

انتشار الاصابة بقمل الرأس لدى سكان محافظة ديالى قضاء بعقوبة

سهى نجم عبدالله التميمي¹
وزارة التربية - العراق

مقدمة:

لمعرفة مدى انتشار الاصابة بقمل الرأس لدى سكان مركز محافظة ديالى (بعقوبة) والاقضية التابعة لها . تم اجراء الدراسة الحالية للمدة من شهر نيسان الى نهاية شهر تشرين الثاني 2023. وإعداد استمارة تضمنت المعلومات الآتية : العمر والجنس والمستوى التعليمي للام ومستوى المعيشة للأسرة فضلاً عن عدد افراد الاسرة .

مشكلة البحث:

انتشار القمل في اقصية محافظة ديالى والعوامل المؤثرة في انتشار الاصابة

أسئلة البحث:

ما تأثير العمر والجنس والمستوى التعليمي للام ومستوى المعيشة للأسرة وعدد افراد الاسرة على معدل الاصابة بهذا الطفيلي؟

أهداف البحث:

مما تقدم في مشكلة البحث وأسئلته السابقة تشكلت مجموعة من الأهداف والغايات التي يمكن أن تسهم في توضيح هذه الأهداف:- اهداف الدراسة الحالية بتحقيق تحديد نسبة الإصابة الخارجية **Infestation** بقمل الرأس في عينات عشوائية من سكان الاحياء المختلفة في قضاء بعقوبة وبيان دور بعض العوامل الوبائية (العمر، الجنس، مستوى التعليم للام، عدد افراد الاسرة، مستوى المعيشة للأسرة، منطقة السكن).

أهمية البحث:

تكمن اهمية البحث في تحديد العوامل الوبائية المسببة للإصابة ومنها العمر والجنس ومستوى تعليم الام وعدد افراد الاسرة ومنطقة السكن .

¹ تدريسية لطلاب ثانوية المتفوقات العراق / محافظة ديالى / قضاء بعقوبة

منهج البحث:

يعتمد منهج البحث على دراسة استقصائية متمثلة بجمع العينات العشوائية من سكان المحافظة لمناطق قضاء بعقوبة الموجودة فيها ومقارنة هذه النتائج بالدراسات السابقة. الكلمات المفتاحية: قمل - الرأس - الجنس - الشعر - بعقوبة

Prevalence of head lice infection among residents of Diyala Governorate, Baquba District

Soha N. A. Al-Tamimi

Abstract:

To investigate the spread of head lice infection (*Pediculis humanus capitis*) among the residents of the Diyala Governorate Center (Baquba) and its affiliated districts. The current study was conducted for the period from April to the end of November 2023. A form was prepared that included the following information: age, sex, educational level of mother the living level and number of individuals.

The current study showed that 50 people of the total people under study were infected with 200 people and the highest rate of infection was 14% among individuals at the age of 6-7 years. Females showed a higher infection of males of 40% and 10%, respectively. The study showed that the scientific level of the mother had an impact on the infection rate, as no infection was shown among family members from mothers with a university degree. The infection rate was 42.85% for individuals with a poor standard of living and the highest rate of 50% was recorded among individuals from families with more than 7 individuals.

Keywords: head lice, sex, hair, Diyala

Introduction

Lice are widespread Ectoparasite , which live permanently with the host and cause many pathological effects. (Al-Hadithi & Habash, 1986)

Many studies have shown that one of the symptoms of head lice is severe itching and redness of the scalp infection area and may be accompanied by secondary bacterial infections in addition to the appearance of red spots at the end of the head, behind the ears and the neck area, which are more common in children . (Elgart, 1990)

Head lice are considered a cause of many crises, especially among school students in developing countries. They are considered a global problem, especially in primary schools, because of the infection they cause among students and the rapid spread of lice due to contact between them (Hunter & Barker, 2003).

There are some studies on the infection of school students to head lice in some governorates of Iraq, including a study (Al-Mamouri, 2000) in the province of Basra, in which he stressed that age and hair length have an impact on the level of infection.

(Al-khafaji, 1999) also served in the Hashemite District in the Governorate of Babylon, also conducted a study that dealt with the infection of head lice in students of some primary schools. The study also dealt with the relationship between the infection and the impact of both age, the size of the family, the academic achievement of the mother and the length of the hair.

