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## Multi herb Combination : Boon in AYURVEDA [INDIA]

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### ABSTRACT

Ayurveda happens to be one of the oldest Indian medical science. Avoiding needless suffering and leading a long, healthy life are central to Ayurveda. Ayurveda involves the use of natural ingredients to remove the disease's underlying cause and restore mental and bodily harmony in order to build wellbeing and prevent imbalance from reoccurring.

Ayurveda treats patients by using one or several herbs (poly herbal). Individual plants do not contain sufficient amounts of active phytochemicals to provide the desired therapeutic impact. The therapeutic efficacy is increased when various herbs are blended in a certain ratio to form poly herbal compositions. Poly herbal combinations are extremely effective in treating a variety of illnesses and are safe even in high doses. The Sarangdhar Samhita is a piece of Ayurveda literature that emphasises this concept of poly herbal use for disease treatment.

Instead of using individual plant parts, traditional medicine employs complete plants or combinations of plants. Poly herbalism can offer a number of advantages that single-herb mixtures cannot, thanks to synergism. To accelerate the development of the vast body of knowledge about various herb- herb combinations, quality monitoring of herbal products, the identification of active ingredients, and the understanding of the functioning of molecules, modern technology should be employed in conjunction with active research. As there is rising interest in switching from single drug therapy with single herbs to poly herbal combinations to get therapeutic advantages for a variety of illnesses, there should be a push to discover new information by drawing on the past empirical experiences of herb-herb mixtures.

## ANCIENT VEDIC SCIENCE : AYURVEDA

Ayurveda is one of the traditional medical systems having a lengthy history that spans many centuries. This ancient Vedic expertise, also known as Ayurveda Medicine, is regarded as one of the oldest therapeutic sciences and has persisted up to the present generation through many centuries of tradition.[1]

India is where Ayurveda first emerged and is thousands of years old. The Sanskrit words ayurveda means “science of life” and lays its emphasis on the balance of mind, body and soul that is complete well being of an individual [2] The fundamental ideas of Ayurveda are avoiding undue suffering and having a wellness full life. Ayurveda uses organic techniques like using of various herb combinations ,adding mineral and spices, diet control and regulation, different exercises, meditation and yoga for mental health and numerous techniques to eradicate the disease's cause, restore the body's balance, and stop it from recurring again. On the other hand, allopathic research holds that symptomatic alleviation can be achieved by using drugs that operate on the receptors they are intended to target and may also have unwanted side effects. Ayurveda brings in holistic treatment with longevity, energy and well being.[3]

Herbal medicines have been used throughout the world since the beginning of recorded history. The Native Americans and the Africans use herbs for healing diseases and it is part of their culture, and similarly they were used in ancient Egyptian, Chinese and Indian medicine for diverse therapeutic purposes. Herbs are one of the most potent medicinal components in the Indian Ayurvedic system, and this is also documented in our vedas and sahitas[4]. Traditional herbal medicine refers to the use of plants or plant material to cure wounds or diseases, whether in their raw or processed forms. Over the years, many diseases have been treated with herbal remedies[5].

Ayurvedic medicine formulation is based on two principles: using a single herb or using more than one herb. poly herbal formulations are those that contain two or more herbs. The concept of poly herbalism is unique to ayurveda, In order to achieve better medicinal efficacy, poly herbalism was advocated even in the ayurveda textbook Sarangdhar Samhita. All around the world, poly herbal mixtures are utilised from centuries to treat various disease forms.[6]

## POLY HERB BENEFITS IN TREATMENT

Poly herbal therapy has been practised in ayurveda medicine for many generations [6]. In comparison to one medicine, drug combinations frequently show promise in the treatment of disease. In Western medicine, the idea of pharmacological combinations is well-established, and it has seen a lot of success over the years. Combining herbs can have complex effects since different interactions between the constituent parts are possible. The interactions that can provide additional therapeutic benefit are the most desirable ones. When employing combination therapy, this is frequently the desired or anticipated result [7] [8].

Plant-based pharmacological agents found in poly herbal formulations have the potential to exert synergistic, agonistic, antagonistic, and other actions as a result of the associated diverse active principles. These pharmacological principles interact dynamically to produce the greatest therapeutic efficacy with the fewest side effects [9]. The availability of numerous active components in botanicals that combined can produce required strong effect that may not be possible with any one component alone is a significant potential benefit above traditional single-component medications.

The active phytochemical components of herbs found in trace amounts and are seldom enough to produce the desired therapeutic effects. Because of this, research has shown that combining these different plants with differing potencies could conceivably result in a better outcome than using them separately or adding up their unique effects. Synergism is the term for this beneficial interaction amongst herbs. Some pharmacological effects of herbal products' active ingredients are notable only when amplified by those of other plants; they are not noticeable when used alone [10].

