Development and Standardization of Polyherbal Formulation in Diabetes Mellitus

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ABSTRACT

In Traditional system of Medicine, many plants have been documented to be useful for the treatment of various systemic disorders. Many of the Traditional/Indigenous system of Medicine are effective but they suffer from lack of complete standardization which is one of the important challenges posed by the Traditional system of Medicine. The concept of Polyherbal Formulation is well documented in the ancient Literature. Compared to the single herb, the Polyherbal Formulation has better and extended therapeutic potential. Hence, the present study was planned to formulate and standardize a Polyherbal Formulation using plants having known anti diabetic potential. The most important challenges posed by herbal formulations is their evaluation and standardization. Evaluation is necessary to ensure the quality and purity of the herbal product. For evaluation of raw materials and Polyherbal Formulation various parameters are studied as per the World health organization’s guidelines and the Ayurvedic pharmacopoeia of India. The present study deals with Formulation the Polyherbal Formulation prepared from hydro - alcoholic (30:70) extracts of Andrographis paniculata (Stem and Leaves), Asparagus racemosus(root), Ipomoea digitata (Rhizome), Tinospora cordifolia(Sem) and Withania somnifera(root). To evaluate of raw materials include Physicochemical studies like ash values, extractive values, phytochemical studies and safety profiles which include heavy metal analysis, pesticide residue analysis and microbial load analysis. The preformulation parameters and parameters for finished product (hard gelatin capsule) include uniformity of weight, disintegration time, moisture content, PH, Phytochemical estimation and microbial load assay. The HPTLC finger print profile of finished product was also carried out.