

Exploring Geophagy Among Pregnant Women: Practices, Perceptions, and Health-Related Effects with Perspectives from Nurses in Tshwane, Gauteng Province, South Africa

Malebatja Mohora Feida^{1*}, Mokgatle Mathildah Mpata¹, and Oluwafemi Omoniyi Oguntibeju²

¹*Department of Public Health, School of Healthcare Sciences, Sefako Makgatho Health Sciences University, Pretoria Ga-Rankuwa 0208, South Africa*

²*Phytomedicine and Phytochemistry Group, Department of Biomedical Sciences, Faculty of Health and Wellness Sciences, Cape Peninsula University, Bellville, 3575, South Africa*

*mohora.malebatja@smu.ac.za (*Corresponding author's email only)

Abstract

Background and Objectives: Geophagy is the continuous ingestion of earth materials like clay soil that is generally common among pregnant woman. This practise is often linked to various negative health outcomes and potential health risks. It is a major global public health challenge that is currently not recognised as a serious medical condition. **Methods:** An exploratory qualitative study was conducted to explore the practise of geophagy, perceptions and health related effects of geophagy amongst pregnant women and Nurses in Tshwane, Gauteng Province, South Africa. The study was conducted in Tshwane Public Healthcare facilities located in the North District of Tshwane, targeting areas such as Mamelodi, Ga-Rankuwa, Mabopane, Soshanguve, and Pretoria CBD, Focus group discussions were conducted to explore the geophagic practise of pregnant women attending antenatal care services. Nurses allocated in the antenatal care units were also interviewed in focus group discussions. An adapted interview guide was used during the interviews. Data collection took 3 months between September and December 2023. **Results:** The findings are that geophagy is a common practise amongst pregnant women and that it is inspired by social acceptability, cultural and religious belief systems, lack of proper knowledge, and absence of health education and promotion intervention programmes. The study findings revealed that more than fifty percent of the participants practised geophagy during gestation period attributing this to the attempt to compensate for iron deficiency. Other participants indicated that they use the practise of geophagy to curb nausea, morning sicknesses and vomiting during pregnancy. Nurses perceived geophagy to be triggered by mental health and substance use disorders, iron deficiency, and exacerbated by non-adherence to iron deficiency and folic acid supplements during gestation period. **Conclusion:** It

is concluded that education programmes about geophagy amongst pregnant women should be prioritised by government to prevent pregnancy complications which could lead to maternal and child mortalities and morbidities.