A study was also conducted on head lice in the Al-Khalis district center. The infection rate was 18.7% among students, especially those with limited income and the highest age of infection is 6 years. (Al-Bayati, 2000)

The aim pursued by any society is to bring children to adulthood while they are in good health that ensures the continuation and development of the human race. Schools also have an important role in the health of society and that the school environment has an important source of diseases, which causes the emergence of a generation suffering from diseases (Salah, 2010) The current study was conducted with the aim of investigating the infection of head lice among the residents of Diyala Governorate, the district of Baquba, the center and its aspects, to determine the size of the infection and take the necessary measures to reduce the spread of these parasites and to indicate the impact of age, sex, academic achievement of the mother,

living status and the number of family members on the severity of the infection.

Materials and working methods

Six areas belonging to the Baquba district of the center were selected to detect head lice or their eggs (nits) that were randomly selected to investigate the prevalence of head lice and the impact of the socio-economic level variation in Diyala governorate on the infection.

The study included the examination of 200 people during the period from April 2023 to November 2023. The presence of head lice, egg or nymphs in the heads of infected people was investigated through a direct examination of the scalp using a plastic comb with thin teeth to remove lice into one of its phases (eggs or nymphs). The focus was on areas preferred by lice in their presence such as the tops and behind the ears and the use of thin wooden chopsticks to disperse hair and search for lice. The examination was conducted in the presence of parents and specialists in the health field who have experience in the field of contracting these diseases. After that, a personal interview was conducted for the examiners and the questionnaire form was filled out, where personal information such as name, age, housing area, number of family members, living condition, gender and academic achievement of the mother was and the infection was diagnosed by finding the adult insect in its one of its way (eggs or nymphs). Six areas belonging to the district of Baquba, the center, were selected to detect head lice or their eggs (nits) were randomly selected to investigate the prevalence of head lice and the effect of the variation of the socio-economic level in Diyala governorate on infection. The study included the examination of 150 people during the period from April 2023 until November 2023. It was investigated for the presence of head lice, eggs or nymphs in the heads of the infected persons by direct examination of the scalp, using a fine-toothed plastic comb to remove lice or one of its stages (eggs or nymphs). The focus was on areas preferred by lice in their presence, such as the nape and behind the ears, and the use of thin wooden sticks to separate the hair and search for lice. After that, a personal interview was conducted for the examinees and the questionnaire form was filled out, where the personal information such as name, age, area of residence, number of family members, living status, gender and educational attainment of the mother were recorded. Diagnosis of infection by finding the adult insect or one of its stages (eggs or nymphs).

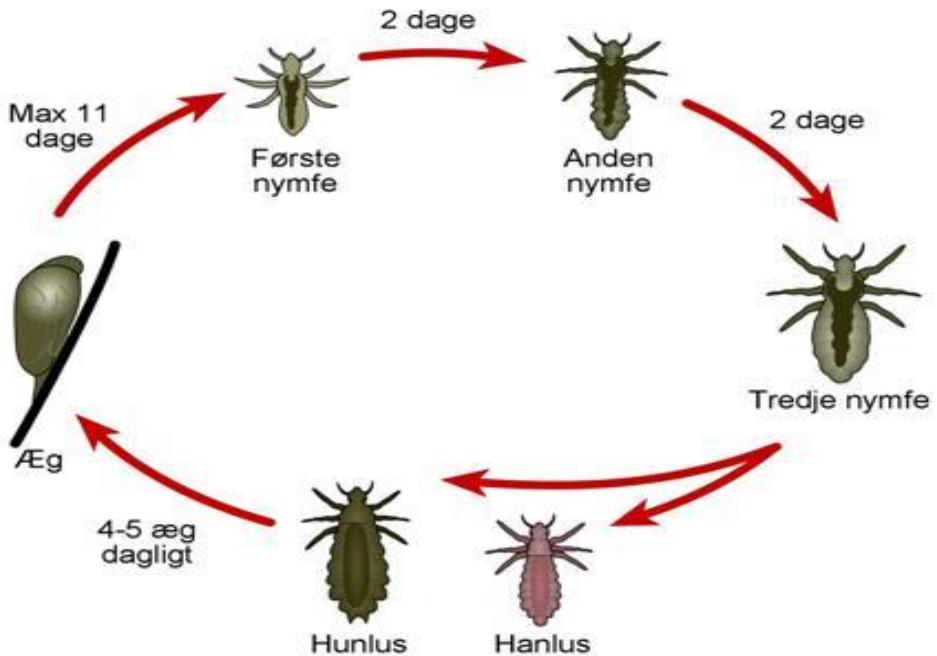


Figure (1) The life cycle of head lice

([https://www.almrsl.com/post/791582 head lice life cycle picture.](https://www.almrsl.com/post/791582-head-lice-life-cycle-picture), 2023)

