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Cosmeceutical Current Review of Herbal Plants Used for Skin Diseases and Related Problems in India: An Overview

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ABSTRACT

Herbal Cosmetoceutical preparation defined as a product used to topical applied to the outer part of skin for growing skin glow and cleaning, beautifying, promoting attrattractive face, Herbal cosmetic formulation is very useful medicine for our life which remove the skin related problem of the body such as eczema, Dermatitis, body inflammation, Itching, psoriasis, Skin cancer, Acne, Some type of Fungal Infection Like Aspergillosis. Blastomycosis. Candidacies. Candida infections of the mouth, throat, and oesophagus Infection. Vaginal candidacies. Candida auris. Coccidioidomycosis, according to India cosmetics surveillance cosmetic product mainly used to women and young men beautifying cleaning of face and other body part. The herbal cosmetics preparation used generally for daily rotation include herbal face wash, herbal conditioner, herbal soap, herbal shampoo herbals creams herbal some of preparation used for daily purpose. Manly some of type herbal product used such as Turmeric, Henna palms, Sandalwood, Azadiritica indicail, Emblica officinalis etc. an herbal cosmetic have growing demand in the world market and is an invaluable gift of nature. Herbal product always has attracted considerable attention because of their good beautifying, promoting attractive skin and comparatively minimum or nil adverse effect with synthetic medicine. Herbs and spices have been used in maintaining and enhancing human beauty.

Keyword: Herbal medical plant, Skin Disease, Herbs Derma care, Psoriasis, Dermatitis, inflammation

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INTRODUCTION

Ayurveda system made use of many herbal plants to make cosmetics for beautifying and protection from outer body parts effects. The herbal phytochemical constituents not cause any adverse effects on the human body parts; but provide nutrients and other useful minerals to the body [1]. The Herbal plants or products are made from various cosmetic constituent to form the base in which one or more herbal ingredients are incorporated for defined cosmetic benefits [2]. Excessive exposure to heat, the causes skin to dehydrate during summer and causes wrinkles, blemishes, pigmentation and sunburns. Extremes of winter causes damages to the skin and hairs in the form of cracks of the skin and other body parts, [3] The cosmetics, according to the Drugs and Cosmetics Act is defined may be articles intended to be rubbed external parts of the body, poured, sprinkled or sprayed on, introduced into or otherwise applied to the human body or any part thereof for cleansing and beatifying of body, promoting attractiveness or altering the appearance. The cosmetic product does not come under the preview of drug license authority. The herbal cosmetics are the preparations containing photochemical from a variety of botanical sources, which influences the functions of skin and provide nutrients necessary for the healthy skin or hair. [4] There is common belief that chemical based cosmetics are harmful to the skin and an increased awareness among consumers for herbal products triggered the demand for natural products and

| natural extracts in cosmetics preparations. [5] The skin and hair beauty of individuals depends on the health, habits, routine job, climatic conditions and maintenance. [6] The origin of cosmetics forms a continuous narrative throughout the history of man as they developed. The man in prehistoric times 3000BC used colours for decoration to attract the animals that he wished to hunt and also the man survived attack from the enemy by colouring his skin and adorned his body for protection to |
|---|
| provoke fear in an enemy (whether man or animal). |
| The origin of Cosmetoceutical product were related |
| with hunting skin, butifing, religion and |
| superstition and later associated with herbal |
| medicine. [7] Plants are the natural herbal sources |
| of cosmetic product. They can be used to design |
| some useful inorganic and organic materials that |
| are called green synthesis. [8] They are made from |
| original ingredients in plants, leaves, roots, fruits |
| and flowers which have properties for health and |
| beau [9] the herbal Act specify that herbs plants |
| and faithful oils used is cosmetics product must not |
| claim to enter beyond the external layers of the |
| epidermis layer. [10] |

Cosmetic Preparation: The cosmetic product are physically divided into three phase

Solids preparation: face powder, face pack, talc, mass compact powder, face peck etc

Semi solids preparation: Creams, ointment, wax base creams, ointment, liniment, paste, etc

Liquids: Lotion, Mustering, Shampoos, conditioner, hair oils, deodorant, cleansing milk, mouth wash etc.

| <i>S.NO</i> . | Botanical Name/Common Name/ family | Chemical constituent | Use | Part of plant used |
|---------------|--|--|---|--------------------|
| 1. | Carica papaya/papitta/ Caricaceae | Papaine, carpain,benzyl isothiazaine | Skin Inflammation, Dermatitis, Eczema, Bacterial infection Digestive system, | Figure 1 |

