



EPIDEMIOLOGICAL STUDY OF SKIN (DERMATOLOGICAL) DISEASES AND ITS TREATMENT IN NORTH GUJARAT

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ABSTRACT

Skin diseases accounts for 10-20% of all consultations in general practice. Most common skin complaints are Dermatitis, Eczema, Acne, Urticaria, Psoriasis, skin allergy etc. They do not cured completely. We have carried out epidemiological study among skin diseases patients in the region of North Gujarat State with the objectives to check the skin problems, to identify if any common patients life style factors is responsible for skin problems, to study the symptoms of skin complications, to study the drug prescription and drug utilization in skin problems and to study the pharmacoconomics of the skin problems. Randomly 521 patients were approached with pre-prepared questionnaires directly at clinics and hospitals of general physician and skin specialist. Acne or pimples (14%), Eczema (8%), Non-specific infections (11%), Hyper pigmentation (7%) and Alopecia (9%) were the most prevalent skin related complications among these patients. Itching (80%) was the common symptoms with redness (18%), swelling and inflammation (17%). Awareness of people among food and food habit observed quite less which might be responsible for development of skin diseases. The prescriptions of anti-histaminic drug were found higher and are rational because about 80% patients were itching problem with skin diseases. Similarly use of analgesics and anti-inflammatory drug is also rational with the swelling and inflammatory symptoms in patients. The treatment of skin complications was found more or less rational, however few irrational prescription were also found. Cost of the treatment for skin diseases was comparatively higher which increase economic burden to the patients which can be minimize by patient awareness.

Keywords: Antibiotics, Dermatology, Epidemiology, Pharmacoconomics.

INTRODUCTION

There are numbers of people in India suffering from common skin problems. They are found in children, young and adults as well as in old persons. The common skin problems are Acne, Burn scars, Hyperhidrosis, Psoriasis, Scabies, Skin grafting, Vitiligo, Pediculosis, Herpes simplex infection, Varicella, Herpes Zoster, Erythema, Urticaria etc⁵. Dermatological problem in India manifests as primary and secondary cutaneous complaints. Among them, allergy and itches are widely observed in most of the patients. Yellowish or dryness of skin in normal old age, Pruritus, Hypersensitivity reaction, Eczemas, Pellagra that type of skin problems are quite observed in the patient. Usually for peak level skin disorder, the therapy of skin problems is longer for complete removal of problems. Use of drug like Benzoyl Peroxides, Proactiv, Antibiotics, Retin-A, Oral retinoid, Salicylic acid, Anti-Histaminic, Minerals and Vitamins, Steroids, Analgesic are of more interest for skin specialist for the treatment¹. Allergic skin reactions with drug therapy are also commonly observed in patients. It is very difficult to find out the specific allergens responsible for common skin problems so the treatment is very complex and it does not yield 100% results in such patients. Ultimate way of prevention of such allergic problems is that "Live away from inciting agent of allergy (allergens)". That will yield well-being for such common hyper sensitive patients.

Objectives

- To check the skin problems in the North Gujarat region.
- To identify patient's life style factors are responsible for skin problems.
- To study the symptoms of skin complications.
- To study the drug prescription and drug utilization in skin problems.
- To study the pharmacoconomics of the skin problems.³

METHODOLOGY

80% patients were having itching as the major symptom of skin complication. 18% patients were having redness, 17% were with swelling and inflammation, 12% were with pruritus, 12% having pus formation, 11% patients were having skin rash, 7% were having lesions, 6% were with spotting, 4% were with skin grafting, 3% were having sneezing. 2% each prevalence found for skin eruption, crimping, Ulcers, Anaphylaxis (Figure 3). 88% patients were purely vegetarian while other (12%) were non-vegetarian .60% patients have habit of eating pickles especially

The study was conducted in three major districts of north Gujarat Mehsana, Sabarkantha, and Patan. We have studied randomly 521 patients in these three districts of North Gujarat. Details collected from patients during their visit to general physician and skin specialist according to the pre-prepared questionnaires. The details of patients like age, sex, occupation and routine work, life style details like food habits, bath habit, smoking and or tobacco habit, laboratory test carried out and their results, details of the diagnosed disease of skin and with other diseases if any, their symptoms, duration of disease. We have also studied the drug prescribed and cost of treatment of all patients. The results were analyzed statistically.

