A Systematic Review and Perspective Analysis of Medicinal Plants Used in Zimbabwe for the Treatment and Management of Genitourinary Infections

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Abstract

The use of traditional medicinal plants for healthcare in Zimbabwe is widespread, with approximately 80% of the population relying on these plants for primary healthcare needs. This practice is supported by the World Health Organization's endorsement of their safety and efficacy. Notably, plant-based medicines are commonly employed in the management of genitourinary infections (GUIs), a significant health concern, particularly among immunocompromised individuals. This study reviews the documented properties of medicinal plants traditionally and currently used for managing GUIs in Zimbabwe. A comprehensive literature search was conducted through online databases such as ScienceDirect and PubMed. Medicinal plants used for GUIs were identified and compiled from various published sources, including abstracts, journal articles, scientific reports, book chapters, textbooks, and theses from Zimbabwean and international university repositories. An ethnobotanical survey identified 119 medicinal plant species belonging to 44 families and 100 genera. Of these, 82% have undergone scientific validation, demonstrating pharmacological efficacy and potential as sources of novel therapeutic agents. Approximately 55% of the identified plants have been subjected to toxicological evaluation, while 45% remain unassessed. Among 65 plants tested for toxicity, 63.08% were found to be non-toxic and safe for therapeutic use. However, a few traditionally used plants have shown high toxicity. Given the widespread use of these plants, there is an urgent need for comprehensive toxicological studies to ensure their safety. While most traditionally used plants have been reported as effective for managing GUIs, elucidating the toxicological profiles of all these plants remains critical to mitigate potential health risks.

Keywords: Medicinal plants, Genitourinary tract infections, Sexually transmitted infection, Urinary tract infection, Zimbabwe