

# Spectrum of Dermatological Conditions in a Rural Community

Muhammad Arif Maan, Maqsood Ahmad, Umair Ahmad, Muhammad Saeed Akhtar, Muhammad Irfan, Zahid Yasin Hashmie

---

## Abstract

**Objective:** To determine the prevalence of dermatological conditions in a rural community.

**Study Design:** Cross-sectional descriptive study

**Place and Duration of study:** Study was conducted in Tehsil Headquarter Hospital Bhawhana in May, 2011. **Materials and Methods:** 300 patients belonging to Tehsil Bhawana and surrounding villages reported in the camp. Forty three patients both male and female had dermatological conditions and were included in the study. They were evaluated, diagnosed and given treatment for various dermatological conditions. **Results:** Mean age of patients was  $24.48 \pm 14.48$ . Out of these

Patients 17 patients (39.53%) had Scabies, 6(13.95%) had Acne Vulgaris, 5(11.6%) had urticaria, 4 patients (9.3%) had contact dermatitis, 2 (4.6%) had pemphigus vulgaris (PV), 2 (4.6%) had burn injuries, 2 (4.6%) had seborrhic dermatitis and 1 patient (2.3%) each of vitiligo and Helmenthic infections, 3 patients (6.9%) had lichen planus (LP). **Conclusion:** Scabies is the most prevalent dermatological condition in rural communities and the scenario can be improved by improvement in the hygienic conditions and the general public awareness. **Key Words:** Scabies, Acne Vulgaris, Urticaria.

---

## INTRODUCTION

Community camps offer an opportunity for the people belonging to rural communities to avail best medical opinions at their door step by the respective specialists of various fields. Community camps are frequently arranged in various parts of world such as Africa and Asia. Skin diseases are highly prevalent worldwide. It is one of the top 15 groups of medical conditions for which health care spending increased the most between 1987 and 2000. Approximately 1 of 3 people in the United States had a skin disease at any given time.<sup>1</sup> Dermatological conditions are also very prevalent in Pakistan.<sup>2</sup> The majority of patients with skin disease in the rural communities are managed by general practitioners not formally trained as dermatologists because of shortage of dermatologists in rural communities. World wide different studies have been conducted regarding spectrum of dermatological conditions in primary settings. In one of the studies in primary care setting, the percentage of consultations relating to cutaneous disorders varied between practices, ranging from 3% to 18.8%, with a mean of 8.4%. Eczema accounted for 22.5%,

infections 20.3% and benign tumours for 11.4% of consultations with a dermatological basis.<sup>3</sup> In one of studies done at Bhawalpur, it was found that the most common dermatoses were found to be skin infestation, scabies and other cutaneous infections (bacterial, fungal and viral etc.) followed by eczema/dermatitis, disorders of sebaceous/sweat glands, urticaria/ drug eruption, pigmentary disorders, papulo squamous disorders and other dermatoses in that order.<sup>4</sup> In a recent study in Rawalpindi it was found that the most common infectious skin disorder was scabies accounting for 18.9% of the total skin diseases. Most common allergic disorder was dermatitis that accounted for 13.9% of the cases. Acne being the most common inflammatory condition constituted 11.96% of the cases. The most commonly affected age group was between 21-30 years with 19.5% of the cases.<sup>2</sup> The dermatological conditions are also more prevalent in communities with low socio-economic status.<sup>5</sup> Ongoing care for people with skin diseases can be optimized by understanding the incidence and population, prevalence of various skin diseases. In one of the

studies skin diseases accounted for 12.4% of all diseases seen by the participating family physicians.<sup>6</sup> The rationale of present study is to assess the spectrum of various dermatological conditions in a rural community so that by knowing the frequency of prevalent diseases awareness can be created in those communities regarding the treatment and prevention of these diseases.

### MATERIALS AND METHODS

It was a cross-sectional observational study conducted in Tehsil Bhawana in May 2011. A community camp was arranged in Tehsil Headquarter Hospital Bhawana. They were provided with specialist opinion regarding medical, surgical, gynaecological, pediatric and dermatological conditions. They were evaluated and given treatment according to their diseases. The data regarding the diseases was recorded on the predesigned performa by us.

Data was analyzed using SPSS version 10. Numeric variables like age were expressed as Mean  $\pm$  S.D. Frequencies, percentages were calculated for gender of patients and for patients presenting with different diseases in the camp.

