

## ORIGINAL ARTICLE

# Frequency of Various Skin Diseases in Patients Visiting the OPD of Dermatology Department at a Tertiary Care Hospital

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## ABSTRACT

**Background:** The largest organ in the body is the skin. It is impacted by a number of diseases, such as genodermatoses, inflammatory diseases, infections, metabolic abnormalities, and neoplastic diseases, much like every other organ.

**Objective:** To determine the prevalence of various skin diseases in patients visiting the OPD of dermatology department at a tertiary care Hospital

**Methodology:** The current cross-sectional study was carried out at the Dermatology department PGMIQ/ BMC Hospital Quetta. The study duration was six months from January 2023 to June 2023. The overall sample size in our study was 500 based on the WHO sample size calculator. The inclusion criteria were all the patients of both the gender and all ages visiting the OPD of Dermatology department PGMIQ/ BMC Hospital Quetta. Skin conditions were divided into infectious and non-infectious categories. Version 23 of the Statistical Package for Social Sciences (SPSS) was used to analyze the data.

**Results:** In the current study, a total of 500 patients were enrolled. The male patients were 210 (42%) while female patients were 290 (48%). The frequency of infective diseases was 225 (45%) while non-infective diseases were 275 (55%). The distribution based on infective diseases shows that the most frequent condition was scabies in 170 (34%) patients followed by fungal infections in 25 (5%) patients, Warts in 15 (3%) patients and Impetigo in 15 (3%) patients. The distribution of non-infective diseases shows that the most frequent condition was Acne in 90 (18%) patients followed by melasma in 50 (10%) patients, alopecia areata in 25 (5%) patients and psoriasis in 20 (4%) patients.

**Conclusion:** Non-infectious skin disorders were more common, according to our research. The most prevalent dermatosis was scabies. Our investigation revealed eczema and fungal infections, the causes of which might be attributed to poverty, occupational features, and overcrowding, which can all contribute to an elevated illness burden. A campaign to raise public awareness is necessary, and prompt reporting and treatment of skin conditions are crucial to reduce the prevalence of skin diseases and enhancing quality of life.

**Keywords:** Frequency; Skin diseases; Scabies; Dermatoses

## INTRODUCTION

The largest organ in the body is the skin. It is impacted by a number of diseases, such as genodermatoses, inflammatory diseases, infections, metabolic abnormalities, and neoplastic diseases, much like every other organ<sup>1,2</sup>. Globally, dermatological disorders are prevalent health issues and the fourth most frequent cause of disease-associated morbidity. Ten to fourteen percent of the disorders encountered by family physicians are caused by them<sup>2-3</sup>. Skin problems are the most common reason people see their general practitioner in developed nations like the UK<sup>4</sup>. According to the Global Burden of Disease Study report in 2019, skin and subcutaneous diseases caused the greatest number of new cases and fatalities in South Asia<sup>5</sup>. Numerous variables, such as literacy levels and ethnic, environmental, economic, and social factors, impact the prevalence of skin disorders in every given nation<sup>6</sup>. The distribution of skin conditions varies across developing and developed nations<sup>7</sup>. Infectious skin illnesses are more common in poorer nations due to factors including poverty, inadequate cleanliness, a lack of basic facilities, and overcrowding. Understanding the prevalence of different illnesses in a nation aids in developing of policies, the distribution of resources, and the prevention of disease<sup>8</sup>. Investigations of prevalence in the general population and research from specialist dermatological institutions may be used to determine the pattern of illnesses in a nation. There is a lack of information on the frequency and distribution of skin-related illnesses in general population in developing nations<sup>2,8</sup>. Nonetheless, a number of studies conducted in hospitals provide information on the frequency and patterns of skin-related illnesses in the general community<sup>9,10</sup>. The burden of skin-related disorders may be ascertained with the use of these investigations. The objective of the study was to determine the frequency of various skin diseases in patients visiting the OPD of Dermatology

department PGMIQ/ BMC Hospital

## MATERIALS AND METHODS

The current cross-sectional study was carried out at the Dermatology department PGMIQ/ BMC Hospital Quetta. The study duration was six months from January 2022 to June 2022. The study approval was given by the institutional ethical committee for research. The overall sample size in our study was 500 based on the WHO sample size calculator. The inclusion criteria were all the patients of both the gender and all ages visiting the OPD of Dermatology department PGMIQ/ BMC Hospital Quetta. All patients having follow-up reports and those who had repeat visits were deemed ineligible for the study. Every patient gave their informed permission, and all patient data was documented. Each patient had a comprehensive medical history and a pertinent physical examination. A dermatology consultant diagnosed each case. Each patient's diagnosis of skin issues was recorded, along with their age and gender. The majority of the diagnosis was clinical. Skin biopsies and other examinations were carried out as needed to confirm the diagnosis. Skin conditions were divided into infectious and non-infectious categories. Version 23 of the Statistical Package for Social Sciences (SPSS) was used to analyze the data. Data analysis was done using descriptive statistics. For quantitative factors like age, the mean and standard deviation were computed. For qualitative factors like gender and the diagnoses of different skin conditions, frequency and percentages were computed.

## RESULTS

In the current study, a total of 500 patients were enrolled. The male patients were 210 (42%) while female patients were 290 (48%). (Figure 1) Based on age wise distribution, the patients in age group <20 years were 125 (25%), 20-30 years were 170 (34%), 31-40 years were 95 (19%), 41-50 years were 50 (10%) while the patients in age group >50 years were 60 (12%). (Table 1) The

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infections were divided into infective and non-infective skin diseases. The frequency of infective diseases was 225 (45%) while non-infective diseases were 275 (55%). The distribution based on infective diseases shows that the most frequent condition was scabies in 170 (34%) patients followed by fungal infections in 25 (5%) patients, Warts in 15 (3%) patients and Impetigo in 15 (3%) patients. (Figure 2) The distribution of non-infective diseases shows that the most frequent condition was Acne in 90 (18%) patients followed by melasma in 50 (10%) patients, alopecia areata in 25 (5%) patients and psoriasis in 20 (4%) patients. The distribution of other non-infective conditions is given in figure 3.

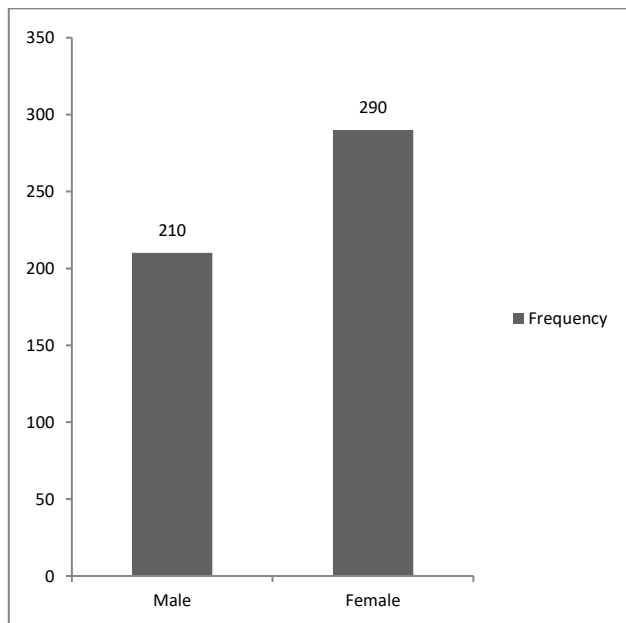


Figure 1: Frequency of enrolled patients based on gender

Table 1: Frequency of enrolled patients based on age

Age	Frequency (%)
<20 years	125 (25%)
20-30 years	170 (34%)
31-40 years	95 (19%)
41-50 years	50 (10%)
>50 years	60 (12%)

