



A REVIEW ON POLYHERBAL CREAM

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ABSTRACT

Since the dawn of time, researchers have been looking for novel medications in the natural world. Everywhere in the world, products with practical uses can be made. plants' seeds, flowers, leaves, and bark, among other plant parts. Both men and women think their skin on their bodies is beautiful and protective. It plays a crucial role in one's appearance. Moisturisers, soaps, gels, oils, creams, lotions, and lotions are just a few of the numerous cosmetic products on the market. Since the dawn of time, creams have been regarded as the primary topical treatments in cosmetic products due to how simple it is to apply and remove them from the skin. Pharmaceutical creams are used to treat cuts, burns, skin wounds, and other aesthetic issues such as washing, beautifying, altering appearance, moisturising, and protecting skin from bacterial and fungal infections. Vitamins, minerals, cancer-fighting agents, oils, colours, tannins, alkaloids, starches, proteins, terpenoids, and other substances are among these bioactive components. The distinguishing quality of locally produced cosmetics is the lack of any symptoms.

KEYWORDS: Herbal, cream, formulation, cosmetics, moisturization, aloe vera, papaya, neem

INTRODUCTION

Every person on this planet wants to seem youthful and beautiful, therefore we all took various steps to tone up our skin and reduce the appearance of pimples, acne, wrinkles, and other ageing indications ^[1]. Most people today prefer natural components to synthetic ones, especially when it comes to skin care. A natural skin care product should hydrate, nourish, and moisturise the skin ^[2]. The current work represents an effort to create a natural face cream with multiple uses. A natural face cream is essential and crucial in any skin care regimen. Cosmetics are used to enhance the appearance and attractiveness of skin and to protect it from endogenous and external harmful substances. Cosmetics work to improve more than just one's physical appearance; they also help people live longer, healthier lives by preventing skin conditions. The herbal elements used in skin care products promote the strength, integrity, and texture of the skin as well as moisturising, keeping the skin's elasticity by reducing collagen, and photo protection, among other things. . This cosmetic quality is caused by the inclusion of chemicals in skin care formulations, which aid in lowering the generation of free radicals in the skin and managing its properties over an extended period of time. The best option to lessen skin conditions like ageing, wrinkles, hyperpigmentation, rough skin texture, etc. is to use cosmetic goods. The use of synthetic materials has long been detrimental to both our environment and young. multiple synthetic substances, chemicals, dyes, and their derivatives have been shown to induce a variety of skin conditions with multiple adverse effects. There is a high demand for herbal cosmetics due to the increased importance of herbs in the production of cosmeceuticals in the personal care industry. As a result, we make the most of employing herbal cosmetics. The Rigveda, Yajurveda, Ayurveda, Unani, and homoeopathic systems of medicine all have their roots in the fundamental

concept of skin care cosmetics. These are the goods that contain herbs in extract or crude form. These herbs ought to possess a range of qualities, including antibacterial, antiseptic, antiseborrheic, anti-inflammatory, and antioxidant ones. The term "herbal" denotes safety as opposed to the term "synthetic," which has detrimental effects on human health. [3] In addition to softening the skin, the aids in the healing of skin cracks and blemishes. An herbal cream that, when applied frequently, can provide skin with adequate protection while being free from any toxicity or poisonous residue or irritation. It should also be acceptable from an aesthetic standpoint.

An antioxidant is a crucial component of any skin cream used for cosmetic purposes because the skin need it greatly. This guards against damages to the cell membranes of any kind, including harm from the sun's UV rays, air pollution, smoking, and other factors [4]. The purpose of the current research is to create skin care products that do more than just moisturise.

Along with Vitamin E, mild emollients are another all-natural component that soothes, softens, and cleanses the skin without clogging the pores. Additionally, they act as a seal for skin cells, allowing you to maintain continuously supple skin [5]. Each person's skin and hair beauty were influenced by their health, habits, regular jobs, environment, and care. [6] Long-term heat exposure will cause the skin to become dehydrated. Throughout the summer, it causes sunburns, pigmentation, wrinkles, freckles, and blemishes. The harsh winter's affects on the skin and hair include cracks, sores, maceration, infections, and hair loss. [7] Skin problems can be caused by exposure to environmental pollutants such germs, chemicals, and biological agents as well as, to a lesser extent, malnutrition. They commonly affect persons of all ages. [8]

Definition of Cosmetics^[9]

The Drugs and Cosmetics Act defines cosmetics as items that are meant to be rubbed, poured, sprinkled, sprayed, inserted into, or otherwise applied to the skin. washing, beautifying, increasing beauty, or changing the look of the human body or any component thereof. The cosmetic is not covered by the drug licence presumption.

