

# A Concept of Fusion Medicine - where Ayurveda Meets Allopathy

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## Abstract

There is a constant debate on the efficacy of medical treatments using Ayurveda versus allopathy. Staunch supporters of one method of treatment are quick to dismiss the other. The combination of ayurvedic and allopathic medicines has both advantages and disadvantages. Basic pharmacology of both ayurvedic and allopathic medicines should be included in both branches of medicine. Proper history should be taken before prescribing these drugs to avoid possible drug interactions among high risk patients. Positive aspects from both branches of medicine can be taken for the benefits of the patients.

**Keywords:** Allopathy; Ayurveda; Fusion Medicine

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## INTRODUCTION

Ayurveda is derived from the Sanskrit language in which “Ayur” means life and “Veda” means science or knowledge. Thus, Ayurveda means the knowledge of life.<sup>1</sup> According to the Ayurveda texts, the *Sambhava*, Ayurveda was originated in Himalayan regions more than 5,000 years ago and is often called “the Mother of All Healing”.<sup>2</sup> The texts on Ayurveda are the “*Charaka Samhita*”, “*Sushruta Samhita*”, and the “*Ashtanga Hrudaya*”. These texts deal with the effects of the five elements found in the cosmic system - earth, water, air, fire and space also known as “*Pancha Tattva*” on individual life. Balancing these elements makes man happy and healthy. Ayurveda mainly focuses on three humors namely

*Vata* (concerns for body movement), *Pitta* (concerns with metabolism and temperature) and *Kapha* (concerns with growth, protection, lubrication and sustenance). The concept of Ayurveda is that the imbalance between these three fundamental humors causes diseases.<sup>2</sup> Further, Ayurveda deals with the body, mind, spirit and the environment. Ayurveda usually focuses on preventive measures like consuming proper diet, reducing stress and improving body flexibility to build strength and stamina of the body and maintain overall good health. Ayurveda also deals with the concept of Rejuvenating (*Rasayana*). *Rasayana* helps to increase the strength of tissue, increase in digestion, increase the capacity and functioning of the brain, delay

ageing process, destroy disease from the body, reduce stress and increase the immunity of the body.<sup>3</sup> Practices of yoga and meditation have helped people to control conditions like asthma, high blood pressure, arthritis and various mental diseases.<sup>4</sup> The concept of “Virudh Ahara” (how certain food combinations interact with each other and create a disease) may help in controlling many diseases like allergic disorders, chronic digestive problems, skin disorders etc.<sup>5</sup> People prefer ayurvedic medicines because they are comparatively cheaper and have natural ingredients.<sup>1</sup> The concept of Aphrodisiac (*Vajikarana*) was developed before in Ayurveda than in allopathy. *Vajikarana* helps to cure common sexual diseases, premature ejaculation, erectile dysfunction and infertility. The first pharmacologically approved sildenafil was developed in 1990. As per *Charak Samita* there are eight specialities of *Ashtanga Ayurveda*. They are *Kaya* (internal medicine), *Bala* (pediatrics and neonates), *Graha* (psychological), *Urdvanga* (ENT), *Salya* (surgery), *Visha* (toxicology), *Rasayana* (rejuvenate) and *Vajikarana* (aphrodisiacs).<sup>11, 12</sup>

Allopathy is derived from the Greek language in which “allos” means opposite and “patho” means suffer. Allopathy was coined in 1810 by German physician Samuel Hahnemann, who is also a father of homeopathy, to designate the usual practice of medicine, allopathy as opposed to homeopathy.<sup>15</sup> Allopathic medicine focuses on signs and symptoms of the diseases, identifying the pathology behind the disease and treating them while homeopathy acts on the principle of similarities. The drug when used in a healthy person, causes disease and when used in a disease person may cure the disease.<sup>16</sup>

### Scope of fusion medicine

Ayurvedic medicines along with allopathic medicines have been used in the treatment of diabetes, arthritis, cough, cold, hemorrhoids, liver diseases, etc.<sup>6</sup> At present, ayurvedic and allopathic treatments have been studied for the management of COVID-19. People staying at home during the

lockdown period have taken major benefits from yoga and meditation to cope-up with mental health issues. Similarly, a major hospital in India is using allopathic medicine and ayurveda combined treatment in collaboration with Ayurveda hospitals in India. The Indian government and its ministry of Ayush formulate policy; implement it for the development of Ayurveda. It has its mission in seven areas. They are drug administration, education and communication, information, medicinal herbs, human research development and collaborations with international communities. Ayush also focuses on safety, efficacy, quality and rational use of Ayurveda to globalize it.<sup>8</sup> They are planning to give combination therapy to bring down the cost of treatment as ayurvedic medicines are comparatively cheaper, and for quicker recovery as ayurvedic medicines are believed to boost up immunity.<sup>8</sup>

### Precautions while taking fusion medicine

Numerous adverse effects of drug-drug, drug-herbal and drug-food interactions can occur when allopathic medicines are taken along with some ayurvedic or herbal medicines due to alteration in pharmacokinetics of allopathic drugs.<sup>14</sup> Even two or more allopathic drugs taken together may also cause adverse drug reaction.

