Work Plan and Methodology of the Research Work

The aim of this research is to evaluate anti-acne activity of some selected herbal drugs and to formulate and evaluate a polyherbal anti-acne dosage form.

Procedure of proposed work:

The present study will deal with the development and evaluation of herbal Anti-Acne formulation containing various combinations of extracts of herbal drugs.

1. The literature review of the study shall be done.
2. The plants shall be obtained and authenticated.
3. Preparation of Extract
   The specimens of different herbs and plants will be collected. Then the desired plant parts will be extracted according to the standard procedures. Following this extraction, individual drug extracts will be studied for their activities.
4. Formulation of Anti-acne Polyherbal Dosage Form
   Depending upon the results of the individual drug study, selection of the desired extracts will be made. Then various combination batches will be prepared. And finally these formulation batches will be evaluated for various evaluation parameters.
5. Evaluation Parameters
   i. The individual extracts will be tested for zone of inhibition and minimum inhibition concentration.
   ii. Various prepared formulations will be evaluated for the following parameters:

      Color, odor, appearance, skin application, consistency, pH, spreadability, viscosity, zone of inhibition, drug content, stability study, skin feel test.
6. Formulation Selection
   Depending upon the results obtained from the above parameter testing, one formulation with best results will be selected. This optimized formulation will be compared with the marketed preparation for its safety and efficacy [29].
7. Invitro anti-acne activity (Preclinical Trial)
The invitro activity will be stude on the Sprague-Dawley rats.
The histological parameters to be evaluated will be comedo formation, hyperkeratosis, leucocytic infiltration, dilated sebaceous gland, necrosis of epithelium and acanthosis [21].

8. Clinical Trial

Clinical trial shall be performed for the formulation prepared.

The clinical evaluation of the effect of the formulation on the patients shall be obtained through appropriate methods [43].