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ISSN 2349-7750



CODEN [USA]: IAJPBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

http://doi.org/10.5281/zenodo.3518286

Available online at: <u>http://www.iajps.com</u>

Review Article

A REVIEW ON ETHNO-MEDICINAL PLANTS FOR TREATMENT OF SKIN DISORDERS

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| Article Received: August 2019 | Accepted: September 2019 | Published: October 2019 |
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Abstract:

Human skin, the outer covering of the body, is the largest organ in the body. It also constitutes the first line of defense. The skin guards the underlying muscles, bones, ligaments and internal organs. There are two general types of skin, hairy and glabrous skin. However, the skin can be dry, sensitive, pale, sagging or tired. People deficient in essential nutrients such as beta-carotene, the B complex vitamins and vitamins C and E often suffer from the drying of the skin. About 17,000 species of Indian flora about 7500 species of higher plants are reported to possess medicinal value and in other countries it is projected about 7% and 13%. There are estimated to be around 25,000 effective plant-based formulations, used in folk medicine and known to rural communities in India. For these reasons several plants have been investigated for treatment of skin diseases ranging from itching to skin cancer. In the present paper, an attempt has been made to document the list of ethno-medicinal plants used to cure in skin diseases. The study that a total of 21 species were identified used for skin disorder. This review helps the researchers working on skin problems to screen out the efficient or to find out the new approach in reported plants and to find out for related lead molecules in other plants which may be a step ahead in the drug discovery process. **Keywords:** Herbal Medicine, Skin Disorder, Psoriasis, Scabies, Skin Eruptions.

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Please cite this article in press Sameer Shafi et al., A Review on Ethno-Medicinal Plants for Treatment of Skin Disorders., Indo Am. J. P. Sci, 2019; 06(10).

INTRODUCTION:

Human skin, the outer covering of the body, is the largest organ in the body. It also constitutes the first line of defense. Skin contains many specialized cells and structures. It is divided into three main layers viz. epidermis, dermis and hypodermis. Each layer provides a distinct role in the overall function of the skin. Epidermis, the outer most layer of the skin, varies in thickness in different regions of the body. It is the thinnest on the eyelids (0.05 mm) and the thickest on the palms and soles (1.5 mm). The dermis also varies in thickness depending on the location of the skin. It is 0.3 mm on the evelid and 3.0 mm on the back of the body. The dermis is attached to an underlying hypodermis or subcutaneous connective tissue. The subcutaneous tissue is a layer of fat and connective tissue that houses larger blood vessels and nerves. This layer is important in the regulation of temperature of the skin itself and the body. The size of this layer varies throughout the body and from person-to-person. Hair follicles, sweat glands and sebaceous glands are the main skin appendages. The skin guards the underlying muscles, bones, ligaments and internal organs. There are two general types of skin, hairy and glabrous skin. [1] However, the skin can be dry, sensitive, pale, sagging or tired. People deficient in essential nutrients such as beta-carotene, the B complex vitamins and vitamins C and E often suffer from the drying of the skin.

The terms "skin condition" and "skin disorder" are used interchangeably to describe various skin problems, from small red bumps on the skin to widespread rashes. Some skin conditions can be unsightly but harmless, while others may be contagious. Many skin conditions are also itchy or painful. Allergic skin conditions occur when allergens (certain foods, animal dander, wool, or soaps, for example) trigger an immune system response, such as redness and itching. Viruses, fungi, bacteria, or parasites can also cause skin issues to develop. Some skin problems have a genetic component. For example, eczema, which causes weeping, blister-like rashes, is more common in allergy-prone families. The common medications for topical use include Antibacterials like bactroban or cleocin. Anthralin derivative like drithocreme. micanol, Antifungal agents like Lamisil, lotrimin and nizoral, Benzoyl peroxide, Coal tar, Corticosteroids, Retinoids and Salicylic acid. These allopathic drugs have more serious adverse drug reactions

World Health Organization estimate over 80% of the people in developing countries depend on traditional medicines for their primary health needs [2]. India is one of the largest producers of medicinal herbs and is rightly called the botanical garden of the world as it is sitting on a gold mine of well-recorded and traditionally well practiced knowledge of herbal medicine. About 17,000 species of Indian flora about 7500 species of higher plants are reported to possess medicinal value and in other countries it is projected about 7% and 13% [3]. There are estimated to be around 25,000 effective plant-based formulations, used in folk medicine and known to rural communities in India [4]. Since medicinal plants are nontoxic and easily affordable they play a vital role not only for pharmacological research and drug development, but also when plant constituents are used directly as therapeutic agents and as starting materials for the synthesis of drugs.

Natural drugs from the plants are gaining popularity because of several advantages such as often having fewer side-effects, better patient tolerance, being relatively less expensive and acceptable due to a long history of use. Besides herbal medicines provide rational means for the treatment of many diseases that are obstinate and incurable in other systems of medicine. For these reasons several plants have been investigated for treatment of skin diseases ranging from itching to skin cancer [5].