Need of Cosmetic

- To enhance general appearance
- Minimise skin defects
- Psychological application
- Social application
- Clinical application
- Skin defence against UV radiation, dust, and harsh weather
- Cleansing effect
- Emollient effect

CLASSIFICATION OF COSMETIC

| | |
|---------|--|
| SKIN | Powder, lip balm, cream, lotion, sunscreen and sunburn preparation |
| HAIR | Shampo, hair oil/hair tonic, Hair colourant |
| MOUTH | Dentifrices |
| SHAVING | Shaving preparation, After shave preparation |
| LIP | Lipstick, Lipgloss |
| EYE | Eye shadow, Eye liner |
| NAIL | Nail lacquer, Nail lacquer remover |

ADVANTAGES: ^[10-12]

- When applied to the skin, it is non-annoying and less oily than ointment.
- Effectively washable with water. Simple to remove.
- Easy to spread over the surface of the skin (i.e., easy to apply).
- Compared to several other pharmaceutical semi-solid dosage forms, they provide a longer period of action at the location of usage.

DISADVANTAGES:

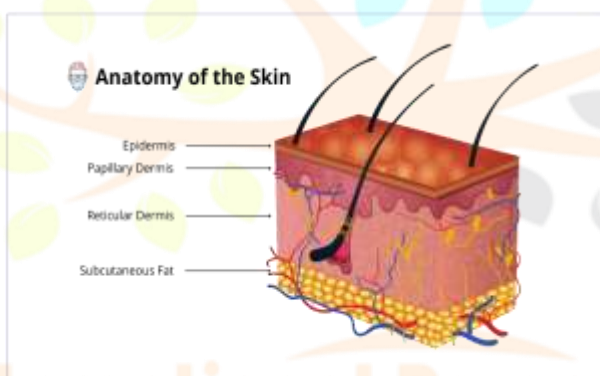
- Stability cannot be compared to an ointment.
- They are less hydrophobic than other semi-solid formulations, hence the risk of contamination is greater than with other formulations.

IDEAL CHARACTERISTICS

- It needs to be non-irritating.
- It has to be harmless.
- It must not cause inflammation.
- It needs to dissolve at body temperature.
- It must pierce the epidermis (through natural opening).

Skin

All health care practitioners should have a basic understanding of the composition and purpose of human skin. Another name for skin is cutaneous membrane. Adult skin has a surface area between 1.2 and 2.2 m². Both hair-bearing skin that covers much of the body and hairless skin, such as that seen on the palms, are varieties of skin. Less feet and more hands. The skin is the area of the body that is most susceptible to pollutants from the environment, sunlight, and pathogens.

**Most common skin disease^[13-15]**

Eczema, acne, rashes, psoriasis, allergies, dry skin, and urticaria are the most prevalent skin conditions etc.

The herbal treatments for specific skin issues are listed in detail.

2: Special skin problem and Herbal remedies

Cosmetic preparation is divided into 3 categories

Solid: Face Powder, Talcum Powder, Compact Powder

Semisolid: Cream, Ointment, Liniments

Liquid: Shampoo, hair oil, mouthwashes, sprays, lotions, etc

Polyherbal cream

The topical products that can be applied to the skin are called creams. "Viscous liquid or semi-solid emulsions of either the oil-in-water or water-in-oil type" are what are referred to as "creams." dosage forms whose viscosity ranges between water and oil.^[16-17] Creams are used for therapeutic as well as cosmetic functions, including cleansing, beautifying, improving looks, protecting, and so forth. Creams with oil in them work best for pharmaceuticals that are soluble in water, whereas creams with oil in them work best for drugs that are soluble in lipids.^[18] Aqueous phase, hydrophobic phase, and an emulsifying agent make up oil-in-water creams in their most basic form. The colloidal structures that are created from the constituent parts are in charge of the stability of the end product in addition to determining the viscoelastic qualities. Emulsions are a unique type of cosmetics that leave the skin feeling good after application, are suitable for long-term use, have increased ingredient spreadability, and are stable over an extended time of storage^[19]. Emulsions are frequently utilised as a vehicle for the transport of drugs, particularly through the skin, because of their properties. Water-in-oil (W/O) emulsions are more frequently utilised to treat dermatological issues, especially for dry skin^[20]. These emulsions are given cosmetic qualities by the addition of antioxidants as active components. Since plant extracts contain a variety of antioxidants that may have a synergistic impact, they can be used to cosmetic creams for improved cosmetic features^[21]. Because of their intrinsic instability, creams' internal phase tends to coalesce over time. Because the free surface energy is reduced by a surface-active substance, the emulsion is more likely to be stable. The surface area of any given internal phase volume is dependent on the degree of agitation of the two phases, which also affects the stability of the system.

MATERIAL

Chemicals:

These include sterylalcohol, cetylalcohol, liquid paraffin, stearic acid, white beeswax, Collection, identification and processing of plant: the leave of neem powder, leaves of tulsi powder, fruits of papaya, leaves of aloe vera gel were collect from different mature plant.

Extraction processes:

(i) Aloe vera gel:

Aloe Vera leaves that were mature, healthy, and fresh were gathered and cleaned with distilled water. After the leaf had been thoroughly dried in a hot air oven, it was dissected longitudinally with a sterile knife. Then, a sterile knife was used to cut away the aloe Vera gel, which is the colourless parenchymatous tissue. After that, muslin cloth is used to filter out the fibres and contaminants. The process then uses the filtrate, or filter product, which is a transparent aloe Vera gel.

