## **Original Article**

# Frequency of various skin diseases in patients visiting the OPD of dermatology department at a tertiary care Hospital, Aziz Fatima Medical & Dental College Faisalabad

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## **Abstract**

*Objective* To determine the frequency of the skin diseases in patients attending dermatology OPD in a tertiary care Hospital in Faisalabad.

Materials and Methods It is a descriptive study carried out from 1<sup>st</sup> September.2019 to 29<sup>th</sup> February 2020 for the period of six months. It was carried out on patients attending dermatology OPD at Aziz Fatima Hospital Faisalabad which is a tertiary care hospital affiliated with Aziz Fatima Hospital Faisalabad. Total of two thousand eight hundred seventy nine patients were enrolled after informal consent. Study was based on the newly diagnosed cases presenting in dermatology OPD, irrespective of age and sex. The diseases were diagnosed clinically and relevant investigations were carried out at laboratory of hospital. History and Physical examination was recorded on a predesigned standared proforma and analysed through computer Microsoft SPSS. Biochemical tests were carried out where needed. Skin biopsy and histopathology was carried out in selected cases where diagnosis was proved or otherwise. All the data was recorded and analyzed by SPSS software to assess the burden of these diseases in our setup and finally comparison was made with different studies.

**Results** A total of 2879 patients were enrolled in the study from 1<sup>st</sup> September 2019 to 29<sup>th</sup> February 2020 for a period of six months. It include 1928 female patients (66.97%) and 951 male patients (33.03%), female to male ratio was 2:1 approximately. A general classification into infective and non infective groups was categorized. All the diseases were broadly divided in to infective and non infective groups. Infective group comprised of 1288(44.73%) and non infective group consists of 1592 patients.ie55.27%. Acne was most common (n=489 ie.16.98%) non infective disease. Scabies was (n=873 ie.30.32%) among the infective group.

**Conclusion** Our study found the higher incidence of non-infective disease i.e. n= 1591(55.27%) and acne was most common disorder (n=489 i.e. 16.98%) and among infective disorder (n=1288 i.e. 44.73%) scabies was most common n=873 i.e30.32%.

## Key words

Skin diseases, acne, scabies, infectious and non-infection groups.

#### Introduction

Skin diseases affect the individuals in a number of ways. They affect the quality of life and in certain cases associated with mortality e.g. (toxic epidermal necrolysis, malignant melanoma and pemphigus). The factors governing the frequency of skin diseases are

diverse. Commonly these factors are ethnicity, religion, living standards, poverty, geographic

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areas, rural and urban community, level of education, weather, age groups, gender, pets, contact with animals; communal living conditions, occupation, genetic susceptibility and marriage traditions.

Nutritional factors and dietary intake can affect the frequency of skin problems. Skin disease may be seen by a physician in the general population.<sup>1,2</sup>

We studies the frequency of different skin diseases in patients attending the tertiary care hospital in Faisalabad and to compare the results with other studies. This study was conducted at OPD of Dermatology deptt Aziz Fatima Medical and Dental College Faisalabad from 1<sup>st</sup> September 2019 to 29<sup>th</sup> February 2020 for the period of six months.

All the patients attending the Dermatology OPD and patient referred to Derma OPD from other departments for skin complaints were enrolled in the study.

Patients belonging to either sex or any age were included in the study. Informed consent was obtained from each patient and freshly registered cases were included in the study. Follow up cases were excluded. A preformed performa was utilized to collect the data describing the name age sex occupation gender physical exam and history of traveling to any of endemic disease area. After a comprehensive history, a detailed dermatological and systemic examination was carried out and a critical diagnosis was made on history and physical examination. Relevant investigations were taken, e.g. complete blood examination, urine examination, X-ray chest.

#### Discussion

In our study, scabies was most common disease which reflects urban community of industrial

and populated city of Faisalabad. Aziz Fatima Hospital is situated in heart of Faisalabad, a tertiary Care and trust Hospital and it also attracts rural as well as urban patients and is

Table 1 Incidence of Non infective skin condition.

Diagnosis	N (%age)
Acne	498 (16.98%)
Melasma	326 (11.32%)
Alopecia Areata	127 (4.41%)
Freckling	84 (2.9%)
Hirsutism	56 (1.94%)
Atopic Dermatitis	76 (2.63%)
Other Eczemas	162 (5.62%)
Lichen planus	71 (2.46%)
Psoriasis	109 (3.78%)

Table 2 Frequency of infective skin diseases.

