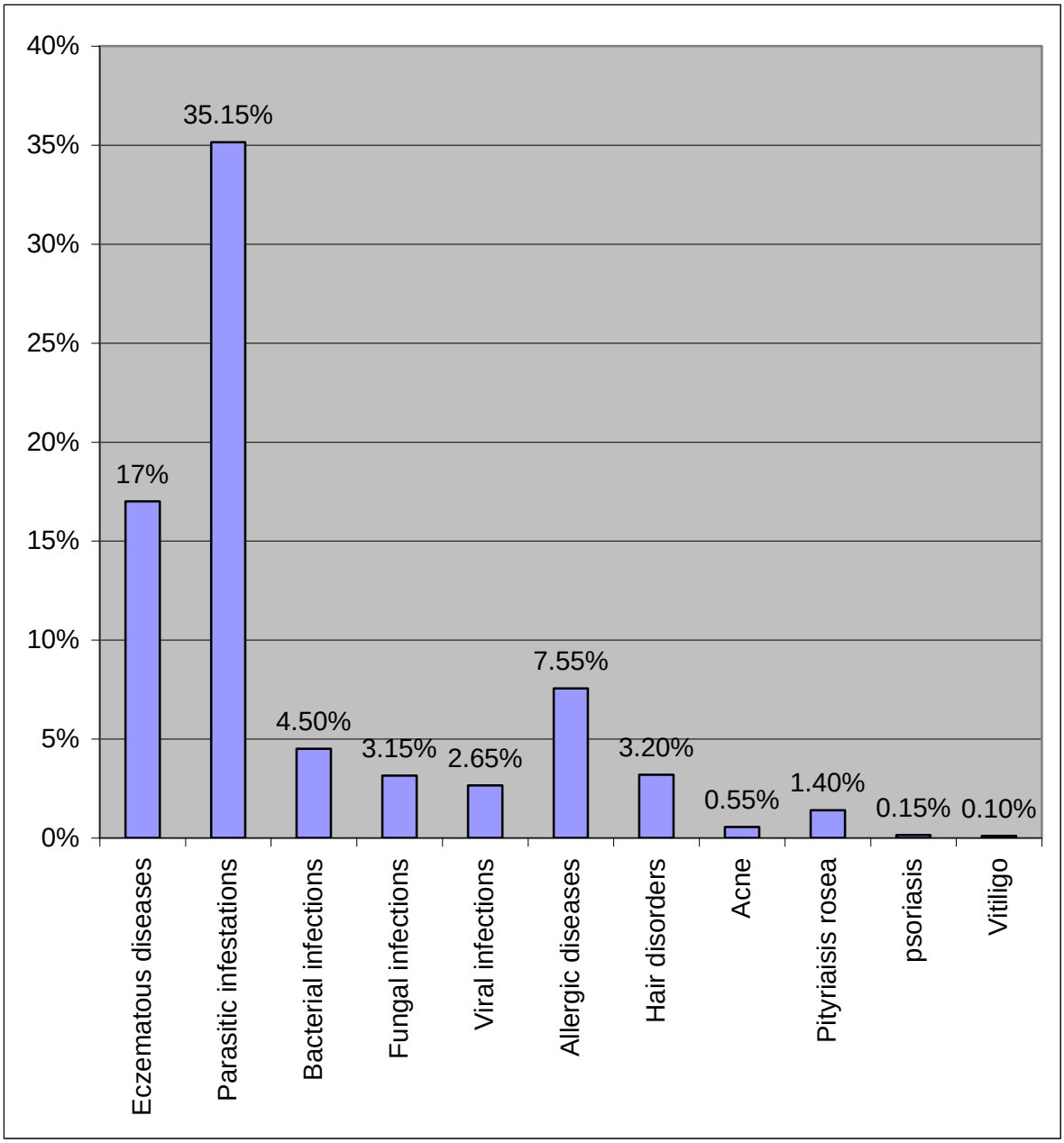

Fig. (31): Distribution of studied skin diseases among studied group.

Photo (1): Vitiligo in 9 years old boy from urban group.

Photo (2): Atopic dermatitis in 10 years urban sample.

Photo (3): Verruca vulgaris in 10 years boy from rural sample.

Photo (4): Pityriasis versicolor in 11 years old from urban sample.

Photo (5): Chicken pox in 6 years old boy from the rural sample.

Photo (6): Tinea capitis in 7 years old boy from the rural sample.

Photo (7): Pediculosis in 6 years old girl from the rural sample.

Photo (8): Chicken pox in 7 years old boy from urban sample.

Photo (9): Traction alopecia in 10 years old girl from rural sample.

Photo (10): Alopecia areata in 9 years old boy from urban sample.

Photo (11): Impetigo in 8 years old boy from urban sample.

Photo (12): Atopic dermatitis in 8 years old boy from urban sample