Herbal cosmetic plant:

| 2. | Aloe barbadensis/Ghrit kumari/Liliaceae | Anthraquinone,ph thalic anhydride, polycyclic | soothing, moisturizing, Improves digestive health, Relieves anal fissures | Figure 2 |
|----|---|--|---|----------|
| 3. | Acaruscalamus (Araceae,), Sweet flag, | Sesquiterpenoids, lignans, and steroids. spooning | Aromatic, Dusting powders, Skin lotions, Skin disorders | Figure 3 |
| 4. | (Ocimum sanctum),Tulsi, Lamiaceae | Ursolic acid, Oleanolic acid, | Promotes skin healing, Antibacterial, Moisturizer, Sun screen, Emollient | Figure 4 |
| 5. | Calendula ofjicinalis, Genda Asteraceae | Alpha-cadinol, sesquiterpenoid alcohol, Taraxasterol, Calendic acid, hydroxyl OH radical | Skin care, Anti- inflammatory, Antiseptic Creams. Wound healing, | Figure 5 |

| 6. | Panax/ginseng (Araliaceae) | Protopanaxadio, beta-D-glucoside, Falcarinol, Panaxatriol ginsenosides | Stimulate blood flow to skin, Inflammation, CNS stimulant properties | Figure 6 |
|----|---|--|---|----------|
| 7. | Curcumalonga/ Haldi/ Zingiberales | <i>Curcumin,</i> curcuminoids, bisdemethoxycurc umin, zingiberene, Bisabolenes | Digestive problems and pain., skin problem, inflammation disorder, Astringent properties | Figure 7 |
| 8. | Azadiracta indica /Neem (Meliaceae) | AzadirachtinNim bin, Epoxyazadiradio ne, Salannin, Quercetin | Eczema, Skin problem, anti oxidant, inflammation, Dermatitis, | Figure 8 |

| 9. | Saffron/ Crocus sativu/kaser/ aphrodisiac | Crocin, Safranal Picrocrocin, Zeaxanthin, Gentiobiose, | Alopecia, Eczema, baldness, saffron is used as a spice, flavoring agent, increase interest in sex | Figure 9 | |
|-----|--|--|--|-----------|--|
| 10. | Achyranthes aspera/ Chirchita (Amaranthaceae | achyranthine and glycosidesBetaine , Achyranthine acid,fatty acids, oleonic acid, spinasterol, dihydroxy ketones, spathulenol, | Skin problem ,chest pain, coughs, menstrual bleeding, boils, abscesses and stomach complaints. | Figure 10 | |
| 11. | Cymbopogon/Lem mon grass / Poaceae | Citral, Geraniol, Citronellal, culinary lemongrass. Citronellal | cold, cough, Alopecia, Eczema, Face wash headache and rheumatism, Skin Dermatitis Fiver, | Figure 11 | |

| 12. | Genus Rosa/Gulab Rosaceae. | Geraniol, Citronellol, Nonadecane, Heneicosane, phenylpropanoid | Anti oxidant, inflammation, Dermatitis, anti bacterial properties. | Figure 12 |
|-----|----------------------------------|---|---|-----------|
|-----|----------------------------------|---|---|-----------|

Skin Disorder:

Bacterial skin infection; Skin Subcutaneous bactericidal infections may be divided into primary and secondary types. Primary Infections are mostly frequently incited by Staphylococci, especially Staphylococcus aureus, as well as Streptococci, mainly group A Streptococci ^{11, 12}. They are also the large common invaders in secondary infections, but gram-negative bacterial infection also often colonize dermatological Skin infection, though they do not frequently produce true secondary infection except in special locations like the outer ear part, or in certain types of chronic lesions. [13, 14].

Candidiasis: Candidacies, the overall term for infective infection with fungal, may be divided into superficial blood connective tissue infection, deep native infection, or dissemination infection. Fungal infections of the skin infection and nails area unit one amongst the foremost common Candidiasis infections worldwide. Fungal species area unit mostly found in within the human GIT tract, mouth and duct etc. Predisposition factors for infective fungal infection embody prolonged antibiotic

herbal medical care, steroid medical care, Dermatological skin trauma and immunological disorder, with the foremost severe infections currently occurring in patients with AIDS. [15].

Scabies: Scabies is a common condition and very critical symptoms itchy skin inflammation redness and swelling condition caused by human scabies mites. It can affect individual of any age group but is mostly common in the young men and the elderly. The mighty that cause scabies are tiny parasites inflammation, smaller than a pinhead. They are usually picked up by directly skin to skin network infection with someone whose already has scabies, and only very rarely from objects such as Clothing or bedding. Inflammation is the main symptom of scabies, usually starting about a month after the mites were picked up. The itching affects the body and limbs but usually spares the Head and neck, except in infants. The itching often gets worse in bed at night. It is common for several people in the same family, and their friends, to become itchy redness at roughly the same time. [16].



