

Ethnobotanical study on medicinal plants used as anti-inflammatory therapeutics among the inhabitants of Gampaha district- Sri Lanka

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Plants and plant based products play a major role in traditional medicine in Sri Lanka. A large number of plant species are extensively used to alleviate the pathological conditions caused by inflammation. However, an in-depth study has not been pursued yet in Sri Lanka to assess the significance and contribution of medicinal plants/herbal therapeutics for inflammatory conditions. Thus as a part of our ethnomedical inventory work in different regions in the country, the present study was carried out in Gampaha district which is famous for several pedigrees of traditional physicians.

The field study was conducted with 458 participants covering all 13 divisional secretariats in Gampaha district using semi-structured interviews. Ethnobotanical data were analyzed using relative frequency of citation (RFC) and family importance value (FIV). Demographic characteristics of the participants were also recorded. Out of the total participants, 232 (50.7%) claimed the usage of medicinal plants for the treatment of inflammatory conditions such as fever, cough, asthma, rheumatic arthritis etc. A total of 43 medicinal plants belonging to 28 plant families were mentioned, out of which *Coriandrum sativum* was the most cited species followed by *Coscinium fenestratum* and *Adhatoda vasica*. *Fabaceae* was the most cited plant family while family importance value was highest in *Apiaceae*. The most frequently used plant part was leaves (34.1%) and the most common preparation method was infusion. 46.16% have mentioned the reason for their choice as their belief on low adverse effects associated with the herbal formulations. Among the non-users of the herbal products, majority has claimed that the difficulty in preparation (24.69%) and collection of plant materials (22.22%) has hindered the usage, while considerable number of people have mentioned that they do not have any faith as the effectiveness is not scientifically proven. Interestingly 71.43% of the non-users mentioned that they would shift to herbal products if systematic scientific studies are conducted.

The present study has led to the identification of medicinal plants widely utilized for the treatment of inflammatory conditions. The effectiveness and safety of these plants will be assessed by phytochemical and pharmacological studies in the follow-up studies.