

Abstract

Allopolyherbal formulations refer to combination of allopathic drug and polyherbal formulation. The herbal plant and their derivatives are one of the most ancient forms of medical treatment used to cure the diseases and their symptoms. Although, from ancient period herbal medicines have been used effectively in treating various disorders or diseases all over world and generally considered to be less toxic and free from side effects as compared to synthetic allopathic drugs. The main reason of incorporating allopathy with herbal is to modify or explore these medicine systems for the profit of patient and to introduce it in the current medicine to improve the pre-existing therapeutics medicines for new challenges of the contemporary world. In Allopolyherbal formulations the effect of drug will be same but the side effect is overcome by the reduction of dose of allopathic drug and the combination of allopathic and herbal drug as compared to synthetic ones. Many herbal medicinal plants provide relief of symptoms comparable to that one produce by allopathic drugs. The simultaneous use of PHFs and allopathic drugs is expanding as most of the patients do not notify their medical practitioners on the adjuvant treatments.

Allopolyherbal formulation; Polyherbal drug; Allopathic drug; Therapeutics; Herbal plant

Introduction

Allopolyherbal formulation refers to combination of allopathic drug and polyherbal formulation. The herbal plant and their derivatives or metabolites are one of the oldest forms of medical treatment used to cure the numerous diseases and their symptoms. Although, from ancient period herbal plants are used effectively for treating diseases throughout the world and are considered to have little or no side effect as compared to synthetic drugs [1].

With herbal is to modify everything and anything from these medicine systems for the benefit of patient and to include in the mainstream medicine to extend the already existing therapeutics which is a new challenge for the modern world [1].

In Allopolyherbal formulations the effect of drug will be same but the side effect is overcome by the reduction of dose of allopathic drug and the combination of allopathic and herbal drug as compared to synthetic ones. For example- the combination of herbal drugs and allopathic

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pharmaceuticals are found to be comparatively more expensive and produce various unwanted side effects in spite of having powerful pharmacological action. As no modern people are moving back to oldest herbal drug therapies, which are derived from the nature and claim to be safer (Table 1) [7].

Ayurvedic Herbs

On the basis of origin, Ayurvedic medicines are divided into three classes, namely, mineral, herbal and animal. Among this, recently herbal formulation has achieved great attention. According to WHO 80% of the world's citizen mainly lean on traditional herbal Ayurvedic medicines for healthy life [8].

The chemical analysis of herbs is further accomplished with knowledge on the procedure of isolation, purification, characterization of active ingredients and preparation type. The term herbal drug refers to the plant parts (seeds, roots, bark, stem, leaves, flowers and etc.) used for preparing the medicines. Every part of the plant are completely utilized for the different-different pharmacological action the produce and then finally converted into a herbal preparations by using different methods: Decoction (Katha), Infusion (Hoin), Siphon (Hoin), Cold infusion (Hima), Liquid extract (Arka), Powders (Churna), Resins and balsams (Guggul), Medicated oil (Taila) etc. [9].

The total number of pharmacologically active constituents of the herbal remedies and their beneficial role in drug therapy has been identified. The pharmacological activity of herbal drugs are mainly due to phytochemicals constituent present in it which are responsible for its healing properties such as, tannins, sesquiterpenes lactones, terpenoids, saponins, alkaloids, flavonoids, alkenyl phenols and phorbol esters. Even a single herb comprise of one or more phytochemicals, which in combination works together synergistically in producing pharmacological activity.

Examples of Ayurvedic herbs with their active constituents having pharmacological activity: Arjuna (Terminalia) contain saponin glycosides, responsible for improving function of cardiac muscle and pumping activity of the heart, while flavonoids show antioxidant action and vascular strengthening.

Single Herbal versus Polyherbal Formulation

Formulation of drugs in Ayurveda is mainly based on two concepts: Use of single drug/plant and use of combination of more than one drug/plants, which is known as PHF (Polyherbal formulations). It is

traditional therapeutic herbal approach helps in combining several medicinal herbal plants to bring extra therapeutic efficacy, mainly known as, a 1-7 (h)5 n as 4.9 (ra 1)-6 (h)4 (erain)455 T 0 -9 (3) (gOO Uh irdin s-5 ()8 (oin)-5 lanleli(cin)8an

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PHFs are commonly found to possess wide therapeutic range. Most of formulations show activity even at a low dose and safe/effective at high dose, thus they have risk to benefit ratio. Example: Diakr is a polyherbal formulation used as hypoglycemic. Joshi et al. studied showed that Diakr at a high dose of 12800 mg/kg p.o. shows no toxic symptoms up to 72 h in the experimental animals; whereas sub-acute toxicity test indicates that Diakr is safe for long term treatment at the dose of 1600 mg/kg p.o. This is in contrast with the allopathic hypoglycemic

reduces or overcomes the side effect of allopathic drug having large number of side effect.