Out of them mercury and lead are used widely. Using these elements can be neurotoxic, nephrotoxic and hepatotoxic if used without their purifications.<sup>10</sup> These interactions are usually due to alteration in absorption, distribution, metabolism and elimination of allopathic drugs.<sup>7</sup> So, precautions should be taken before prescribing. At least one metal is contained in approximately 6000 medicines in the “*Ayurvedic Formulary*”. Several ingredients in herbs and modify the intestinal pH or motility, inhibit or induce gut transporters (P-glycoprotein) or metabolizing enzymes (Cytochrome P450-isozymes) and glucuronidation pathways.<sup>14</sup> Center for Disease Control and Prevention (CDC) had also reported lead poisoning cases in pregnant women using *Ayurvedic* medicines which had affected the health of both mother and child. Not

only few Ayurvedic medicines produce teratogenic effects in pregnancy, some allopathic drugs also produce similar teratogenic effects when used in pregnancy. The oral combination of grapefruit juice and St. John's wort can alter the metabolic disposition and bioavailability of many synthetic drugs. Grapefruit juice is contraindicated in patients taking alprazolam and felodipine because furanocoumarins (paradisins, bergamottin) present in grapefruit juice inhibit the activity of Cytochrome P450 3A4 and P-glycoprotein furanocoumarins (paradisins, bergamottin) present in grapefruit juice inhibit the activity of Cytochrome P450 3A4 and P-glycoprotein transporters in the gastrointestinal tract and liver. St. John's wort used in the treatment of mild depression, anxiety and insomnia, are found to potentiate the action of antidepressants, especially Selective Serotonin Reuptake Inhibitor (SSRI) type of drugs. So, precautions should be taken while taking the drugs

Garlic taken along with warfarin has been found to prolong clotting time, which gives rise to

bleeding complications. Similarly, garlic interacts with Nonsteroidal Anti-inflammatory Drugs (NSAIDS) by antiplatelet activity. Similarly, coriander *increases* the effects of hypoglycemic agents.<sup>7</sup> Likewise, *Guggulu* is found to interact with hypolipidemics, anticoagulants, antihypertensives and thyroid medications. *Ashwagandha* is known to enhance the effects of barbiturates. *Yashtimadhu* is contraindicated with thiazide and loop diuretics because it enhances potassium loss. Similarly, patients taking antiarrhythmics, diuretics, fat-soluble vitamins and antihistamines must be precautionous while consuming castor oil. Other examples include the interactions of herbs like *Tulsi* with paracetamol, *Methika*, *Meshasringi* etc. with antidiabetic drugs, *Jatamamsi* with benzodiazepines, berberine in *Daruharidra* with hypolipidemic drugs and *Vasa* with theophylline. Ayurvedic medicines containing high levels of heavy metals are found to be nephrotoxic.<sup>10</sup> The quality, purity and potency of herbal medicines are not generally regulated by many drugs regulatory agencies as they are done for the synthetic drugs.<sup>7</sup>

**Table1: Advantages and disadvantages of using the combination of Allopathy and Ayurveda**

Advantages	Disadvantages
1. The concept of rejuvenating ( <i>Rasayana</i> ), <i>panchakarma</i> and <i>yoga</i> in Ayurveda helps to prevent different kinds of diseases.	1. Risk of metal poisoning in pregnant women while using some ayurvedic drugs as they contain some metals like lead and arsenic.
2. Combination therapy is expected to bring down the cost of treatment as ayurvedic medicines are comparatively cheaper, and for quicker recovery as ayurvedic medicines are believed to boost up immunity.	2. Some ayurvedic medicine preparation from gold and diamond can be expensive.
3. When Ayurveda used together with allopathy show good response in treating chronic and immune mediated diseases that cause pain and inflammations. <sup>13</sup>	

## CONCLUSION

Preventive measures like yoga, meditation and lifestyle changes can always be used as measures for the prevention of diseases. However, physicians should always take a proper history if the patients are taking any ayurvedic medicine or

herbal diet supplement to decrease the risk of interactions, especially among high-risk patients. Proper research and clinical trials must be conducted to study herb-drug, diet-drug and drug-drug interactions, so that we can use both the systems of medicine more safely and

conveniently. Any healthcare professional who wants to prescribe the combination of ayurvedic and allopathic medicines must have proper and authentic knowledge of both the systems of medicines. The basics of pharmacology of allopathic and ayurvedic drugs should be included in the course of both the branches of medicine. There must be strict regulatory agencies to monitor the quality, purity, efficacy and potency of both ayurvedic and allopathic medicines. A joint effort is necessary from people, both allopathic and ayurvedic doctors, pharmacists, pharmaceutical companies and regulatory agencies to minimize the risks and enhance the

benefits of the combined medicine, where Ayurveda meets allopathy.

The fusion of ayurvedic and allopathic medicines has both advantages and disadvantages. The positive aspects must be taken from both the systems of medications if they help in the wellness of the people. We must not be biased among any system of medicine if it helps in the wellness of people.

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