

## Pattern of skin diseases among patients attending skin OPD of BPS GMC, Khanpur kalan

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### ABSTRACT

**Background:** There exists a wide variety of infectious and inflammatory skin disease. A pattern may exist in a given geographical area. Knowledge of these patterns proves helpful to care givers.

**Aim:** To identify the pattern of diseases among patients who attended the outpatient department of Skin- VD & Leprosy of BPS GMC Khanpur Kalan.

**Methods:** Patients (20500) attending the Skin-VD and Leprosy outpatient department from January to December 2012 were included in this retrospective study. The medical records of the patients (history, physical examination, laboratory investigations) were analysed to ascertain the diagnosis and management. All patients were diagnosed clinically by qualified dermatologists and supported by relevant investigations.

**Results:** There were 20500 patients that constituted 10.3% of the total OPD attendance of the hospital (20500/210900) excluding those who had repeat visits, 15307 new diagnoses were made including multiple diagnoses in some patients. The highest incidence was of infection (34.4%) followed by eczema (31.9%), urticaria (7.8%), papulo-squamous disorders (6.3%) and others.

**Conclusion:** Based on present trend, training of the primary health care providers in dermatology should emphasize these common conditions, with the aim of improving primary health care and alleviating the burden on hospital care.

**Key words:** dermatoses, eczematous, infectious

### INTRODUCTION

In India, skin diseases have been recognised since the Vedic age. Outpatient departments treating dermatology patients were set up in the big cities only in the early part of 20<sup>th</sup> century and by the middle of that century, post graduate medical courses began in various universities.<sup>1</sup>

With the large number of basic and clinical research activity, and the consequent recognition of newer dermatological disorders, dermatology, venereology and leprology is now considered to be the most sought specialities.<sup>1</sup> The skin is the most exposed organ of the body and is most vulnerable to the assault of external agents. The spectrum of dermatoses varies from genetic, infections, immunological, inflammatory and cosmetic disorders to tumours and diseases of the appendages.<sup>1</sup> The vicious cycle of ignorance, poverty and disease plays a prominent role in the prevalence of many skin diseases. According to WHO, prevalence studies of the general population in developing countries reported high prevalence figures for skin diseases (21-87%).<sup>2</sup> This study was

undertaken to obtain baseline data on the skin diseases common in this part of northern India.

### MATERIALS AND METHODS

There were 20500 dermatological patients which constituted 10.30% of the total out-patient attendance of the hospital. 15307 new outdoors dermatological patients, excluding those who had repeat visits, constituted the study material during January' 2012 to December' 2012.

The personal bio-data of each patient was documented including name, age, sex, occupation and duration of skin disease. Clinical examination was subsequently conducted on all dermatological patients. The diagnoses were based on history of presentation, physical examinations and supportive investigations carried out wherever necessary. Descriptive statistics were carried out.

### RESULTS

Infections constituted the largest single group of diseases accounting for 5266 (34.40%) new diagnoses. Scabies was the most common infection

(1969-12.87%) followed by fungal infections (1455-9.50%) which include dermatophytes (1066-6.96%), pityriasis versicolor (250-1.63%), candidiasis (139-0.90%). Bacterial infections were seen in 728 patients (4.75%) in various forms viz.; folliculitis (302-1.97%), pyoderma (208-1.35%), impetigo-contagiosa (198-1.29%) and bullous impetigo (20-0.13%). Sexually transmitted infections were seen among 436-2.84% patients; wherein vaginal discharge was the prominent feature. Skin tuberculosis was seen in 55-0.35% patients; out of which forty patients were diagnosed as lupus vulgaris, ten were of tuberculosis verrucosa cutis and five patients were of scrofuloderma. Diagnosis was confirmed on histopathological examination. Leprosy was found only in 30-0.19% patients. Table 1. provides group wise breakup of diagnosis.

Eczema was the second largest group (4893-31.96%). Among this group seborrhoeic dermatitis was seen in 1603-10.47%, atopic dermatitis in 1252-8.17%, airborne contact dermatitis 908-5.90%, allergic contact dermatitis in 332-2.16%, irritant dermatitis in 237-1.54% and others (LSC, DDE & pit. alba) 561-3.66%.

Urticaria represented the third big group of dermatoses (1195-7.80%). Patient presented with different variants of urticaria i.e. acute urticaria, acute on chronic urticaria, chronic idiopathic urticaria, physical urticaria, cold and aquagenic urticaria. Papulo-squamous disorder was seen among 977-6.38% patients. In this group psoriasis was the most common diagnosis (594-3.88%) followed by lichen planus 176-1.14%, pityriasis rosea 98-0.64%, erythroderma 87-0.56% and palmoplantar keratoderma 22-0.14% patients.