RESULT AND DISCUSSION

We collected the data 26% from Patan district, 14% from Sabarkantha district and 60% from Mehsana district. Among the patients 19% were students, 16% were farmers, 28% were labours, 11% were servicing people, 2% were business people and 15% with other occupation than above mentioned occupations (Figure 1). 41% patients were from urban areas and 59% patients were from rural areas.

The prevalence of disease was Acne or pimples (14%), Eczema (8%), Non-specific infections (11%), Hyper pigmentation (7%) and Alopecia (9%). Other complications like dermatitis (5%), Burns (2%), Dandruff (4%), Scabies (5%), Allergy (6%), Ichthyosis (4%), Phrynoderma (3%), Folliculitis (2%), Psoriasis (6%), Vitiligo (3%), H. Zoster (2%), Flup cox (5%), Seborrhic dermatitis (5%), Scleroderma (2%), Malaria (2%), Comedous (2%), Atopic dermatitis (2%), Intertrigo (5%), Urticaria (3%), Dermatophytosis (2%) were found among these patients. Only 1% prevalence was found for each of the skin complications like Angioderma, Hypersensitivity, Vaginitis, Erythrokeratoderma, Fishila T V, Erythema, Handsens diseases, Ergeria, Palmar exfoliation and Melasma were prevalent in less than 1% patients (Figure 2).

at evening or night and 30% takes pickles and other sour food with milk. 20% patients have habit of smoking and 33% of tobacco. 58% patients bath with cold usual tap water, 39% bath with hot water. Majority (84%) patient's bath with soap, however 16% patients bath without soap, just only with water. No significant co-existing diseases have been observed among these patients with different skin complications. 13% patients have skin complication in cold season and 12% patients have skin allergy with dust (Figure 4).

