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**Health providers' access to blood pressure machines at point-of-care in a Ugandan district: a mixed methods study**

*Innocent Besigye<sup>\*1</sup>, Vicent Okuuny<sup>1</sup>, Mari Armstrong-Hough<sup>2</sup>, Anne Katahoire<sup>1</sup>, Nelson Sewankambo<sup>1</sup>, Bob Mash<sup>3</sup>, Achilles Katamba<sup>1</sup>*

1. Makerere University, College of Health Sciences, Kampala Uganda
2. New York University, School of Global Public Health, New York, NY, USA
3. Stellenbosch University, Faculty of Health Sciences, Cape Town, South Africa

*Corresponding/presenting author: Innocent Besigye E-mail: [ibesigye@gmail.com](mailto:ibesigye@gmail.com)*

**Background:** Early diagnosis and proper management of hypertension prevents a significant number of complications and premature deaths. However, in resource-variable settings, access to blood pressure machines may be limited. Therefore, we sought to understand access to blood pressure machines at the point of care in primary care facilities serving a high prevalence population in Eastern Uganda.

**Methods:** Sequential explanatory mixed methods study using a structured facility checklist and key informant interviews with primary care providers who comprised of a doctor, clinical officers, nurses and midwives. The checklist collected data on availability and functionality of BP machines in each health facility. Key informant interviews explored health providers' actions to access BP machines. The checklist was administered by the interviewer who also physically checked the availability and functionality of the machines.

**Results:** Eighteen health facilities were studied. Majority (17/18) of health facilities reported at least one working BP machine. However, health providers said they have limited access to machines because they are not located at each point of care. Health providers report borrowing among themselves within their respective units or from other units within the facility. Some health providers said they purchase and bring their own BP machines to the health facilities or attempt to restore the functionality of broken ones. Health providers said they were motivated to search the clinic for BP machines for some patients but not others, based on their perception of the patient's risk for hypertension.

**Conclusions:** Access to BP machines by health providers at the point of care within Tororo district primary care facilities is limited. As a result, screening for hypertension is selective based on health providers' perception of the patients' risk for hypertension.

BP machines should be accessible at the point of care. BP machines should be regularly inspected, calibrated, and repaired. In order to minimize frequent breakdowns, health providers should be trained in proper use of BP machines.