Objectives of the Research Work

Acne is the most common disease affecting a wide percentage of population worldwide. It hits the adolescents as well the adults irrespective of the sex. Along with the physical symptoms such as scars, it also has a great impact on the psychological state of the patient suffering from it. Hence it is very important to treat and manage the acne condition in the patients. There are various drugs which are available in the market for the management of acne vulgaris. Some of these formulations are benzoyl peroxide, topical retinoid preparations, topical antibiotics etc. But these formulations have many side effects. Benzoyl peroxide has side effects such as skin irritation and contact dermatitis. Side effects of topical retinoid preparations are desquamation, erythema, increased sensitivity of skin to sunlight and hyper or hypopigmentation. P. acnes develop antibiotic resistance and hence this limits the use of antibiotics. It is easy to eliminate such side effects with herbal preparations. Homeopathic drugs may also be employed for the management of acne, but they occupy a long time for producing their effects which limits its use. Hence use of herbal formulations is more convenient to treat acne vulgaris.

The main criteria which are to be met by anti-acne formulation are:

- The formulation will possess antibacterial activity against P. acnes which is mainly involved in acne vulgaris.
- It will also possess anti-inflammatory, antioxidant, hydrating, astringent and antiseptic activities.
- The formulation would be able to help in reducing the irritation by producing soothing effect.
- It would also possess detoxification and skin purification activities, and should produce bleaching effect which will help in reducing the scar.

Through formulating such an anti-acne gel which provides all the above mentioned characteristics, it will be a helping hand in the treatment and management of acne. The patient compliance will also increase as the side effects will be limited which are caused by the allopathic formulations. All the characteristics required for acne healing and also scar removal and skin nourishment will be compiled in a single formulation and hence there will not be any need to apply more than one formulation (which is generally seen with various allopathic formulations), which will also enhance patient compliance.