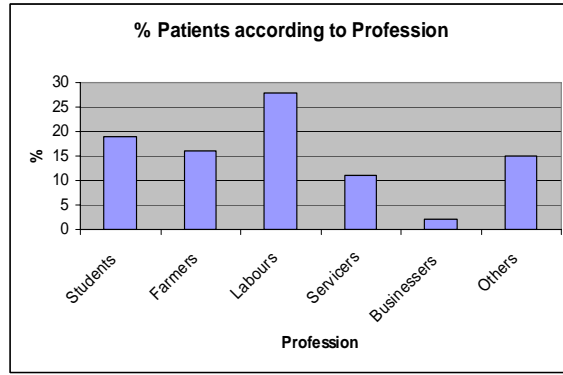


Fig. 1: % Patients according to Profession

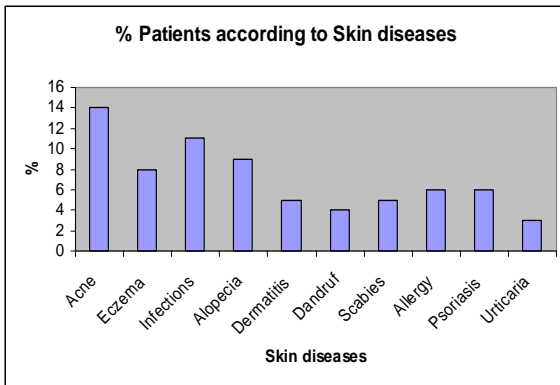


Fig. 2: % Patients according to skin disease

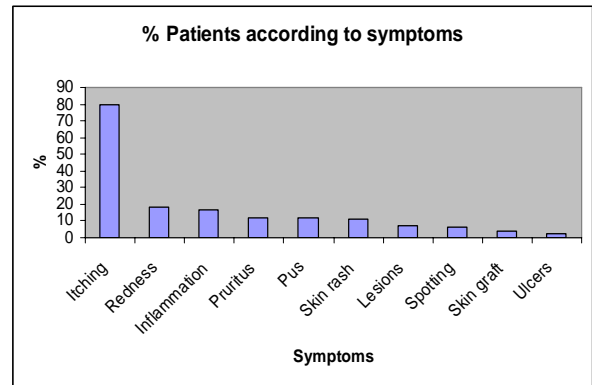


Fig. 3: % Patients according to symptoms

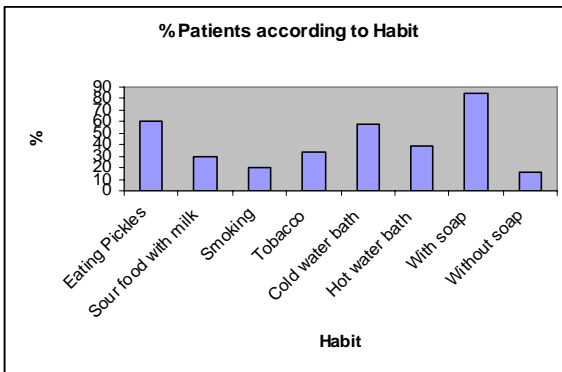


Fig. 4: % Patients according to habit

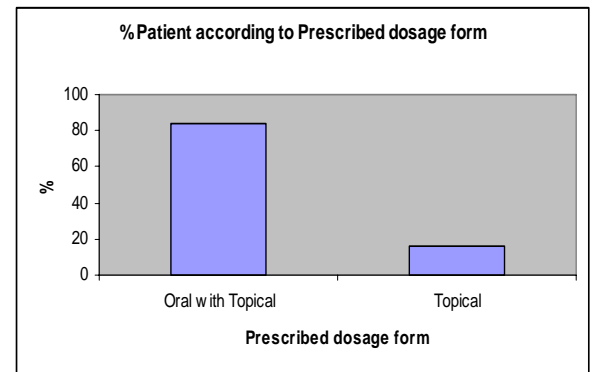


Fig. 5: % Patients according to Prescribed dosage form

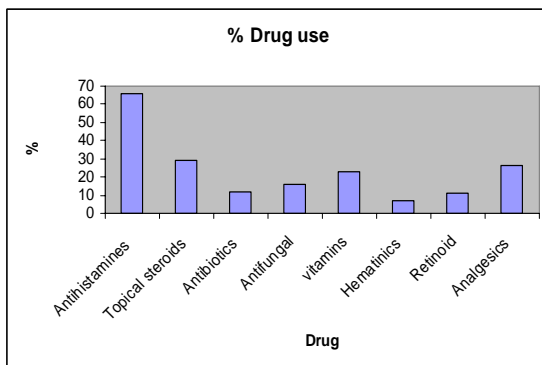


Fig. 6: % Patients according to drug use

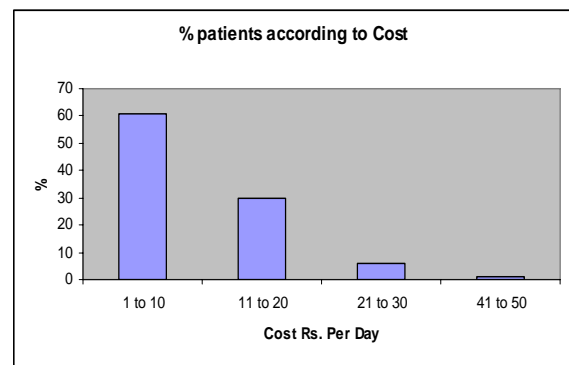


Fig. 7: % Patients according to cost

Majority of drug prescribed in skin complications are the anti-histaminics (66%), topical steroids (29%), tetracycline (26%), Erythromycins family antibiotics (20%) and Fluconazole (23%) and other anti-fungal agents (19%). Other drug found to be prescribed were B-complex vitamins or folic acid (29%), Analgesics and anti-inflammatory drugs (26%), Vitamin C and anti-oxidant (17%), Floroquinolones (12%), Zink oxide (12%), Vitamin A (11%), Penicillin (11%), Aminoglycoside antibiotics (9%), Antacids (9%), sulfa drugs (8%), Cephalosporin (7%), Hematinics (7%), Salicylic acid gel (6%), Anti-amoebics (5%) and Gresiofulvin (4%) (Fig-6). Looking towards to the pharmacoconomics of these patients, 61% patients spent up to Rs. 10 per day, 30% spent Rs. 11 to 20 per day, 6% spent up to Rs. 21 to 30 per day and 1% patients spent Rs. 41 to 50 per day for the treatment of skin complications (Figure 7). 22% patients were under treatment since last 12 months, while 37% patients were under treatment since last one month, 30% patients were under treatment since last two months. Rest of the patients was under treatment from duration more than 12 months.

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CONCLUSION

The awareness of peoples found quite less about the food and food habits that sour food like pickles should not be taken at night especially with milk, such habit might be responsible for development of skin complications. The prescriptions of anti-histaminic drug were found higher and are rational because about 80% patients have itching problem with skin diseases. Similarly use of analgesics and anti-inflammatory drug is also rational with the swelling and inflammatory symptoms in skin diseases. The treatment of skin complications were found more or less rational however little more irrational prescription were found e.g. prescription of Hematinics in about 7% patients, these might be among anemic patients. But the economic burden over the patients only for drugs and topical agents was quite higher. Cost of the treatment is quite higher.

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