|  |  |
| --- | --- |
| **A PROGRAMME TO SUPPORT THE DEVELOPMENT OF ULTRASOUND SKILLS FOR MIDWIVES PRACTICING IN PRIMARY HEALTHCARE FACILITIES IN GAUTENG- Women’s health****Ethics clearance number: R14/49****Contact details:**1. **Yasmin Casmod** **yasminc@uj.ac.za**University of the Witwatersrand University of Johannesburg
2. **Susan Armstrong** **sue.armstrong@wits.az.za**University of the Witwatersrand
 |  |
| **INTRODUCTION** Reducing maternal and neonatal mortality rates has been identified as a global significance and the use of ultrasound in pregnancy has been recognized as an intervention to address the Sustainable Development Goal three target. Obstetric ultrasound is safe, cost effective and a well-known imaging tool that is used routinely in first world countries. However, disparities exist within and between countries and in low- and middle-income countries patients are not offered routine obstetric ultrasounds due to a shortage of trained medical professionals.The World Health Organization advocates that all women receive at least one ultrasound during their pregnancy to identify and classify the risk of the pregnancy. This affords patients the necessary surveillance and required monitoring throughout the duration of their pregnancy.**FIGURE 1: ULTRASOUND IMAGE DEMONSTRATING FETUS IN A SAGITTAL PLANE** PROBLEM STATEMENT: The training of midwives to conduct basic obstetric ultrasound examinations is not included in the current education programme for student midwives, nor is it specifically mentioned in their scope of practice. Antenatal ultrasound provides early diagnosis and important information for the management of all pregnancies. Thus training midwives to perform ultrasounds would increase the availability and address the unequal access to antenatal ultrasound services for the population that is dependent on the public health sector in South Africa. As midwives are currently not conducting ultrasound examinations, an evidence-based programme for the training of midwives to utilize ultrasound is required. This will allow for timely assessments essential for patient management and improved outcomes.RESEARCH QUESTION: How can South African midwives best be trained to perform Basic level one antenatal ultrasound scans in order to address the insufficient access to pregnant women in South Africa?**PURPOSE OF THE STUDY:** The aim of the study is to develop a standardized education programme to introduce the use of ultrasound amongst midwives in South Africa.RESEARCH OBJECTIVES AND METHODOLOGY To address each research objective, the study consists of various phases and methods of data collectionTable 1: Phases, objectives, and methods of data collection.

|  |  |  |
| --- | --- | --- |
| Phases | Objectives | Method |
| One | * To describe the current ultrasound education programmes worldwide relevant to midwives in order to assist in developing an ultrasound education programme.
 | * Scoping review
 |
| Two | * To explore the possible constraints and opportunities for ultrasound training of midwives.
* To describe what should be included in the ultrasound training programme for midwives
 | * Semi-structured interviews
* Focus group interview
 |
| Three | * To develop an ultrasound education programme for midwives
 | * Triangulation of data and application of the

ADDIE Model |
| Four | * To present and verify the programme
 | * Pilot study
 |

CONCLUSIONThe significant contribution of this research will be the development of a standardized curriculum to facilitate an ultrasound training program for midwives in the south African context.**REFERENCES*** Abawollo, H.S. et al. (2022) ‘Contribution of portable obstetric ultrasound service innovation in averting maternal and neonatal morbidities and mortalities at semi-urban health centers of Ethiopia: a retrospective facility-based study.’, BMC pregnancy and childbirth, 22(1), p. 368. doi:10.1186/s12884-022-04703-1.
* Åhman, A. et al. (2016) ‘“Essential but not always available when needed”–an interview study of physicians’ experiences and views regarding use of obstetric ultrasound in Tanzania’, Global Health Action, 9(1), pp. 1–12. doi:10.3402/gha.v9.31062.
* Aliyu, L.D. et al. (2016) ‘Ultrasound in Africa: What can really be done?’, Journal of Perinatal Medicine, 44(2), pp. 119–123. doi:10.1515/jpm-2015-0224.
* Hall, E.A. et al. (2021) ‘Analysis of an obstetrics point-of-care ultrasound training program for healthcare practitioners in Zanzibar, Tanzania’, Ultrasound Journal, 13(1). doi:10.1186/s13089-021-00220-y.
* Wiafe, Y.A., Odoi, A.T. and Dassah, E.T. (2011) ‘The Role of Obstetric Ultrasound in Reducing Maternal and Perinatal Mortality’, Ultrasound Imaging - Medical Applications [Preprint]. doi:10.5772/22847.
* Zitha, E. and Mokgatle, M.M. (2020) ‘Women’s views of and responses to maternity services rendered during labor and childbirth in maternity units in a semi-rural district in south africa’, International Journal of Environmental Research and Public Health, 17(14), pp. 1–12. doi:10.3390/ijerph17145035.
 |