There are two ways that synergism functions :-

Pharmacokinetic :- Pharmacokinetic synergistic effect focuses on one herb's capacity to facilitate the distribution, uptake, synthesis, and removal of the other herbs. [11].

Pharmacodynamic :- It investigates the synergistic effect when therapeutically effective active compounds are directed towards same receptors or pathways. Majority of the time, a variety of variables and consequences create a disease, resulting in both

apparent and unseen symptoms. Here, a mixture of herbs may operate on several sites simultaneously to offer a powerful relieving effect [12].

Poly herbal combination gives various benefits not present in a single herbal preparation due to synergism. It is clear that a single formulation with a variety of ingredients can result in a more effective therapeutic outcome. In order to produce the intended pharmacological action, less of the herbal concoction would need to be consumed, reducing the possibility of adverse side effects. Also the patient does not need to take multiple preparations and this improves patient convenience which indirectly improves compliance and has a positive therapeutic impact [10].

Poly herbal formulations contain a variety of chemicals that fight disease complications in their own respective ways. To give a comprehensive treatment against a medical state. [13]. When different plants combination containing these components are mixed, they might exhibit more activity than the individual extracts [14].

## OUR BATTLE

Although while ayurveda medicine has a lot of expertise prescribing many herb combinations, there have been weak and slow academic attempts to explain herb-herb interactions or to support the medicinal value of many such mixtures. One reason might be the immense work and high expense involved in conducting medical testing on herbal remedies. The pharmaceutical industry's drug research and development programmes have been greatly influenced by the "single component" and "one medicine, one target" paradigms. This is possibly the main reason why there hasn't been a lot of recent research on herbal combinations [15] [16].

Natural herbal preparation production is slightly less stringent despite the creation of the Medicines and Cosmetic Act to govern the production and quality assurance. According to approved clinical standards, the producer of Ayurvedic herbal products is not required to conduct toxicology research or conduct clinical trials on their products before applying for a patent [17] [18].

Once the components and function of a specific herbs combination is understood. It is possible to create a high caliber product and test it to determine if it has desired therapeutic effects. A thoroughly planned, randomised, double-blinded, placebo-controlled clinical trial done on a sufficient sized sample is required to assess the

therapeutic impact. Sadly, due to expensive costs and other factors, such exacting clinical investigations are rarely carried out [19] [20] [21].

Due to the fact that the Quality check, dose sensitivity and procedures are infrequently considered when planning such investigations, small clinical studies are less expensive but frequently produce negative and ambiguous results. To show the therapeutic effectiveness of herb-herb combinations, clinical studies conducted in accordance with good clinical practise (GCP) should be conducted [22].

Despite the best efforts of Department of Ayurveda, rules that are not followed are a result of poorly implemented regulatory procedures. Instances like the appearance of synthesised anti-inflammatory drugs in anti-arthritic Ayurvedic medicines, presence of heavy metal contamination, a lack of proper processing, and storage of marketed products in unfavourable conditions are caused by undetected fraudulent activities, alternation, contamination, and production short cuts [23]. Studies have shown that a large number of Ayurveda remedies contain metals that can be poisonous, and there are about 6000 such combinations that are made specifically with one metal. Thus, focus should be placed more on pure herbal blends [24] [25].

Although many multi-herb remedies have been utilised in clinical settings for hundreds of years, little is known about their exact therapeutic potential. This information is necessary to verify and better understand the empirical findings. Yet, it is likely that the standard pharmacological procedures are insufficient to demonstrate the specific composite impact of herb-herb combination.

Analytical methodologies may be applied after doing research at the molecular and cellular levels to further study and comprehend the impacts of multi-herb prescriptions [26] [27].

Avoid studies with shaky quality, a tiny sample size, a lack of supporting evidence, or technical problems. To show the therapeutic effectiveness of herb-herb combinations, clinical studies conducted in accordance with good clinical practise (GCP) should be used.

## CONCLUSION

Poly herbal mixtures have had a "renaissance" recently due to their equivalent effectiveness, less adverse effects, also higher acceptability than modern science drugs. They are among the most popular medications since, for the most part, they have tolerable side effects and are safe. Patients may suffer serious consequences due to the poor quality of the poly herbal combinations produced as a result of careless producers and insufficient regulatory control. In order to do this, it is crucial to implement preventative and corrective measures, which include imposing strict regulatory control and informing the public about how to use combination medications properly.

Even so, the vast experience gained from studying herb-herb combinations in clinical settings may serve as a springboard for future research into novel therapeutic advantages and product development. Novel research for enhanced quality monitoring of herbs, recognition of active ingredient, and understanding of the biochemical process would be necessary to obtain these benefits, followed by carefully planned animal and clinical studies. It takes time to conduct scientific study of multi-herbal formulations using methods including clinical studies, likely active ingredients, and action mechanisms. Only when utilised carefully and logically the poly herbal mixtures have the optimum effects on human health.

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