

Oral Presentation

A survey of the applications of medicinal plant species in rural Barbados – a scientific evaluation

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Introduction. Barbados is the most Easterly island of the Caribbean Archipelago. The rich plant biodiversity in the Caribbean region has supported a likewise rich tradition in the use of indigenous plant species for medicinal purposes. Barbados has suffered losses in biodiversity due to years of sugar cane agriculture, and subsequent development, and many species have disappeared or are on the decline. It is therefore important to establish the current knowledge base of traditional medicine practice on the island evaluate the importance of the plant species as a guide for conservation efforts.

Objectives. To survey the island of Barbados in order to determine the diversity of plant species used in traditional medicine formulations.

Methods. The rural areas on the island were surveyed. An average of 10 individuals were interviewed in each of 36 village communities throughout 8 of 11 parishes. A plant database was established including images of each plant that was documented, the medical application and method of usage. Herbarium samples were also collected.

Results. On average, approximately 50 % of the respondents in the survey had some knowledge of the use of plants for medicinal purposes. Plants utilized belong to a variety of families including Asteraceae, Moraceae, Annonaceae, Piperaceae and Sterculiaceae. Common illnesses for which the plant preparations are used include diabetes and high blood pressure (two chronic health issues on the island), influenza and the common cold. Many respondents were not clear on dosages but methods of preparation include infusions, decoctions, and blends. The plant material used is mainly the leaf which could be dry or green. In a few instances the yellowing leaf is recommended.

Conclusion. The results indicated that the heritage knowledge associated with the use of medicinal plants is not as important as during earlier periods in the history of health care on the island. Challenges are also posed due to lack of availability and accessibility of plant material. Some species can only be located in the gully system which is not readily accessible. However, there is still a significant knowledge base and many applications can be linked to the properties of the natural products biosynthesized by the plant species or family. Attempts must now be made to assess the economic potential of the bio-resource and to protect the associated intellectual property.

Keywords: ethnobotany, ethnomedicine, phytomedicines

Selected References

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