Hair disorders were observed in 698-4.5% patients i.e. telogen effluvium 498-3.25%, male pattern alopecia 98-0.64%, alopecia areata 98-0.64% and anagen effluvium seen in 2 patients who were on chemotherapy. Acne was seen in 672-4.39% patients. Pigmentary disorders (439-2.86%) observed as; melasma 258-1.68%, post-inflammatory hyper/hypo pigmentation 142-0.92% and vitiligo in 39-0.25%. Skin tumours (397-2.59%) were seen in the form of keloids 236-1.54%, other benign tumours 156-1.01% and basal cell carcinoma 5 patients. Nail disorders were seen in 102-0.66% patients.

Drug related skin diseases were observed in 50-0.32% patients wherein 12-0.07% patients presented with Stevens Johnson syndrome, fixed drug eruption 15-0.09%, Vasculitis 13-0.08% and erythematous rash 10-0.06% patients. Miscellaneous group 618-4.03% i.e. genodermatosis 49-0.32%, systemic illness with skin manifestations 17-0.11%, Connective tissue disorders 43-0.28%, Pruritic of unknown origin 192-1.25%, pregnancy prurigo 98-0.64% and xerosis 105-0.68%. Vesiculobullous disorders were observed in 25 patients (0.16%). Insect bite was observed in 89 patients (0.58%). It was observed that there is increase in number of patients during summer season which reached at the peak in the rainy season. The patients who required admission were admitted in the ward and improved with treatment.

## DISCUSSION

As this is a hospital based study, data obtained cannot be considered to be representative of the prevalence of the diseases in general population. The dermatological patients were 10.3% of the total outdoor patients of this tertiary care hospital situated in the rural background are indirect indicator of the burden of the skin diseases in the population. Very few reports of such studies are available in the literature. The author could find only one Indian study conducted in a tertiary care teaching hospital in Kerala.<sup>3</sup>

Infection was the most common group of diseases in most of the similar studies<sup>4, 5, 6</sup>. Onayemi et al<sup>4</sup> observed a higher prevalence of infections than in our study. Scabies and dermatomycosis were the most common infections observed as seen in other studies.<sup>7, 8, 9, 10</sup> It has been suggested that poor sanitary conditions, overcrowding and malnutrition are predisposing to certain infection and parasitic dermatoses in the tropics<sup>11</sup>, although we did not substantiate the role played by these factors in our patients, as we did not inquire about their living conditions and nutritional habits, we believe that this might be a possibility because our hospital is located in the rural background. One study from Saudi Arabia showed that eczema was more common than infections.<sup>12</sup>

Eczema was second most common dermatosis as

seen in the previous Indian study and much higher than the study conducted in Sokoto, Nigeria.<sup>3,4</sup> Urticaria is the third common dermatosis observed in our study whereas in yet another study it was almost double than our study.<sup>6</sup>

Papulo-squamous disorder was observed in 6.38% patients, almost half as observed by Asokem et al., but is comparable to another study.<sup>3,6</sup> Psoriasis is a common chronic condition that affects about 1-3% of the population<sup>13</sup>. It can have substantial impact of health related quality of life.<sup>14</sup>

Acne is a common skin disease that affects susceptible pilosebaceous follicles of mainly teenagers and young adults.<sup>15</sup> It is found worldwide. Our observation corresponds with the earlier Indian study.<sup>3</sup> Hair diseases were observed in 4.5% higher than Asokem et al.<sup>3</sup>

Nail disorders were observed in almost half as correspond to previous Indian study.<sup>3</sup> Our study has revealed that the most common skin disease such as scabies, dermatophytosis, bacterial infection, pityriasis versicolor, common pyodermas and candidiasis are preventable. Appropriate health education is vital in combating their spread, reducing

the associated morbidity and improving the health status of the population.

## CONCLUSION

The fact that common infections account for such a large volume of the outdoor patient attendance, points to the poorly developed referral system in our healthcare. Ideally most of the common infections should be managed at the periphery levels. To achieve this, the primary health care institutions need to be strengthened in terms of manpower and the level of knowledge and skills. Furthermore, a concerted effort should be made at all levels of healthcare to train health workers in the diagnosis and treatment of the more common dermatological conditions.

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