(ii) Extraction of tulsi leaves:

The fresh leaves of tulsi was collected and washed and taken in a mortar and pestle and are grinded well with required amount of water in order to get juice. Then the juice are filtered to remove any particles present.

(iii) Extraction of neem leaves:

Maceration extraction: The neem leaves were shade for one week and powered (60 mesh) .5g of dreid leaves was blended with 50ml of different solvents (95% ethanol ,hydrous ethanol, acetone ,water ,method ,80%) respectively for 24 hours at temperature room. After 24 hours obtained extracts was filtered by using normal filter paper .The obtained extracts of a sample heated by using water bath for 45 minutes. The obtained concentration extracts ready for the use of herbal cream formulation.

(iv) Extraction of papaya:

Maceration extraction: The papaya fruits were shade for one week and powered (60 mesh) .5g of dreid leaves was blended with 50ml of different solvents (95% ethanol, hydrous ethanol, acetone ,water ,method ,80%) respectively for 24 hours at temperature room. After 24 hours obtained extracts was filtered by using normal filter paper. The obtained extracts of a sample heated by using water bath for 45 minutes. The obtained concentration extracts ready for the use of herbal cream formulation.

METHOD**Preparation of cream:**

In a borosilicate glass beaker, heat liquid paraffin and beeswax to 75 °C and keep it there throughout the heating process. (Phase oil)

Borax and methylparaben should be dissolved in distilled water and heated in a separate beaker to 75 °C to produce a clear solution. (Phase of water)

The heated oily phase will then gradually receive this watery phase ^[16-17]. Then, after measuring out the appropriate amounts, add the aloe Vera gel, neem extract, tulsi extract, and papaya extract. Stir well until a smooth cream forms. Then, as a scent, add a few drops of rose oil. Add a few drops of distilled water if necessary after placing this cream on the slab. Then, mix the cream geometrically on the slab to give it a smooth texture and ensure that all the elements are thoroughly combined. Slab technique or extemporaneous cream preparation is the name of this technique.

Contents of the cream**Aloe vera**

Botanical name: **Aloe barbadensis miller**

Part typically used: Aloe vera gel

Color: Green

Description: Aloe vera is a word that has rosette-shaped, succulent leaves. The leaves range in colour from grey to green, and occasionally have white spots on them. They are the source of the colourless gel used in many commercial and therapeutic products and have sharp, pinkish spines around their edges.

Constituent: minerals, sugars, lignin, salicylic acid, vitamins, enzymes, and amino acids

**Papaya**

Botanical name: **Carica papaya**

Part typically used: fruits powder

Color: Orange

Description: The fruit papaya, which resembles a melon, comes in a wide range of sizes and shapes. When a fruit is unripe, its skin is smooth, thin, and green; when it is ripe, it turns rich orange or yellow. The flesh ranges in thickness from 2.5 to 5.0 cm in colour from yellow to orange.

Constituent: Proteins, benzyle isothiocyanate (BITC), an anthelmintic substance, alkaloids (carpine and pseudocarpine), proteolytic enzymes (papain and quimiopapain), carbohydrates, and proteins.



Tulsi

Botanical name: *ocimum tenuiflorum*

Common name: holy basil

Part of typical used: leaves

Color: Green

Chemical constituents: eugenol, terpens, germacrene



Neem

Botanical name: **Azadiracta indica**

Part typically used: Leaves powder

Color: Green

Description: Compound alternating, rachis 15 to 25 cm long, 0.1 cm thick, leaflet with oblique, serrate, 7 to 8.5 cm long, and 1 to 1.7 cm wide, somewhat yellowish green in colour.

Constituents: Neem leaf contains flavonoids, alkaloids, azadirone, nimbin, nimdin, terpenoids, steroids, margosicacid, vanilic acid, glycosides, nimbectin, kaemperol, and quercursertin.

Evaluations

The Polyherbal cream formulated was evaluated for the following:

1. Organoleptic evaluation:

- i. Colour: Faint green
- ii. Odour: Pleasant
- iii. Texture: Smooth
- iv. State: Semisolid

2. Physical evaluation

The polyherbal cream formulated was evaluated for the following properties:

a) pH: According to the results, the pH of the formulation that is 6.7 were found to be nearer to skin pH so it can be safely used on the skin.

b) Phase separation: Prepared cream was kept in a closed container at a temperature of 25-100 °C away from light. Then phase separation was checked for 24 h for 30 d. Any change in the phase separation was observed/checked. According to the results no phase separation was observed in the formulation.

c) Acid value :The acid value results of formulation was shown in table 4, and showed satisfactory values.

CONCLUSION

Herbal cosmetics are thus the most essential part of contemporary living because they are mostly employed for aesthetic objectives. Many herbal substances have capabilities that benefit the skin, including antioxidant, anti-inflammatory, antiseptic, dryness, dark circles, exfoliating dead skin, radiant skin, opening clogged pores, antibacterial, rashes, and blemishes properties. Natural beauty care products are created by combining one or more natural substances with acceptable beauty additives to form the base. The current experimental work shown that polyherbal cream with herbal extract can be developed and tested for anti-microbial effective.

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