Candidiasis Figure: 13

Scabies Figure 14

Psoriasis: The Psoriasis infection is a common skin disorder affecting about 2% of the world wide population. It occurs equally in male and female, at any age group, and tends to come and go unpredictably. It is not infectious, and does not scar the skin. The outer layer of skin (the epidermis) contains cells which are formed at the bottom and then move up towards the External surface, gradually changing as they go, finally dying before they are shed from the surface. This journey normally takes between 3 and 4 weeks person to person contact. In Psoriasis, the rate of turnover is dramatologically increased within the affected skin outer body parts, so that cells are formed and shed in as little as 3 or 4 days. Lesions of psoriasis (often known as plaques) are Pink or red skin, but covered with silvery-white scales. They can be form a variety of shapes and sizes skin, and have well-defined boundaries with the surrounding skin [17].

Eczema (atopic dermatitis): The Eczema is the conditions mainly used to describe changes in the epidermis layer of the skin that include redness, itching, swelling etc. Blistering, oozing, crusting, scaling, thickening and sometimes pigmentation. It is most commonly in children, affecting at least 10% of infants at some stage. It usually disappears during Childhood, although it can carry on into adult life or come back in the teen age or early adult Year of age groups. It may occasionally develop for the first time in adulthood. Eczema may affected any part of The skin, including the face and other body parts of body, but the area most commonly affected are the bends of the elbows And knees, and around the wrists and neck. Other common appearances of atopic eczema Include discrete coin-sized areas of inflammation [18].



Psoriasis: Figure: 15

Fungal skin infections: Superficial fungal infections can and do occur in both healthy and compromised male person. The Most common fungal skin infections are the dermatophytoses (ring worm, tinea), ptyriasis versicolor and candidacies [19]. Dermatophytic infections are generally restricted to the nonliving cornified layers of the skin external body parts, hair and nail male and female gonads are generally effected and gonad are traditionally named according to the anatomic location of the infected body surface aria. The major types are tinea barbae infection, facie, capitis, corporis, cruris, pedis, manuum and unguium etc. The most frequently isolated causative immune cell dermatophytes are T. rubrum, T. mentagrophytes and E. flocossum in

Dermatitis: Figure 16

case of tinea pedis while M. canis, T. mentagrophytes, T. rubrum as well as T. violaceum are common causative agents in Case of tinea capitis. [20]

Viral Infection: These viral skin infections include when a virus enter the stratum corneum and children the inner layers of the skin infection. It may be many type of Examples in viral skin infections include herpes virus, simplex virus, shingles (herpes zoster) and warts. Some systemic viral infections, like chicken pox and measles, may also affect the skin disease. Viral infections cannot be cured with antibiotics such as penicillin, cephalosporin. etc [21]



Fungal skin infections Figure: 17

Acne: Acne is a very common skin related problem basically characterised by comedones (blackheads and whiteheads) and pus-filled spots (pustules). It mainly started at puberty time and varies in severity condition from a few spots on the face and much type of skin disorder, back and chest, which most adolescents can be have at some time skin in to a more serious problem that may be embarrassing, sap self-confidence and cause scarring. The skin disorder mainly affected skin outer parts of the body. (oil-producing) glands of people who get acne are particularly sensitive to normal blood levels of a hormone called testosterone may produce sex hormones. This triggers inflammation redness skin inflammation and the formation of red or pus-filled spots. [22] These can be caused by irritation, allergy, infection, an underlying disease, as well as by structural blocked pores defects for example, or malfunctioning oil glands. Examples of rashes include acne. [23]

Parasitic infections: These parasitic infections caused occur after external to parasites such as lice and scabies. [24]

Trauma: Trauma describes an injury to the skin caused by a blow, a cut, or a burn. Whenever the surface of the skin is broken, the body becomes more susceptible to infection and disease. [25.26]

Bacterial infections: Such the infections are effected by a Different type of bacteria, the most



Viral Infection Figure: 18

commonly types being staphylococci bacteria and streptococci. Bacteria may infect the outer layer of epidemics layers of skin, the follicles, or the deeper layers of skin. [27]

Pigmentation disorders: The amount of pigment within the skin is set by the number of melanin being produced by the body. Loss of pigment (hypo pigmentation) will be caused by absence of melanocytes malfunctioning cells, exposure to cold or chemicals, or some kinds of infection. a rise in pigment (hyper pigmentation) is also caused by skin irritation, hormonal changes, aging, a disorder, or the other underlying problem. Age spots, freckles and miasma are samples of hyper pigmentation.[28]. Skin disorder could be a common ailment and it affects all ages from the neonate to the elderly and cause harm in number of how. There are over m conditions that will affect the skin but most skin diseases are often categorized into nine common types. [29]

Function of Disease: Because it interfaces with the environment, skin plays a key role in protecting (the body) against pathogens. and excessive water loss. Its other functions are insulation, temperature regulation, sensation, storage and synthesis of vitamin D by action of ultraviolet (UV) and the protection of vitamin B folates, absorption of oxygen and drugs and water resistance. [30]

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