

Research Fellows and Research Projects

Department of Science and Technology (DST) – National Research Foundation (NRF) Centre in Indigenous Knowledge Systems (CIKS)

RESEARCH FOCUS AREA: TRADITIONAL MEDICINE

Image of researcher in action



Image of knowledge holder



Full Name: Tshidzumba Pfarelo Witney

Country of Research: South Africa

Research Topic: An inventory and pharmacological evaluation of medicinal plants used as anti-diabetes and anti-arthritis in Vhembe District Municipality, Limpopo Province, RSA

Institutional Affiliation: University of Venda

Research Supervisor: DR N.A. Masevhe

Research Background/Summary

The study deals with medicinal plants which are used in the treatment of two common chronic diseases namely diabetes and arthritis. The reason these two are chosen is because arthritis (57%) is a leading chronic disease (Vogeli *et al.*, 2007), and diabetes (17%) is a leading cause of cardiovascular (CV) morbidity and mortality (Cooper-DeHoff *et al.*, 2009). The main focus is on the evaluation of antioxidant, anti-inflammatory and antidiabetic properties of the ethnobotanically selected plants. Ethnobotanical survey was conducted and traditional practitioners were interviewed with the aid of questionnaire, the latter contained questions such as: common name of plant, vernacular names, plant parts used, preparation and administration modes, personal information about the informant such as: age, gender as well as level of literacy. Most of the people living in Vhembe District Municipality reside in the rural area where they have to walk long distances to get general health care, because of that they strongly depend on medicinal plants to treat variety of diseases including diabetes and arthritis, most people are not used to healthy lifestyle like regular exercise and healthy eating, thus they are more prone to lifestyle diseases such as arthritis and diabetes.

Research administration and milestones for completion (2016)

- Anti-inflammatory activity assay will be conducted from 4th May 2016 - 15th May 2016
- Alpha amylase inhibition assay and Alpha glucosidase inhibition assay will be conducted from the 17th June 2016 to 30th June 2016.
- Cytotoxicity will be conducted from 1st of July to 7th July 2016.
- Lab results analyses will be conducted from the 7th to 10th July 2016.
- Submission of lab results analysis to the supervisor will be conducted on the 13th July 2016.
- Chapter 4 and 5 lab analysis write up will be conducted on the 15th August 2016.
- Submission complete first draft of thesis will be conducted on 12th October 2016.
- Final thesis will be submitted again on 20th November 2016.

Email: t.pfarelo7@gmail.com