

# Incidence / Prevalence of Scabies in Sialkot

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## ABSTRACT

**Objective:** To study the incidence/prevalence of Scabies in Sialkot.

**Study Design:** Retrospective study

**Place and Duration of Study:** This study was conducted at Idris Teaching Hospital Sialkot from Jan 2019 to December 2019.

**Materials and Methods:** There were 2520 patients of scabies were included in this study Male 1297(51.46%) and female 1223 (48.51%), the history and family history were recorded. The examination was conducted on all the patients. The demographic bio data and incidence of patients of scabies from Jan-Dec 2019 were recorded. The written informed consent was taken before the study of patients. The permission of ethical committee was considered for collection of data and publishing it in medical journal. The data was analyzed on SPSS version 10 for results.

**Results:** The incidence of scabies was the highest at the age of 5-15 years 621 (24.64%) of total patients. The incidence of scabies was the lowest at age below 5 years 100(3.96%). The incidence of scabies was the highest in lower class 1263(49.72%) and the incidence of scabies were lowest in high class 400(15.74%). The incidence of scabies was highest in rural area 1581(62.73%) and in urban area it was lowest 939(37.26%). The incidence of scabies was the highest in month of MAY-June 501 (19.88%) patients and lowest in the month of Jan-Feb 310 (12.30%) patients.

**Conclusion:** It was concluded that the incidence of scabies was highest in the rural area and in the lower class at age of 5-15 years and highest in hot weather and lowest in cold weather.

**Key Words:** Scabies, Incidence, Prevalence, Sialkot, itching

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## INTRODUCTION

Scabies is a skin infestation caused by the burrowing action of a female parasite, *Sarcoptes scabiei* (Itch mite) resulting in irritation and vesicle or pustule formation<sup>1</sup>. Human scabies has played a modest, but not nugatory role in the history of dermatology. Hebra, Beeson, Heilesen and Friedman have related the story of scabies in detail<sup>2-5</sup>.

Scabies infestation is ubiquitous and age, sex or skin colour plays no part in its aetiology<sup>6</sup>. Scabies affects all races and social classes worldwide<sup>7</sup>.

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Accurate figures of its incidence are difficult to obtain and most reports are based on hospital outpatient attendance records<sup>8</sup>. The incidence of scabies in developed countries shows cyclical fluctuations for which, there is, as yet, no satisfactory explanation<sup>9</sup>. The reported incidence of scabies for Karachi is 22.7%, which is more than other infections<sup>10</sup>.

Medical staffs, especially General Medical Practitioners (GPs) are an integral part of any health care system. Treatment of scabies is domiciliary, so mostly patients are in contact with GPs. GPs are not only involved in the management of scabies but they are also responsible for providing health education to the patients about this disease. The patients' queries about scabies, such as mode of spread, prevention and protection of family members, are often directed at the GPs, as they are more readily available than the skin specialists. Although national data for scabies is not available but reports based on hospital outpatient attendance records shows alarming prevalence indicating a lack of awareness about this common skin problem among GPs<sup>11</sup>.

## MATERIALS AND METHODS

There were 2520 patients of scabies were included in this study Male 1297(51.46%) and female 1223

(48.53%), the history and family history were recorded. The examination was conducted on all the patients. The demographic bio data and incidence of patients of scabies from Jan-Dec 2019 were recorded. The written informed consent was taken before the study of patients. The permission of ethical committee was considered for collection of data and publishing it in medical journal.

The data was analyzed on SPSS version 10 for results.

**RESULTS**

At age below 5 years, male 40(3.08%) and female 60(4.90%) patients of scabies were observed, At the age of 5-15 years male patients 321(24.74%) and female 300(24.52%) were observed. At the age of 16-25 years male patients 215(16.57%) and female 207(16.92%) , at the age of 27-37 years male patients 187(14.41%) and female 210(17.17), at the age of 38-48 years male patients 262(20.20%) and female patients 181(14.79%) of scabies , at the age of 49-60 years male patients 152(11.71%) and female patients 150(12.26%) , at age above 60 male patients 120(9.25%) and female patients

115(9.40%) of scabies were observed. As shown in table 1.

In high gentry the male patients 134(11.91%) and female 266(18.79%) of scabies were observed. In middle class male patients 370(32.88%) and female patients507(35.83%) of scabies were observed. In lower class the male patients 621(55.20%) and female patients 642(45.37%) of scabies were found. As shown in table 2. It was seen that in urban area 402(35.57%) male patients and 537(38.63%) female patients of scabies were found, in rural areas the incidence of scabies in male patients 728(64.42%) and 853(61.36) female patients was found. As shown in table 3. In month of Jan-Feb the male patients 107(9.12%) and female patients of scabies 203(15.05%),In month March-April the male patients 176(15.01%) and female patients 221(16.39%), in month of May-June the male patients 246(20.98%) and female patients 255(18.91%), in July-August the male patients were 215(18.34%) and female patients 235(17.43%), in Sept-Oct the male patients 217(18.51%) and female patients 213(15.80%), in Nov-Dec male patients 211(18.00%) and female patients 221(16.39%) of scabies were found. As shown in table 4.

