



## Short Communication

## Cogent note on raised safety concern on concurrent uses of herbal formulations

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## ABSTRACT

Herbal therapy is well known holistic therapeutic approach from ancient times to improve emotional, mental and spiritual integrality because not having considerable side effects or adverse effects upon consumption and administration. Although medicinal plants or herbal formulations are widely proposed and considered to be safe, however, they can be potentially be hepatotoxic if not processed properly for final formulation stage to be used for consumption. Hence, simultaneous use of herbs with therapeutic drugs is considered or accepted these days which lead to increases the clinical potential of herb-drug interactions to treat many fatal diseases like hepatitis, cancer and various neurological disorders etc. However, these random or self-guided use of herbal medicine and supplements can be risky because most of times, they are not subject to review by the FDA. Hence, we need healthy attempts to find out possible reasons for studying streamlined clinical toxicological interpretations and clinical pharmacological approaches of herbal products before considering them for their further use as complementary and alternative medicine combination therapies to treat any diseases.

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## 1. Articulated Scrutinized Reports

Herbal products have been used for past many centuries as the most ancient and indigenous therapeutic probe to treat various diseases and related illnesses in patients. It involves the use of medicinal plants/plant parts/formulations to treat the specific disease and including the improving general health and mental wellbeing. Some of herbs have potent active ingredients or bioactive compounds and even, many pharmaceutical preparations or medications are faculty based on chemically modified versions of various naturally occurring compounds found in these medicinal plants or herbs.<sup>1,2</sup> Herbal medicine has been estimated to be used in almost 80% of world population which rely on traditional and safe herbal medicine for improving primary health care. In many past decades, herbal remedies including like aloe vera, ginseng, feverfew, chamomile, echinacea, ginkgo, goldenseal, milk-thistle, saint-john wort, saw- palmetto,

valerian etc have been considered as most potent dietary supplement for the treatment of many disease or cold/flu like symptoms as well as their respective prevention to be used as alternative/complementary medicine.<sup>3,4</sup> Herbal medicines or products can cause kidney failure and liver damage in some of patients or old aged consumers because they contain toxic chemicals or heavy metals or might be reacted with other drugs lead to form lethal components while used in various combinations like complementary and alternative medicines. Hence, with the increased utilization of these herbal products or herbal formulations, their safety and efficacy have become a public health concern. Because, adverse or side health effects associated with herbal products could be assigned credits to both inherent toxic effects of herbal medicine and their respective toxicities induced by their adulterants/contaminants.<sup>5-7</sup> Side effects of herbal based medicinal therapies are required many elucidative toxicological studies, 'omics' technologies and FDA approval before being to be developed or considered for consumption purposes.<sup>6-8</sup> These days, it is just a belief

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that herbal preparations are "natural" and are therefore intrinsically harmless for consumption uses because their hepatotoxic and renal toxic side effects have been attributed which can be potentially lethal if taken inappropriate way as a herbal substitute for conventional medicines or alternative therapies for treatment of various alleviating common health problems e.g. heart diseases, diabetes, high blood pressure and various types of cancers. According to Food and Drug Administration (FDA) mandates, only pharmaceutical preparations and allopathic medicines have to be gone through all critical clinical pharmacological and toxicological procedures before being released into market to be used as safe products.<sup>9,10</sup> But, herbal products do not fall under this category of medicine as long as they are not considered for marketing for the prevention of any type of specific disease. These can be easily available for consumers which mostly lead to increase their self-medications that can be unsafe for patients or consumers upon long term uses or in combination of other conventional medicines because herbal based drugs preparations or formulations are considered as 'food integrators and easily available in the market without any kind of medical or physician's prescriptions. It is important that people must have general clinical awareness and do not self-diagnose any health conditions at their own. And, any type of medication like herbal medications and dietary supplements should be taken always under the supervision of a knowledgeable and qualified practitioner or physicians.<sup>10,11</sup>

## 2. Conclusion

The herbs or herbal formulations contain near pharmaceutical concentrations of poisonous constituents if not gone through robust clinical pharmacological and pharmacokinetic interpretations during their respective processing, purification, final formulations and packaging procedures. And also, manufacturers of these herbal products or formulations are not required or asked to submit proof of safety and efficacy before marketing, so the adverse effects associated with remedies are largely still left unknown in public notice. So, herbal products are no safer all times as compared to other conventional drugs or medicines that can cause liver injury which could require transplantation or might be fatal lead to sudden death. It is concluded that adverse toxic effects of herbal medicines or

herbal formulations as well as their interactions with other prescription drugs should be known to the consumers and physicians as well as everyone should also know possible risks of herbal products while using in cure and treatments of any kind of diseases.

## 3. Conflict of Interest

None.

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