

Traditional Use of Herbs Active Against Snakebite in India

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Snakebite envenoming is a global public health crisis of such size and complexity that it deserves far more attention from national and regional health authorities than it has been given up until now. This environmental and occupational diseases affect mainly agricultural workers and their children in some of the most impoverished rural communities of developing countries.

The global inequality in the epidemiological data reflects variations in health reporting precision as well as the diversity of economic and ecological conditions [1]. To complicate matters further, accurate records to determine the exact epidemiology or even mortality in snake bite cases are also generally unavailable [2]. Hospital records fall far short of the actual number owing to dependence on traditional healers and practitioners of with craft etc. It has been reported that in most developing countries, up to 80% of individuals bitten by snakes first consult traditional practitioners before visiting a medical centre.

Morbidity and mortality resulting from snakebite envenomation also depends on the species of snake involved, since the estimated fatal dose of venom varies with species. In our countries, almost one fourth to *R. viper* and small proportions to Cobra. However, clinical features and outcomes are not as simple to predict because every bite does not result in complete envenomation. Prevention is all important. In India out of 216 snake species, approximately 52 are poisonous species of snakes. Bites are primarily due to the venomous species of the families *Elapidae* and *Viperidae* [3]. The abundant species of families *Elapidae* known as Indian monocle Cobra (*N. Kaouthia*) causes the highest number of deaths due to snake envenomation and another species of families *Viperidae* known as *Daboia russelli* (*R. viper*) poses a dangerous public

health problem in numerous tropical and subtropical countries of southwest region of India.

A major population of the world depends even at the present time on herbs for medicine. Although minerals and animal products are used to some extent, the greater part of the natural drugs are from plants. It is estimated that about 75 percent of the population rely heavily on the use of herbal drugs for the treatment of diseases. Even though synthetic medicine has taken front seat; plants are the economic sources of a number of well-established and important drugs. They are also the source of some chemical intermediates needed for the production of some others and 25-30% of modern drugs are derived from plant. The modern synthetic drugs are potentially toxic; symptoms reappear following their discontinuation and are also costly. In contrasts chemical drugs, herbs are generally claimed to be non-toxic, because of natural origin and long use as folk medicine.

Herbs are alternative medicines for treatment of various diseases due to their unspecified adequacy, effectiveness, affordability, wellbeing and low cost. There is also an rising increase in the consumption of herbal formulations by the public because of the strong confidence that these products are natural; hence, they are harmless for the treatment of ailments [4].

Herbal compounds that acquire snake venom neutralization properties in experimental animal models (*in vivo* and *in vitro*) usually follows protocols are — venom- herbal compounds mixed together, herbal compounds follow by venom and venom followed by herbal compounds. Along with these, the third technique is similar to clinical conditions. The venom dose is one of the significant fac-

tors, on which the herbal compounds could show their neutralizing effects. Higher the venom dose, less the fold up of neutralization. So, what is enviable is that the venom should be try from lower to higher dose [5].

In conclusion, there are more compounds present in the herbs having greater snake venom neutralizing capacity. Therefore an endeavor to validate once again, the claim of traditional literature of the herbs in snakebite cases.

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