

Joint Event

4th EUROPEAN BIOPHARMA CONGRESS

&

6th International Conference and Exhibition on PHARMACOLOGY AND ETHNOPHARMACOLOGY

November 09-11, 2017 Vienna, Austria

An ethnopharmacological evaluation of indigenous plants used by the communities of district Kotli, Azad Jammu Kashmir

Humaira shaheen

Agriculture University Rawalpindi, Pakistan

Aim of the Study and Ethnopharmacological Relevance: District Kotli is a mountainous area ranging from scrub to alpine forests which is sporadically known with reference to ethnopharmacological research. Such studies are mandatory for discovering new crude drugs based on the folk knowledge. This study was aimed to collect knowledge of medicinal plants and folk herbal remedies from the local inhabitants.

Materials and Methods: In all, 100 local informants including 55 were males and 45 were interviewed using semi-structured questionnaire in addition to group discussions and field observations. Different ethnobotanical indices such as Spearman test, relative frequency of citation (RFC), Relative Importance (RI), Informants Consensus Factor (FIC) and Medicinal Importance (MI) were calculated from the recorded data. Besides, to check the novelty of information, the recorded data was compared with the literature from the recent past.

Results: In all, 80 medicinal plants were used in treating 58 diseases/ailments by the indigenous communities. Comparing the knowledge held by men and women, men had much higher knowledge on medicinal plants ($Z = -2.8$; $p < 0.05$) and their uses ($Z = -0.252$; $p < 0.005$): they reported 14.05 (± 10.18) species and 6.12 (± 4.13) uses, while women 8.55 (± 6.06) species and 5.83 (± 3.65) uses. Abdominal pain was the most prevalent problem treated with nine species (7.38%), followed by acute injuries & pain (7 spp., 5.74%) and diabetes (5 spp., 4.10%). The Informants' Consensus Factor (FIC) analysis indicated that among the 19 disease categories used, mouth, ear and eye problems (0.91), skin and related symptoms (0.91), circulatory problems (0.90), allergies (0.90), hair related problems (0.90) and diabetes (0.90) had the highest FIC values. Aerial parts (21 spp.) and leaves (20 spp.) were highly utilized for making recipes. The oral application of powder was the leading mode of application (21 spp., 26.25%). *Zanthoxylum alatum* possessed the highest relative importance (93.75), followed by *Adhatoda zeylanica* (91.67).

Conclusions: The high informant consensus suggests that current use and knowledge of medicinal plants are still strong and local inhabitants have a high dependency on medicinal plants in meeting their primary health care. This knowledge can be exploited in validation of this knowledge for the drug development and pharmacological activities in addition to the conservation and management of these valuable plant resources of this territory.

Keywords: Ethnopharmacological research, Local inhabitants, Frequency of Citation, Relative Importance, Informants Consensus Factor, Medicinal Importance.

humaira.shaheen@comsats.edu.pk

Notes: