

## Frequency of Scabies and Pediculosis in Different Age Groups in the Republic of Karakalpakstan for 2014

**Nagiza Kunnazarova**

General Doctor of Multidisciplinary polyclinic of DMA (district medical association) of Takhiyatash Region

### ANNOTATION

Scabies is the most common parasitic skin disease. However, the true incidence rate does not reflect the intensive rate, which in 1997 was 217.6 per 100,000 of population, in 1998 - 172.6, in 1999 - 149, in 2000 - 144. Morbidity is not taken into account when patients refer to general medical specialists' networks (therapists, pediatricians), as well as dermatovenerologists, when self-medicating. The intensity of head lice disease ranges from 200-300 cases per 100,000 people. 35% of patients are young people aged 15 to 24 years, 27% are children up to 14 years old, 16% are more mature age group 35-50 years.

**Key words:** skin, pathology, female, vesicle, papule

### Introduction:

The skin is an important organ that is complex in structure and performs various functions in the body. The weight of the skin together with the subcutaneous base is about 16% of the body weight i.e. several kg. The total surface of the skin is about 1.5 m<sup>2</sup>, the average thickness is 1-4 mm. The skin is thicker on the extensor surfaces than on the flexor surfaces. The thickness of the skin depends on the color of the skin - for example, in blondes, it is thinner. Skin thickness plays a role in the development of pathology. Many diseases affect areas where the skin is thinner, for example, scabies, occupational diseases. The child's skin is thinner, so disease processes in children have their own characteristics, for example, scabies in children can be localized on the palms and soles (which is not observed in adults).

The skin takes an active part in the physiological functions of the body, performs a number of very important functions (protective, heat-regulating, secretory, resorption, metabolic, immune, receptor, etc.)

Parasitic diseases of the skin, or dermatozoonoses, are caused by blood-sucking animals and parasites, which include mosquitoes, lice, bedbugs, fleas, ticks, as well as some types of roundworms. Parasitic diseases that develop as a response to the effects of animal parasites include scabies, lice, tick-borne dermatitis. The most common in the practice of a dermatologist is scabies and lice, which are transferred by direct contact with patients (direct route of infection), or through their belongings (indirect route of infection), especially through clothing and bedding.

### Literature review:

Scabies is a parasitic skin disease caused by the itch mite *Sarcoptes scabiei hominis*, which is a human intradermal parasite. The scabies mite belongs to the type of small arthropods, the class of arachnids, the order of acariforms. Infection occurs through direct contact with a sick person or through contaminated household items, clothing, toys. Children usually contract scabies from adult family members, caregivers, or other children.

The female tick penetrates the skin and makes moves in it, laying eggs as it moves. It is most active at night. Throughout its life, a female tick lays 40-50 eggs. After 3-4 days, larvae appear from the eggs, and after another 10-14 days they turn into adults. The total life cycle is 30-60 days. An adult is parasitized by 10-12 female ticks.

The incubation period for scabies lasts from 3-7 to 10-14 days, sometimes up to 1.5 months. In children of older age, the clinical manifestations of scabies are the same as in adults. The main symptoms are itching, aggravated at night, typical localization and peculiar nature of the rash. Elements of the rash are localized in the interdigital spaces and on the lateral surfaces of the fingers, flexor surfaces of the limbs, lateral surfaces of the trunk, lower abdomen and on the buttocks. The rashes are represented by paired papules, seropapules (papulovesicles), sometimes vesicles, between which an itch passage is visible in the form of a whitish or grayish slightly rising line up to 1 cm long. At the larger (blind) end of the itch passage is a female mite, which can be seen in the form of a black point.

Lice are flat wingless insects that attack the scalp, body, and pubis. Lice attach to the skin and feed on human blood. They lay their eggs on the hair shafts. Rarely, lice can transmit diseases such as epidemic typhus and chronic fever.

ISSN 2792-3991 (online), Published under Volume: 1 Issue: 5 in October -2021

Copyright (c) 2021 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>

Infection with lice of the species *Pediculus humanus capitis* leads to head lice of the scalp. Lice on the scalp are more common in children. The direct contact is the primary mode of transmission of disease. They live for about 1 month, females lay 7-10 eggs per day. Lice or nits eggs are dense formations attached to the hair shaft approximately 1 cm from the scalp. Lice form from nits in about 8-10 days. Head lice are 3-4 mm long. Upon close examination, they can be seen on the hair shafts and on the head. The diagnosis is usually easy, but re-examinations are required. The head louse has an elongated body that resembles the body of a body louse, but it is smaller in size.

