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**UTILIZATION, PHYTOCHEMICAL AND ANTIBACTERIAL ACTIVITY OF
MEDICINAL PLANTS USED IN THE MANAGEMENT OF HIV/AIDS
OPPORTUNISTIC INFECTIONS IN NJERU SUB COUNTY,**

BUIKWE DISTRICT

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ABSTRACT

HIV/AIDS pandemic is currently the largest socio-economic challenge that faces Eastern Africa including Uganda as it affects mostly the young and the most economically productive population. The majority of the people living with HIV/AIDS are susceptible to bacterial and fungal opportunistic infections that result from immune suppression. However, the increasing acceptance of medicinal plants as an additional and alternative therapeutic strategy to fight against HIV/AIDS opportunistic infections is not adequately documented. The study therefore aimed at assessing the utilization and establishment of the secondary metabolites and bioactivity of extracts of selected plants used in the management of HIV/AIDS opportunistic infections. Data was collected by ethno-botanical survey and laboratory screening of selected medicinal plants for secondary metabolites and antibacterial activity. Fifty two (52) medicinal plant species belonging to forty nine (49) genera and thirty one (31) families were identified to be used by the TMPs in the management of HIV/AIDS opportunistic infections. Most of these plants were found to belong to families; Lamiaceae, Moraceae, Leguminosae and Verbenaceae. Leaves were the plant part that was predominantly used while drinking of the decoction was the predominant mode of application. Many infections such as skin infections, chronic cough, stomach infection, tuberculosis, diarrhoea, warts, herpes zoster and others were claimed to be treated using medicinal plants. The aqueous extracts from the leaves of *Pseudospondias microcarpa*, *Callistemon citrinus* and *Spathodea campanulata* were tested against two bacterial pathogens namely: *Staphylococcus aureus* and *Pseudomonas aeruginosa*. There was no significant difference between the bacterial activities of the extracts of the three plant species but it varied significantly across the different serial dilutions. All plants were found to contain Saponins, Tannins, Anthracenosides and Steroid glycosides. Alkaloids, flavonoids and reducing sugars had narrow distribution among the species. This study also revealed that pruning is the most frequently method used in the harvesting of the medicinal plants that are conserved by planting in or around the homesteads. From these findings, it is therefore recommended that government of Uganda should recognize the TMPs in the management of HIV/AIDS and associated infections; medicinal plants used should be conserved for sustainability and further studies should be conducted on phytochemical analysis to establish more active ingredients that may be used in the development of drugs by pharmaceutical companies.

