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Editorial

Time To Take Medicinal Plant Research Out of the Jungle

In the last ten years, there has been a massive increase in the pharmacological evaluation of medicinal plants and research output in this area especially in the Third World continues at a frenetic pace. As the current Editor-in-Chief of the West African Journal of Pharmacology and Drug Research (a journal that publishes articles all areas of pharmacology and toxicology), I have observed that over sixty percent of papers submitted to us for publication (especially from Africa and Asia) are work on medicinal plants.

What is responsible for this upsurge and research skew in favour of medicinal plant research in the developing world? Some of the ready reasons include the following:

(a) The acknowledgement of the fact that a greater number of the peoples of the Third World depend on herbal preparations for the treatment of their ailments.

(b) Plants are the most likely source from which new drugs will be discovered for the treatment not only of the recalcitrant old ailments like malaria and tuberculosis but also of the latter-day diseases such as HIV/AIDS and the unpredictable and wild influenzas that episodically plague us.

(c) Third World countries have come to the realization that total dependence on the use of orthodox drugs is an unrealistic burden on their often fragile economies in the face of the strangle-hold of the multinational companies on orthodox drug supply whose patent rights they own.

(d) The use of herbal remedies has taken on a global appeal, as their use is less regimented than that of orthodox drugs.

(e) The enormous plant biodiversity provides a tempting arena of opportunities for research and contribution to knowledge and the realization of a sense of achievement on the part of the investigator.

(f) Routine pharmacological evaluation of plant preparations especially in animal models provides a ready source of new knowledge and often requires less of the sophisticated equipment usually needed for today's cutting-edge molecular investigations.

From current research reports, it is obvious that extracts from various plant parts are screened for properties like analgesic, anti-inflammatory, hypotensive, hypoglycaemic, antimicrobial, anticonvulsant and similar

effects in animal models reflecting the disease conditions and their symptoms for which such plants are often used in folk medicine. In a few cases, efforts are made to isolate active principles. It has been argued that the isolation of active principles is not an essential condition for herbal medicine and that it is best to determine efficacy and other effects using each plant preparation the way it is employed as herbal remedy.

It is my opinion that for the acceptance of a herbal remedy for routine and general use, a perfunctory screening in animal models for efficacy is not enough. The time has come for the establishment of standard protocols for the evaluation of any herbal remedy. Depending on the intended or established use of a remedy, controlled clinical trials and broad-spectrum toxicity studies may be necessary. It will then be easier to answer such questions as “Does this really cure or ameliorate this condition?”, “ Is it safe to give this preparation to a pregnant woman or a nursing mother?” , “Can a hypertensive individual be safely treated for his rheumatoid arthritis with this herbal preparation?”.

It is time to take medicinal plants out of the current jungle of uncoordinated research to a domain of structured and standard scientific protocols in order to properly evaluate them for registration and acceptance for clinical use.

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