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CARDIOPULSE

Global Spotlights

Early stakeholder engagement lessons from managing hypertension among people living with human-immunodeficiency virus: an integrated model (MAP-IT)

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Despite the availability of evidence-based interventions (EBIs) for hypertension control, the healthcare workforce shortage in Africa limits the effective integration of these interventions into existing services.[1] For example, the critical shortage of the health workforce has been reported as a major barrier to hypertension control in Nigeria, where in 2013, there were 3.8 physicians and 14.5 nurses per 10 000 population.[1] An acute shortage of physician healthcare workers limits Nigeria's capacity to offer hypertension services in primary health centres (PHCs), where the majority of people living with HIV (PLWH) receive their care. To mitigate this problem, the Nigerian Federal Ministry of Health enacted a task-shifting policy across its healthcare system.[2] Specifically, nurses are mandated to carry out clinical duties at PHCs including case identification, patient counselling and treatment for maternal and child health, tuberculosis, malaria, and human immunodeficiency virus (HIV).[2] Although the 'Task-shifting and Task-sharing Policy for Essential Health Care Services in Nigeria' has been in place since 2014,[2] it has not been leveraged as a strategy to integrate non-communicable disease (NCD) management into HIV care where nurses were not allowed to treat patients with NCDs until recently.

We are conducting an NIH-funded cluster randomized controlled trial of 30 primary healthcare facilities in Akwa Ibom State of Nigeria to compare the effect of practice facilitation (i.e. quality improvement support for primary care practices) intervention vs. usual care on the rate of adoption of task-strengthening strategy for hypertension control and change in systolic blood pressure (SBP) from baseline to 12 months.

Even though early stakeholders' engagement is essential for the adoption of such EBIs, strategies on how to engage them early to improve uptake of these interventions are lacking. This makes the adoption or actions to implement evidence-based strategies for hypertension control in real-world settings very challenging in low- and middle-income countries (LMICs) like Nigeria.

We share our experience engaging major stakeholders in the formative stages of our study with the aims of introducing the study to them, obtaining different stakeholders' perspectives on the context in Akwa Ibom state that should be considered in programme implementation, learning from different stakeholders the factors that will lead to the success of the programme and obtaining additional information pertaining to the local settings where PLWH receive care.

A 2-hour brainstorming session was conducted to evaluate stakeholders' perceptions of an evidence-based strategy designed to identify, counsel, treat, and refer hypertensive PLWH in primary healthcare centres under the USAID-funded Strengthening Integrated Delivery of HIV/AIDS Services (SIDHAS) programme in Akwa Ibom State.

One hundred and fifteen stakeholders (86% female) attended the meeting comprising policy makers, the implementers and service delivery personnel, and the community workers. Among the policy makers (18.2% of total participants) were the Honourable Commissioner for Health for Akwa Ibom State and the Executive Secretary, Akwa Ibom Primary Health Care Development Agency. The implementers include two Primary Care Physicians and 82 community nurses

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(73.0% of total participants) while community mobilizers include three community health extension workers and one volunteer health care provider (*Figures 1* and 2).

Participants felt that the study is noteworthy and one which will help in ensuring routine BP measurement and documentation across all the facilities and help in building capacity for high BP management at the primary healthcare level in Akwa Ibom state of Nigeria.

Top strategies to identify hypertensive PLWH in the communities suggested by the participants include: (i) provision of BP machines to nurses to routinely measure BP of HIV patients during the monthly

Figure 1 Cross-section of stakeholders during the brainstorming session led by one of the study investigators, Dr. Dike Ojji.

Figure 2 The Honourable Commissioner of Health in Akwa Ibom State (standing with a microphone) delivering his remarks during the brainstorming session.

Community ART Refill Club meetings, (ii) routine measurement of the BPs of HIV patients as they come back for 3- and 6-month ART refill, (iii) utilization of community outreaches by nurses, social mobilization officers, health educators, and health promoters to create awareness and identify hypertensive PLWH within the community, (iv) use of volunteer healthcare workers to routinely measure the BPs of HIV patients during drug refill in the community, (v) collaboration with support groups to create awareness among PLWH on the need to measure their BPs.

With regard to creating awareness among PLWH in the community on the burden of hypertension, the stakeholders suggested the following: (i) collaboration with state and local government support groups, (ii) utilization of faith organizations, publicity agents, and community gatekeepers to create awareness and educate PLWH on the need to have their BPs measured regularly and treated if their BP is high, (iii) creation of awareness among primary healthcare staff during monthly facility Continuous Quality Improvement meetings on the need to routinely measure the BPs of PLWH (iv) education of PLWH during routine clinic on the need to have their BPs checked and treated if high. Other strategies suggested by the stakeholders to create awareness include the use of the following: jingles on the radio, information, education, and communication materials, posters in the health centres, and the use of mobile text messaging.

Regarding factors that will hinder the success of the programme, the stakeholders noted (i) poor incentivization of community nurses, (ii) not leveraging available resources and facilities, and (iii) poor advocacy and awareness campaigns at the community level.

We identified factors that will likely enhance or hinder the success of our programme. The lessons learned will help in continuous engagement of relevant stakeholders' in the pre-implementation of evidenced-based strategies for hypertension control among PLWH in LMICs.

Collaborators

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References

1. Daini BO, Okafor E, Baruwa S, Adeyanju O, Diallo R, Anyanti J. Characterization, and distribution of medicine vendors in 2 states in Nigeria: implications for scaling health workforce and family planning services. *Hum Resour Health* 2021;**19**:60.
2. Rabkin M, de Pinho H, Michaels-Strasser S, Naitore D, Rawat A, Topp SM. Strengthening the health workforce to support integration of HIV and noncommunicable disease services in sub-Saharan Africa. *Aids* 2018;**32**:S47–S54.