In the present paper, an attempt has been made to document the list of ethno-medicinal plants used to cure in skin diseases.

Phytomedicine for Treatment of Skin Diseases:

Herbal medicine, also called botanical medicine or phytomedicine, refers to the use of any plant's seeds, berries, roots, leaves, bark, or flowers for medicinal purposes. Long practiced outside of conventional medicine, herbalism is becoming more main stream as up-to-date analysis and research show their value in the treatment and prevention of disease. Recently, the World Health Organization estimated that 80% of people worldwide rely on herbal medicines for some aspect of their primary healthcare [6]. Traditional medicine is an important source of potentially useful compounds for the development new of chemotherapeutic agents. The first step towards this goal is the screening of plants used in popular medicine. Thus antimicrobial research is geared towards the discovery and development of novel antibacterial and antifungal agents. Plant drugs are frequently considered to be less toxic and freer from side effects than the synthetic ones [7]. Medicinal plants have been reported to be very beneficial in wound care, promoting the rate of wound healing with minimal pain, discomfort, and scarring to the patient [8].

| S. No | Botanical Name | Family | Uses |
|-------|-------------------------------------|-------------------------|--|
| 1 | Clerodendrum infortunatum | Verbenaceae. | Leaves and roots employed externally for skin diseases and alopecia. |
| 2 | Derris indica(Lamk.) Bennet | Fabaceae | Essential oil from leaves Used for skin diseases - eczema, scabies, leprosy, and for ulcers, tumours, piles, enlargement of spleen, vaginal and urinary discharges. |
| 3 | Rhinacanthus nasutus(L.) Kurz | Acanthaceae | Leaf, seed and root - used for skin diseases. A paste of the root, with lime juice, is applied externally to eczema, ringworm and Dhobi's itch. |
| 4 | Tiliacoraacuminata (Lam.) | Menispermaceae | Whole plant used externally for skin diseases |
| 5 | Thespesia populnea | Malvaceae | Root, fruit and leaf-used in psoriasis, scabies and other cutaneous diseases. |
| 6 | Actaea spicataLinn. | Ranunculaceae | Berries are used topically for skin diseases |
| 7 | Anthemis nobilis Linn | Asteraceae | Plant externally used for skin disorders |
| 8 | Ervataemia coronaria staff | Apocynaceae | Parts of the plant are used in the indigenous system of medicine for skin diseases and cancer. |
| 9 | Euphorbia antiquorum Linn | Euphorbiaceae | Fresh stems-used for skin sores and scabies. |
| 10 | Hibiscus abelmoschus Linn | Malvaceae | Seeds- used externally for skin diseases and itch. |
| 11 | Luffa cylindrica | Cucurbitaceae | Alcoholic extract of seeds exhibited fungitoxic activity. |
| 12 | Nerium oleander Linn. | Apocynaceae | Leaves used for skin diseases. |
| 13 | Pandanus utilis Bory | Pandanaceae | Root-a decoction is used for the treatment of venereal diseases |
| 14 | Polianthes tuberose Linn | Amaryllidaceae | Flowers and bulbs - externally used for skin eruptions. |
| 15 | Pterocarpus marsupium Roxb | Papilionaceae; Fabaceae | Leaves-used externally for skin diseases |
| 16 | Ranunculus sceleratus Linn | Ranunculaceae | Fresh Plant used after drying or as a homoeopathic medicine for skin diseases. |
| 17 | Rumex crispus Linn | Polygonaceae | Root used for skin eruptions, chronic skin diseases, scrofula, scrofulous skin affections and glandular swellings |
| 18 | Sapium sebiferum Roxb | Euphorbiaceae | Seed oil used for skin diseases |
| 19 | Shorea robusta Gaertn. f. | Dipterocarpaceae | Essential oil of Sal resin used as antiseptic and for skin diseases. |
| 20 | Smilax aristolochiaefolia Miller | Liliaceae; Smilacaceae | Preparations of sarsaparilla root are used for skin diseases, and psoriasis. |
| 21 | Viola biflora Linn | Violaceae | The leaves are used for treating skin eruptions and the flowers for skin irritation. |

Table 1: Ethnomedicinal Plants Used for the Treatment of Skin-Related problem

CONCLUSION:

In general, many herbs are found in Indian region and some are found in worldwide having good topical potential for treatment of most skin diseases. Acne, dermatitis, eczema, hives, pityriasis rosea and psoriasis are the most common disorder in day to day life which effects and has great influence on human physiology. This review helps the researchers working on skin problems to screen out the efficient or to find out the new approach in reported plants and to find out for related lead molecules in other plants which may be a step ahead in the drug discovery process.

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