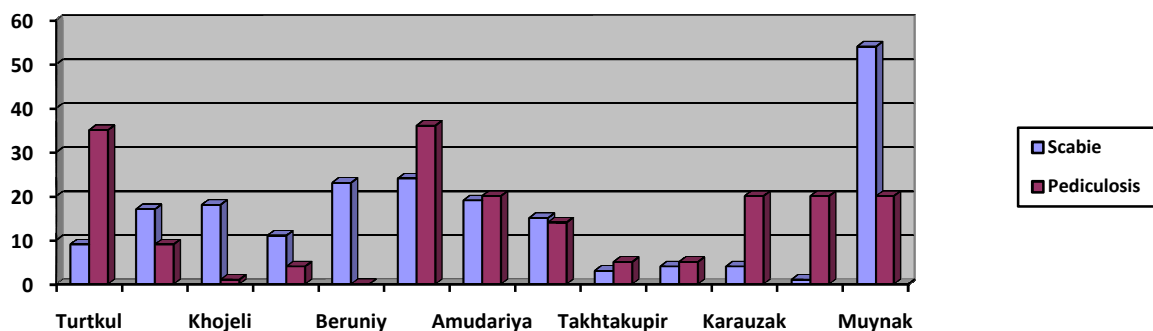
**Goal:** Study and compare the incidence of scabies and pediculosis in different age groups in the Republic of Karakalpakstan in 2014.

#### Materials and Methods:

Located at the Medical Institute of Karakalpakstan, at the Department of "Infectious Diseases". The medical histories of 876 patients were studied in 2014 at the Republican Skin and Venereal Dispensary.

#### Results and Discussion:

During the research of medical histories and laboratory data of 876 patients of different age groups were studied. From this patient, the absolute number of scabies was 154, the absolute number of pediculosis was 260. The integral indicator of scabies was 8.9; The integral indicator of pediculosis was 15.0. The highest number of scabies detection is 24 (on the territory of Kungrad region), the lowest is 1 (on the territory of Ellikkala region). The highest number of detections of pediculosis is 54 (on the territory of Muynak region), the smallest is 1 (on the territory of Khojeli region). Patient complaints (scabies): severe itching, getting worse in the evenings and at nights. Inspection: the presence of characteristic scabies, nodular and blister eruptions, erosion, scratching, and bloody crusts. In some patients, vesicles were found in the interdigital folds, on the lateral surfaces of the fingers, wrist, and less often in the region of the medial ankles and the arch of the foot. 32 patients showed Ardi's symptom (manifestation of scabies localized on the extensor surface of the elbow joints in the form of impetiginous rashes and purulent crusts), 18 patients showed Gorchakov's symptom (manifestation of punctate bloody crusts on the elbows).



#### Conclusion:

Aforementioned diseases, frequency of occurrence of scabies in 2014 in the Republic of Karakalpakstan was 154 cases (37.2%), the incidence of pediculosis was 260 cases (62.8%). The frequency of occurrence of scabies in the regions: a larger number in the territory of Kungrad region - 24 (15.6%), a small number in the territory of Ellikkali region - 1 (0.65%). Frequency of occurrence of pediculosis by regions of Republic of Karakalpakstan: a greater number in the territory of Muynak region -54 (20.8%), a small number in the territory of Khojeli region-1 (0.38%).

#### References:

1. Clinical chrestomaty in pediatric dermatology. N. G. Kochergina, O. Yu. Olisova, I. A. Gorlanov, D. V. Zaslavsky, L. M. Leina, I. R. Milyavskaya. Moscow 2016
2. Skin diseases. Diagnostics and treatment. Thomas P. Hubiff. Translation from English. Edited by Academician RAMS, prof. A.A. Kubanova. 3rd edition. Moscow 2008
3. Pediatric dermatovenerology. I. A. Gorlanova, D. V. Zaslavsky, I. R. Milyavskaya, L. M. Leina, O. V. Olovyanikov, S. Yu. Kulikova. Moscow 2012
4. Skin and venereal diseases. V. V. Kulaga, V. A. Lemeshko. Moscow 2009
5. Skin and venereal diseases. Yu.K. Skripkin, G. Ya. Sharapova. Moscow 1987