SCABIES CASES AT INSTITUTE OF SKIN DISEASES SINDH, KARACHI, DURING THE YEAR 1995

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ABSTRACT:

This is a twelve months report on the monthwise and genderwise data of scabies patients in the year 1995. The data was collected from the Institute of Skin Diseases Sindh, Karachi. No such reports are published for Karachi or other cities of Pakistan except few recent reports in 2002 & 2003. Although scabies is a common skin problem in Karachi and other parts of the country. Therefore, this data has been collected. The total skin disease patients visiting in each of the twelve months of the year, the scabies cases among them, in the adult males, females, male children and female children were recorded. The results are presented in tabulated form and supported by charts to provide information about the incidence of this skin infection. It is concluded that scabies is the most common skin problem in Karachi as revealed by the patients visiting the Institute of Skin Diseases Sindh, Karachi.

KEY WORD:

Introduction

The human skin disease Known as scabies is caused by the itch mite Sarcoptes scabiei var hominis. This mite invades the human skin and produces a sever dermatitis. This infection causes intense itching specially at night. It is endemic in Pakistan in crowding rural areas and is highly contagious. Skin to skin contact is the important mean in transmission. Adults, children, infants and elderly, all are equally susceptible. Scabies can be found in the dust samples or beds of patients with scabies²¹.

The possibility of transmission of scabies via bed clothes and the role played in this transmission by different development stages is known. Scabies lesions can occur on any part of the body. But the commonly affected organs are interdigital webs and backs of the hands, beneath the breast and between the belly folds of the babies. The secretions, excretions as well as mite substances including the egg shells, dead adults, are offensive to the tissues. This can cause intensely pruritic, short, linear reddish lesions. Sometimes scabies may appear as an indeterminant urticaria⁸.

Vesicles and papules may develop. Scratching often leads to secondary bacterial infection with pustule formation. In severe cases weeping and bleeding may occur. When mite population grows and invasion of skin progresses small lesions spread on the affected areas.

An unusual form of scabies as Norwegian scabies, may involve the formation of keratotic excrescences on extensive areas of the body and relatively little pruritus²⁵.

This infection not only involves the skin but blood picture may show changes. In experimental animals, the differential blood count may show elevated lymphocytes, increase of neutrophils and granulocyte⁹.

Folk and Eide¹³ Hayashi¹⁶ and Deshpande¹¹ found eosinophilia in some human patients. A severe anemia developed and a reduction in told haemoglobin, haematocrit and callular haemoglobin occurred in Nigerian pre school Children¹². Humans can contract scabies from domestic and other mammals including, camel, water buffaloes, cat and dog⁷,¹⁵,¹⁹,²⁴. Similarly animals can get the infection from humans. But we in Pakistan do not have published data or record of human or animal scabies. Except few recent publications from Karachi¹,⁵,²³ Therefore, we have made an attempt to collect data about the incidence of human scabies in adults and children. We hope that this information will help in our further studies. Here we have presented the incidence of infection in the year 1995 for the twelve months from January to December based on the data collected from Institute of Skin Diseases Sindh, Karachi.

DATA COLLECTION

The data was collected with the cooperation of Institute of Skin Diseases Sindh, Karachi, here patients come from all parts of Karachi for treatment. The total number of skin disease patients for the months of January to December 1995 were recorded. The number of scabies patients in each month, adult and children, males and females were analysed. Rate of infection in each group was calculated to study the incidence pattern in adults and children of both sexes. The data is presented in the form of tables, and charts.

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This is a part of our continuous year wise study on the cases of scabies which has been recorded from 1991 onwards.

**OBSERVATIONS**

Out of 145643 skin disease patients recorded during the year 1995 (January to December) 61570 were adult males, 54649 were adult females 9830 male children and 19644 were female children. Our data shows that more adults visited the hospital than the children during the year 1995 (Table 1, Fig1).

Out of 145643 skin disease patients who visited the hospital 65418 were the scabies cases including of all ages. The average rate of scabies patients throughout the year was 44.91%.

In January 13050 patients with skin problems visited the Skin Disease Institute, Karachi. Out of these 6835 (52.38%) were scabies patients including adult males 2675 (39.14%), adult females 3138 (45.91%), male children 635 (9.55%) and female children 369 (5.40%).

the total skin disease patients in February decreased and 10475 visited the hospital out of these 5166 (49.32%) were scabies patients including 2171 (42.02%) adult males, 2303 (44.58%) adult females, 654 (12.66%) male children and 38 (0.74%) female children.

In March overall rate of infection declined, as out of 10475 skin disease patients 4420 (42.20%) were scabies cases including 1414 (31.99%) adult males, 2268 (51.20%) adult females, 412 (9.32%) male children and 326 (7.38%) female children.