**Table No 1: Age and Gender distribution in scabies at Sialkot**

Sr. No.	Age (years)	Gender		Total Patients
		Male	Female	
1	Below 5yr	40 (3.08%)	60 (4.90 %)	100(3.96%)
2	5-15	321(24.74%)	300 (24.52%)	621(24.64%)
3	16-25	215 ( 16.57%)	207 (16.92%)	412(16.34%)
4	27-37	187 (14.41%)	210(17.17%)	397(15.75%)
5	38-48	262(20.20%)	181 (14.79%)	443(17.57%)
6	49-60	152 (11.71%)	150 (12.26%)	302(11.98%)
7	Above 60	120(9.25%)	115 (9.40%)	235(9.32%)
	Total	1297 (100%)	1223(100%)	2520(100%)

**Table No2: Socio economic Status distributions in scabies**

Sr. No	Social economic status	Male	Female	Total Patients
1	High	134(11.91%)	266(18.79%)	380(15.07%)
2	Middle	370(32.88%)	507(35.83%)	877(34.52%)
3	Lower	621(55.20%)	642(45.37%)	1263(49.72%)
	Total	1125(100%)	1415(100%)	2520(100%)

**Table No.3: Area distribution in scabies**

Sr. No	Area	Male	Female	Total Patients
1	Urban	402(35.57%)	537(38.63%)	939(37.26%)
2	Rural	728(64.42%)	853(61.36%)	1581(62.73%)
	Total	1130(100%)	1390(100%)	2520(100%)

**Table No.4: Monthly distributions of patients of scabies**

Sr. No.	Month	Male	Female	Total patients
1	Jan-Feb	107(9.12%)	203(15.05%)	310(12.30%)
2	March-April	176(15.01%)	221(16.39%)	397(15.75%)
3	May-June	246(20.98%)	255(18.91%)	501(19.88%)
4	July-August	215(18.34%)	235(17.43%)	450(17.85%)
5	Sep-Oct	217(18.51%)	213(15.80%)	430(17.06%)
6	Nov-Dec	211(18.00%)	221(16.39%)	432(17.14%)
	Total	1172(100%)	1348(100%)	2520(100%)

## DISCUSSION

“Very little epidemiological work has been done in dermatology, as this branch of medicine has been neglected in Pakistan due to lack of interest by medical professionals.” “To the best of our knowledge, this is the first study of its kind among GPs of Sialkot in Pakistan.” “So we are unable to compare the results of this study with other studies.” “Scabies is a condition that may involve the whole body and medical and paramedical staffs working in all disciplines of medicine are involved in its management<sup>14</sup>.” “The present study showed that substantial numbers of GPs have inadequate knowledge regarding the causative parasite for scabies, the importance of scrapping the burrow and its examination in the diagnosis and health education for patients and family members”. “At the same time, however, there is reasonably good awareness about practical aspects such as mode of spread of the disease, clinical features and treatment of scabies.”

“Improper application of topical medications often occurs because the patient fails to fully understand the necessity and importance of application of topical preparations on whole body and treatment of whole family at the same time. Not only must patients be taught to take their medications, but they must also gain sufficient understanding of disease and its treatment, in order to become convinced that this is necessary.” “This study evinced that GPs are not clear about health education to be imparted to scabies patients. Consequently, the responsibilities of GPs have been increased manifold<sup>14</sup>.”

“Another important observation was that neither increasing age nor increasing years of experience of GPs improved the level of satisfactory awareness among the GPs. This reflects the total lack of refresher courses or continuous medical education programmes for the GPs”.<sup>13,14</sup>

“Some limitations of our study need to be acknowledged. First, the study is limited by cross-sectional design so temporal or cause-effect relationship cannot be established. Final and most important is small sample size with networking sampling strategy for selection of GPs”.

“In our study, the incidence of scabies was the highest at the age of 5-15 years 621 (24.64%) of total patients. The incidence of scabies was the lowest at age below 5 years 100(3.96%). The incidence of scabies was the highest in lower class 1263(49.72%) and the incidence of scabies were lowest in high class 400(15.74%).” “The incidence of scabies was highest in rural area 1581(62.73%) and in urban area it was lowest 939(37.26%). The incidence of scabies was the highest in month of MAY-June 501 (19.88%) patients and

lowest in the month of Jan-Feb 310 (12.30%) patients. The results of our study also correlates with other study.<sup>14</sup>”

## CONCLUSION

It was concluded that the incidence of scabies was highest in the rural area and in the lower class at age of 5-15 years and highest in hot weather and lowest in cold weather.

### Author's Contribution:

Concept & Design of Study: M Naeem, Abdul Rehman  
 Drafting: Shafiq ur Rehman Jamil  
 Data Analysis: Anwar Khan  
 Revisiting Critically: Shafiq ur Rehman Jamil, Kamran Hamid  
 Final Approval of version: M Naeem

**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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