Results and discussion

After the 200 samples under study were detected distributed to the areas under study. It is Tahrir District, Yarmouk District, Baquba Al-Jadeeda, Al-Mustafa District, with a rate of 50 people each, it was found that 50 people among the total samples examined were infected with head lice, i.e. 25%, and the number of those infection (15,0,15,20) respectively, was in each of (Tahrir District, Yarmouk District, Baquba Al-Jadida, Al-Mustafa neighborhood), that is, the lowest percentage of infection was in the new Baquba area, and no infection did not appear, and the reason for this may be due to the social and health awareness and standard of living of this area, table (1).

The difference of sex has an impact on the infection of these parasites, as the infection rate in females reached 40% higher than the infection of males, which is 10%, as shown in Table (2). This is due to the length of the hair that females have compared to the short hair of males, which creates a greater opportunity to hide lice and lay eggs as a result of the difficulty of

caring for long hair, as it requires more care and these are consistent with what it has (Makki & Darwish, 2007).

From the note of Table (3), we find that the highest rate of infection with head lice is 14% in the age group between 6-7 years compared to other age groups in which the infection was lower. As in the age group (8-9), it is (50%), the age group (10-11) is (20%), and the age group (12-13) is (16%), which means that the greater the age of the child, the lower the infection rate, in order to increase the child's awareness and ability to take good care of his personal hygiene as a result of increased self-reliance.

If we notice Table (4), which between the relationship of infection with head lice and the academic achievement of the mother, we find that there is an inverse relationship between them, as it was found that the higher the mother's culture, the lower the infection in the current study, as the rate of children of their uneducated mothers reached 41.66%, while the children of mothers with a university degree was 0%.

The economic and living level has an impact on the infection of head lice. Table (5) shows this effect, as the infection rate in children living at a low economic level was 42.85%, which is very high compared to children living at a very good economic level, whose infection rate reached 0%, and between those levels, that is, the average level was 28.33% and the good 7.5% is considered less than the weak level. This indicates that good care of these families is the great effect of not getting their children to get sick, and this is evidence that these parasites spread and multiply in poor environments, and this is in accordance with what is stated in (AL-abaddy, 2008)

Also, the number of family members, the great impact on the infection of these parasites, as shown in Table No. (6), that is, the more family members increases 7 and above in the house, we note that the rate of infection is 50% and the lowest rate of infection among families, the number of whose members were 2-4 was% 7.69. This explains the fact that the rate of infection increases in crowded places. These parasites are transmitted from one person to another directly to use the tools jointly such as towels, covers, clothes, comings and sleeping places, and this is in accordance with what was brought about (Bashi, 1995)

Table (1): The effect of the residential area on the level of head lice infection.

Residential area	Samples	Number of infection	percentage%
Tahrir	50	20	40
Yarmouk	50	15	30
New Baquba	50	0	0
Mustafa	50	15	30
the total	200	50	25
Calculated X^2 value 68.6 Table X^2 value 0.05			

Table (2): The effect of sex on the level of head lice infection

sex	Samples	Number of infection	percentage%
male	100	10	10
female	100	40	40
the total	200	50	25

Table (3): The effect of age group on the level of head lice infection

Age group	Total number (infected and non- infected with the head lice)	Number of infected	percentage%
6-7 years	50	07	14
8-9 years	50	25	50
10-11 years	50	10	20
12-13 years	50	08	16
the total	200	50	25
Calculated X^2 value 43.30 Table X^2 value 0.05			

Table (4): The effect of the mother's educational level on the infection of head lice infection

Mother's academic	Samples	Number of infection	percentage%
uneducation	60	25	41.66
primary	50	10	20
medium	30	10	33.33
middle school	35	5	14.28
University	25	0	0
the total	200	50	25
Calculated X^2 value 3.30 Table X^2 value 0.05			

Table (5): The effect of the standard of living on the infection of head lice.

The standard of living	Samples	Number of infection	percentage%
weak	70	30	42.85
Average	60	17	28.33
Good	40	3	7.5
Very well	30	0	0
the total	200	50	25
Calculated X^2 value 28.30 Table X^2 value 0.05			

Table (6): Effect of the number of family members on the infection of head lice.

Number of family members	Samples	Number of infaction	Percentage %
2-4	65	5	7.69
5-6	65	10	15.38
7 or more	70	35	50
the total	200	50	25
Calculated X^2 value 25			

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