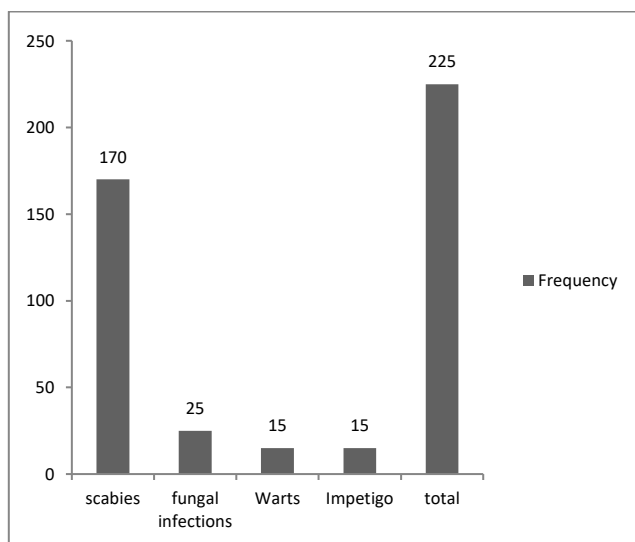


Figure 2: Distribution of patients based on infective diseases

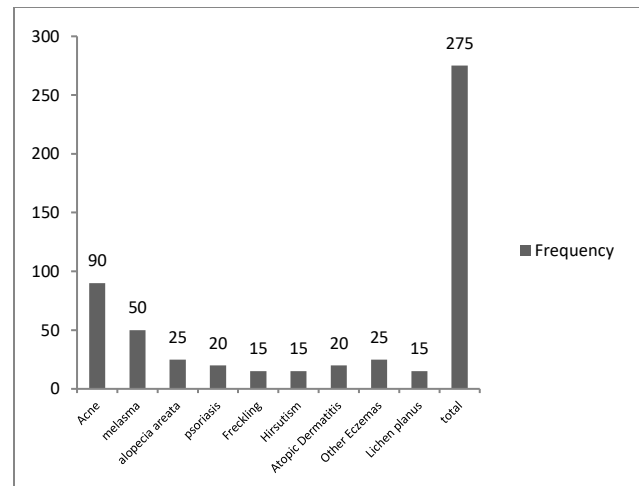


Figure 3: Distribution of patients based on non-infective diseases

## DISCUSSION

In the current study, a total of 500 patients were enrolled to determine the frequency of various skin problems in patients visiting the Dermatology department PGMIQ/ BMC Hospital Quetta. Scabies was the most prevalent illness in our research. Females outnumber men in our research. The findings are comparable to those of another research conducted in Dhaka, Bangladesh, by Nurul Alam et al.<sup>11</sup>. Our research was not in line with the other study in which male outnumbered female<sup>12,13</sup>. Of the patients, 15 (3%) had hirsutism. This could be because our research was dominated by women. There were 20 cases of psoriasis (4%) and 15 cases of lichen planus (3%).

For 225 (45%), infectious illnesses were detected. Our research's incidence is greater than that of Nurul Alam et al.'s study from Bangladesh<sup>11</sup>. The incidence of infectious illness was the same as our research, according to findings from studies conducted in Karachi<sup>14,15</sup>, Lahore<sup>6</sup>, and Bahawalpur<sup>12</sup>. Compared to our research, the incidence of infectious illnesses was greater in the investigations of Das, Zamzashis<sup>16</sup>, and others<sup>17-20</sup>. This may be the result of a different research design and context. Acne 90 (18%) was the most prevalent dermatological condition in non-infected groups. The distribution based on infective diseases shows that the most frequent condition was scabies in 170 (34%) patients followed by fungal infections in 25 (5%) patients, Warts in 15 (3%) patients and Impetigo in 15 (3%) patients. Similar findings were seen in a prior research conducted in Lahore<sup>6</sup>. Our findings are consistent with those of other investigations<sup>1,2,5,17</sup>. This indicates that skin issues are a greater concern for women. The majority of our patients came in between the ages of 20 and 40. Infectious illness 225 (45%) was less prevalent than non-infectious skin diseases 275 (55%). Previous investigations have shown same frequency (21-25). In the non-infectious group, acne was the most prevalent dermatosis (n=90, or 18%). Melasma 50 (10%) followed in frequency; additional trials showed comparable findings<sup>1,2,12,13</sup>. This is because of the overuse of cosmetics, the desire for fair skin, and the potential link between acne and the use of steroids and herbal remedies. The incidence in our research is comparable to that reported by Nurul Alam et al. and others<sup>11,17,18,24</sup>.

The frequency of acne in the research of Tamizud Din et al. and Maryam et al.<sup>27</sup> and Zamanian et al.<sup>26</sup> is comparable to ours. 50 (10%) of the participants in our research had melasma. This might be brought on by dietary variables, female preponderance, and higher sun exposure. These findings are consistent with earlier research by Ahmad et al.<sup>29</sup>, Gupta<sup>28</sup> and M. Nurul Alam<sup>11</sup>. They also reported a comparable incidence to ours. Scabies was the most prevalent dermatosis within the infected group, accounting for 170 cases (34%). An overcrowded population, unsanitary

communal living conditions, illiteracy, and poverty may all be contributing factors. Other research had similar findings to ours<sup>21, 27-29</sup>. There were 25 cases of fungal infection (5%). This is contrasted with previous research<sup>21,30-33</sup>. We recommend further research to determine the prevalence of skin conditions, since this is essential for their prevention and management.

## CONCLUSION

Non-infectious skin disorders were more common, according to our research. The most prevalent dermatosis was scabies. Our investigation revealed eczema and fungal infections, the causes of which might be attributed to poverty, occupational features, and overcrowding, which can all contribute to an elevated illness burden. A campaign to raise public awareness is necessary, and prompt reporting and treatment of skin conditions are crucial to reduce the prevalence of skin diseases and enhancing quality of life.

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