In April out of 12400 skin patients 5851 (47.19%) were scabies patients including 2464 (42.11%) adult males, 2754 (47.07%) adult females; 566 (9.64%) male children and 67 (1.15%) female children.

In May the overall scabies incidence was 39% as out of 8625 skin disease patients 3393 were scabies cases. These included 1334 (39.34%) adult males, 1761 (51.90%) adult females; 223 (6.57%) male children and 75 (2.21%) female children.

In June 8475 skin patients visited the hospital out of these 38.02% (3222) were scabies patients including adults and children of both sexes. There were 937 (29.08%) adult males, 1600 (49.66%) adult females; 37 (1.15%) male children and 648 (20.11%) female children.

In July skin disease patients who came to the hospital were 8750 and among these 3070 (35.09%) were scabies cases. Out of these 1339 (43.62%) were adult males, 1154 (37.59%) adult females; 114 (3.71%) male children and 463 (15.08%) female children.

The skin disease patients recorded in the month of August were 11325, out of these 4485 (39.60%) were suffering with scabies including 2033 (45.33%) adult males, 1671 (37.26%) adult females; 169 (3.77%) male children and 612 (13.65%) female children.

In September 47.47% (6135) were scabies patients out of 12925 skin disease patients with various other infections. The adult males with scabies were 2601 (42.40%), adult females 2649 (43.18%); male children 121 (1.97%) and female children 764 (12.45%).

Sixteen thousand four hundred and seventy seven (16477) patients having skin problems visited in October and among them 7077 (42.95%) were with scabies. There were 3055 (43.17%) adult males, 3101 (43.82%) adult females; 139 (1.96%) male children and 782 (11.05) female children.

In November 17737 patients with skin problems were recorded and 8435 (47.56%) were found suffering with scabies. These included 4001 (47.43%) adult males, 2996 (35.25%) adult females; 373 (4.42%) male children and 1065 (12.63%) female children.

Out of 14929 skin disease patient recorded in December, 7325 (49.09%) were scabies cases including 3256 (44.45%) adult males, 3049 (41.62%) adult females, 211 (2.88%) male children and 809 (11.04%) female children.

Whole data is presented in Table 1 & Figs 1-3

**DISCUSSION**

Present observations indicate that there is high incidence of scabies in Karachi in general and in comparison to other skin diseases as well. But we could not ascertain in which age group it is more prevalent because of the differences in the number of adults and children who visited the hospital (Table 1). There are variations from month to month. But in adult patients the overall incidence was higher in females than in males. The reason may be the more number of female patients visited the hospital as shown in Table 1. The peak infections in females were found in January and February. While in males peaks were observed in December, January and February. It indicates that intensity was higher in cooler months as described by Tariq et al, Kristensen and Kimchi.
et al^{17}, Other reports for the gears 1991-1994 published from Karachi, Pakistan, indicate more or less similar situations^{1,5}.

A recent report has been published by Bilqees et al^{5}, About the prevalence of scabies in Karachi. During the years 2001 & 2002. A comparative data for the years 1996 to 2000 indicating genderwise and monthwise incidence has also been prepared^{5}. All these reports show that scabies is the most prevalent skin problem in Karachi as compared to other skin diseases.

According to present data children showed higher incidences from January to May and the peaks were in January to April. But in female children comparatively low incidences were found in these months. This again may relate to the number of male and female children who visited the hospital. In female children peak incidences were seen in June and July then declined progressively through August to December. Lowest rate of infection in female children was found in the month of February. These figures do not help in concluding the seasonality of the infection. This may be due to the fact that in Karachi there is no distinct demarcation of the seasons.

Summer is very long starting from late March and continuing till October or November. December to February is cool which ends into early summer.

This infection in Karachi is common and probably many years data may give a definite clue about the seasonality and incidence in various age groups. In general the greatest incidence of scabies is suspected in younger age groups but the highest level may vary with the survey^{6}. According to Nathan^{20} the incidence appears unaffected by age up to 45 years. Some studies show that people above 45 years are relatively free of infection^{10}.

At present we are unable to comment on the age factor and scabies incidence. Further community based data may help in concluding about this aspect of scabies. In our data greater incidences were found in adults. Because greater number of adults visited the hospital (Table 1). But no doubt it is a most common skin disease in Karachi especially in rural and low socioeconomic groups. But all communities are equally susceptible if contact between infected and uninfected individuals occurs.

### TABLE 1: PROFILE OF SCABIES CASES AT IVSTITUTE OF SKIN DISEASES, SINDH, KARACHI DURING THE YEAR 1995

<table>
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<th>Months</th>
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REFERENCES


