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A School of Nursing-Led Community Initiative to Identify and Reduce Hypertension in Mukono District, Uganda

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Purpose:

Hypertension (HTN) is a dangerous health condition, which can lead to debilitation or death. According to The World Health Organization, the highest prevalence of adults over 25 years with HTN is in the African Region at 46% (2008). The most commonly reported non-communicable disease (NCD) in Uganda is hypertension (Musinguzi, et al, 2015). The people of the Mukono district, Uganda, suffer from a high prevalence (27%) of HTN (Musinguzi, & Nuwaha, 2013). HTN in Mukono can go undetected until a major catastrophic health event occurs. A University School of Nursing, in partnership with a non-governmental agency (NGO) that provides sustainable, and evidence-based health programs in the Mukono district, developed an innovative plan to educate the community health workers (CHW), on HTN diagnosis, education, and medical referral. CHWs are cost effective in screening for cardiovascular disease in medically low resource areas (Gaziano, et al, 2015).

Purpose: To train CHWs in measuring and recording blood pressures (BP) on local villagers and referring those with BP's greater than 160/90 to a health center, in addition to educating them on lifestyle changes to improve blood pressure (BP).

Methods:

During the fall 2017 and 2018, the nurse-led teams of 5-7 pre-licensure nursing students and a faculty member trained 45 and 75 CHWs in measuring, recording, and educating people in their village about BP and HTN. Prior to departure, manual BP equipment was acquired by the students and faculty. Once CHWs were trained in manual BP, they were educated about lifestyle changes to lower BP, given documentation forms to track BP results, and follow-up communication with the HTN control liaison within the NGO.

Results:

In Fall 2017, 45 CHWs were trained in BP monitoring. Immediately after instruction, all CHWs were evaluated on BP accuracy, with the trainer (student nurse) testing BP simultaneously and evaluating a 5 stop method developed by Amarchand, Sharma, & Krishan (2013). At the conclusion of the training sessions, 100% of the 45 trained CHWs correctly measured BP, evaluated by the student nurse re-test. In March, 2018, follow-up evaluation was done on the previously trained CHWs from 2017. On re-evaluation, there was 95% accuracy in BP measurement, using student nurse re-test and 5 point method. In fall 2018, 51 un-trained CHWs were trained on BP monitoring and education; along with 21 follow-up evaluation on those trained in fall, 2017. Of both new trainees and follow-up trainees, there was 100% accuracy in BP measured by student nurse re-test.

Conclusion:

The health of a global community is dependent upon partnerships that are embedded in the community, with sustainable, evidence-based interventions based on realistic goals and a well-conceived evaluation plan. A School of Nursing led initiative, partnering with a local NGO, focused on training CHWs on BP screening and education has led to over 90 CHWs successfully monitoring for HTN in their villages, training the villagers on healthy lifestyle, and referring

those with HTN to local health centers for treatment. Successful monitoring of this program, with the HTN control liaison within the NGO helps guarantee sustainability.

Title:

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Keywords:

Community Health Workers, Non-Communicable Diseases and Nursing Students

Abstract Summary:

Pre-licensure nursing students and a university faculty member partnered with a local NGO in Uganda and successfully trained 90 community health workers on blood pressure screening, healthy lifestyles, and referral to health centers for treatment. Successful monitoring of this program, with the NGO hypertension control liaison, helps guarantee sustainability.

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Author Summary: Dr. Karen Dawn is an Assistant Professor at George Washington University School of Nursing. She directs the Community Health experiences for ABSN students and has extensive expertise in public and community health