### RESULTS

300 patients both male and female with different medical, surgical, pediatric and gynaecological problems were evaluated in the camp. In this study 43 patients with dermatological disorders were included, out of those 26 were male and 17 were female, (table 1). 107 patients presented with medical problems, 56 patients had surgical complaints. 44 females had Gynaecological complaints and 50 children presented with pediatric diseases Mean age of patients was  $24.48 \pm 14.48$ . (table 2) Out of these patients 17 (39.53%) had scabies, 6 (13.95%) had acne vulgaris, 5 (11.6%) had urticaria, 4 (9.3%) had contact dermatitis, 2 (4.6%) had pemphigus vulgaris, (PV) 2 (4.6%) had burn injuries, 2 (4.6%) had seborrheic dermatitis (SD), and 1 patient (2.3%) each of vitiligo and helmenthic infections, 3 patients (6.9%) had lichen planus (LP). (fig 1)

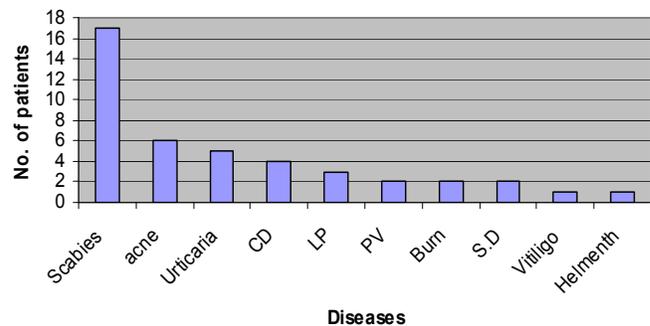
**Table-1**  
**Gender of Patients**

Male	Female
26	17

**Table-2**  
**Age of Patients**

Age	24.48 $\pm$ 14.48
-----	-------------------

**Figure-1**  
**Frequency of Patients**



### DISCUSSION

Dermatological conditions are not uncommon in rural communities. In our camp out of 300 patients presenting in the camp, 43 (14.33%) had dermatological problems. This is approximately near the studies conducted worldwide.<sup>6</sup> Out of the dermatological conditions Scabies is by far the most common infection. This finding is similar to study conducted in Bhawalpur showing spread of scabies in rural communities, as well as in patients belonging to lower socioeconomic class, living in small crowded settings.<sup>4</sup> Acne vulgaris was the second most common infection seen in 6 patients. Similar findings of prevalence of acne vulgaris was seen in study conducted in Germany.<sup>7</sup> Because patients with a more severe skin disease and a lower quality of life made the most frequent use of health care, paying particular attention to patient's physical symptoms and psychosocial impairments may have beneficial consequences for dermatological treatment by increasing satisfaction with treatment and patient compliance with dermatological interventions.<sup>8</sup>

### CONCLUSION

Dermatological diseases are common in rural communities, scabies being the most commonly seen dermatosis Frequent camps should be arranged for such communities, so that best dermatological care can be provided first hand at the doorstep of patients. Scenario can be improved by improvement in the hygienic conditions and the general public awareness.

---

Awareness can be created in those communities regarding the treatment and prevention of these diseases by providing frequent free medical camps so that spread of diseases like scabies can be prevented.

#### REFERENCES

1. Davila M, Christenson LJ, Sontheimer RD. Epidemiology and outcomes of dermatology inpatient consultations in a Midwestern U.S. university hospital. *Dermatol Online Journal* 2010; 16; 12
2. Din T, Butt A, Fatima B, Abbas H. Burden of skin diseases at a tertiary care hospital J Rawal Med Coll 2010; 14:90-2.
3. Kerr OA, Tidmann MJ, Walker JJ, Aldrige RD, Benton EC. The profile of dermatological problems in primary care. *Clin Exp Dermatol* 2010;35; 380-83.
4. Qamar AG, Malik RA. Skin Diseases in Bahawalpur. *J Pak Assoc Derma* 2000; 10:3-8.
5. Khalifa KA, Al-Hadithi TS, Al-Lami FH, Al-Diwan JK: Prevalence of skin disorders among primary-school children in Baghdad Governorate, Iraq. *East Mediterr Health J* 2010; 16:209-3
6. Verhoeven EWM, Kraaimaat FW, Kerkhof PCM, Duller P, Valk PGM, Hoogen HJM et al. Skin Diseases in Family Medicine: Prevalence and Health Care Use. *Ann Fam Med* 2008; 6: 349-354.
7. Augustin M, Herberger K, Hintzen S, Heigel H, Franzke N, Schäfer I. Prevalence of skin lesions and need for treatment in a cohort of 90 workers. *Br J Dermatol* 2011; 165:865-73.
8. Renzi C, Abeni D, Picardi A, et al. Factors associated with patient satisfaction with care among dermatological outpatients. *Br J Dermatol* 2001; 145:617-623.

#### AUTHORS

- **Dr Muhammad Arif Maan**  
Associate Professor Dermatology  
Punjab Medical College, Faisalabad
- **Dr. Maqsood Ahmad**  
Assistant Professor Medicine  
Punjab Medical College, Faisalabad
- **Dr. Umair Ahmad**  
Senior Registrar Medicine  
Allied Hospital, Faisalabad
- **Dr. Muhammad Saeed Akhtar**  
Assistant Prof. Medicine  
University Medical & Dental College, Faisalabad
- **Dr. Muhammad Irfan**  
Medical Officer  
Allied Hospital, Faisalabad
- **Prof. Dr. Zahid Yasin Hashmie**  
Principal & Head of Medicine  
PMC/ Allied & DHQ Hospitals, Faisalabad