N	(%)
N	1379 (47.90%)
Scabies	873 (30.32%)
Fungal infections	226 (7.8%)
Warts	102 (3.54%)
Impetigo	87 (3.02%)

**Table 3** Frequency of mean age in different diseases in females and males.

Male Patients	Gender	Mean Age	No. of Pts
Acne	Male	20.54	N=159
	Female	21.67	N=339
Melasma	Male	27.92	N=72
	Female	29.42	N=254
Scabies	Male	20.6	N=193
	Female	25.5	N=180
Tinea and fungal	Male	44.4	N=42
infections	Female	31.5	N=62
Alopecia Areata	Male	17.60	N=90
•	Female	22.04	N=37
Freckling	Male	18.38	N=26
	Female	26.23	N=58
Hirsutism	Female	31.30	N=56
T. cruris	Male	25.63	N=63
	Female	33.67	N=59
Atopic	Male	5.23	N=33
Dermatitis	Female	5.01	N=43
Other Eczemas	Male	23.83	N=68
	Female	31.90	N=94
Warts	Male	28.25	N=56
	Female	18.62	N=46
Impetigo	Male	6.28	N=41
	Female	5.88	N=46
Lichen planus	Male	33.18	N=34
	Female	41.83	N=37
Uticaria	Male	27.15	N=54
	Female	32.18	N=46
Psoriasis	Male	21.5	N=6
	Female	21.09	N=63

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In our study females out number males. The results are similar to other study by Nurul Alam *et al.* in Dhaka, Bangladesh.<sup>6</sup> In other studies,<sup>7,8</sup> it out numbered our study.

Hirsutisn was reported in 56 (1.94%). This may due to female predominance in our study. Psoriasis was reported in 109 (3.78%) and lichen planus in 71 (2.46%).

Infectious diseases were found in 1379 (47.90%) Our study shows higher incidence than Bangladesh study by Nurul Alam *et al.*<sup>6</sup> The results of studies from Karachi, <sup>10,11</sup> Lahore, <sup>1</sup> Bahawalpur <sup>12</sup> reported, the incidence of infection disease same as our study. The studies by Das, Zamzashis <sup>13</sup> and others <sup>14-17</sup> had higher incidence of infectious diseases than of our study. This could be due to different setting and study design. Most common dermatosis was scabies 870 (30.21%) in infectious group.

The most common dermatological disease in non-infection groups was acne. The acne n=480 (16.98%).

Among the infectious groups scabies was most common 870 (30.21%). Other infectious dermatosis has frequency as under tinea infections 226 (7.84%). It includes all types of tinea infection. Warts were 102 (3.54%).

**Table 4** Frequency of skin diseases in different age groups.

Age groups	Male	Female	Total
<10 Years>	60	80	140 (4.80%)
11-20	220	393	613 (21.29%
21-30	310	750	1060 (36.81%)
31-40	201	415	616 (21.39%)
41-50	110	210	320 (11.11%)
> 50 years	50	80	130 (4.55%)
Total	951	1928	2879

Impetigo and frunculosis, 87 (3.02%). Shahbaz Aman *et al.*<sup>1</sup> in Lahore had the similar results. Other studies<sup>1,2,5,10</sup> which show similar results as of our results. This shows that females are more concerned about their skin problems. Most of our patients presented between 20/40 years of age. In our study non-infectious skin diseases 1500 (52.10%) were more common than infection disease (n=1370) i.e. (47.90%). This pattern is seen in earlier studies.<sup>19-23</sup>

Acne was most common dermatosis in non-infectious group (n=480 i.e 16.98%). Next in frequency was melasma 326 (11.32%), similar results were seen is other studies. 1,2,12,13 The reason for this is excessive use of cosmetics and more concern about the fair beauty and use of steroids and herbal products is its possible cause of the acne. Our study shows similar incidence as of by Nurul Alam *et al.* and others. 6,14,18,21,24

The studies by Zamanian *et al.*,<sup>25</sup> Maryam *et al.*,<sup>26</sup> Tamizud Din *et al.*<sup>16</sup> and Agarwal<sup>17</sup> have frequency of acne similar to our study.

The frequency of melasma in our study was 326 (11.32%) Which may be due to increased exposure to sun, female predominance and dietary factors. These results are similar to past studies of M. Nurul Alam, 6 Gupta<sup>15</sup> and Ahmad et al. 18 and has found similar incidence as of ours. Hair disorders e.g. alopecia areata 127 (4.41%) are different hairloss was found in 127. Similar results are seen in studies of Maryan et al.26 and Ahmad et al.18 had found higher frequency than ours. Other eczemas was found in 326 (11.32%) and atopic dermatitis was diagnosed in 76 (2.63%). Other eczemas included contact dermatitis, seborrhic dermatitis asteototic dermatitis was reported in higher value.

Among the infectious group, scabies was most common dermatosis, 873 (30.32%). This could

be explained by overcrowded population poor environmental hygiene communal living conditions, illiteracy, poverty can be the reason. Similar results are seen as of ours in other studies. <sup>20,27-29</sup>

The incidence of fungal infection was 226 (7.8%). This is compared to other studies, <sup>21,27-30</sup> the frequency of warts was 102 (3.54%).

Impetigo was seen in 87 (3.02%) of cases. There many other skin disorders noted in our study but number of these patients were few. We suggest further studies to known the burden of skin diseases which is crucial for the prevention and control of these skin disorders.

#### Conclusion

Our study found higher incidence of noninfectious skin disorder. Scabies was most common of all dermatosis. Eczema and fungal infections were found in our study of which causation could be explained in overcrowding, nature of occupation and poverty can be responsible for increased burden of disease. There must be a campaign for improved public awareness and timely reporting and treatment of skin disorders is important to reduce the burden of skin disease and to improve the quality of life.

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