ASSESSMENT OF TASK SHARING PILOT FOCUSED ON THE CONTROL OF HYPERTENSION IN PRIMARY HEALTH CARE FACILITIES, OGUN AND KANO STATES, NIGERIA, 2022; A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: **World Health Organization prioritizes strengthening of cardiovascular disease care in primary healthcare (PHC). To achieve this, Nigeria is promoting task-sharing by non-physician healthcare workers (HCWs) due to shortage of physicians and other highly-skilled HCWs in PHC facilities. This study assessed task-sharing pilot for hypertension control in PHC facilities under Nigeria Hypertension Control Initiative of the Federal Ministry of Health (MOH).**

Methods: **A cross-sectional study was conducted using key informant interviews. Six stakeholders were purposively selected from Ogun and Kano States' MOH and the Federal MOH due to their roles as focal persons of health programs practicing task-sharing and who had experience with task-sharing in hypertension control program. Interview guide was developed to evaluate task-sharing in the pilot program. Data were analyzed using thematic analysis.**

Results: **Respondents reported some strengths associated with task-sharing which include availability of non-physician HCWs, national guidelines for task-sharing practice, improved efficiency in health service delivery, reduction in patients' waiting time, and improvement in achieving universal health coverage. The identified challenges included staff attrition, staff fatigue, professional territorialism, and non-physician HCWs reported to go above their task authorization. Respondents reported improved access to care in some PHC facilities due to task-sharing by non-physician HCWs. Respondents perceived that training and supportive supervision are strategies to ensure the successful implementation of task-sharing.**

Conclusion: **This study notes that task-sharing from established health programs and the ongoing piloting on hypertension control has improved service delivery. Nigeria may be able to implement nationwide task-sharing for the control of hypertension through PHC.**

Keywords: Task sharing, Hypertension, Primary healthcare, Health personnel, Policy, Nigeria

INTRODUCTION

The World Health Organization (WHO) African region has a prevalence of raised blood pressure of 35.5% for both sexes combined, one of the highest of all the WHO regions worldwide.[1] A study conducted in 2017/2018 found the prevalence of hypertension was 38% in Nigeria.[2]

However, in many countries, only trained medical doctors and other highly skilled health workers are allowed to diagnose hypertension and prescribe anti-hypertensive drugs.[3] As most doctors work in the secondary and tertiary health facilities, Nigeria lacks the human resources to manage hypertension, one of the major risk factors for cardiovascular disease, at the primary health care level. The primary health care workforce is dominated by non-physician health care workers especially nurses and diploma-level community health extension workers (CHEWs),[4,5] few of whom are authorized to carry out tasks that could increase the diagnosis and management of hypertension.

To strengthen hypertension care at the primary health care level, the Nigeria Hypertension Control Initiative (NHCI) was launched in November 2020 under the Federal Ministry of Health (FMOH),[6] and the FMOH developed a policy[7] detailing the rules and guidelines for task sharing among the primary health care workforce and began piloting this scheme intended for two years in Ogun and Kano States.

Task sharing is the expansion of the levels of health care providers who can appropriately deliver health services.[8] It enables the expansion of tasks to low and mid-level health workers to safely provide clinical tasks. A systematic review/meta-analysis of 31 studies found that task sharing interventions were effective in the control of hypertension.[9] Resolve To Save Lives reported that a team-based care approach using task sharing, was an effective way to reorganize service delivery to meet the demand on hypertension control.[10]

The FMOH policy allowed for task sharing activities to include blood pressure measurement, prescribing and dispensing anti-hypertensive medicines, adherence counseling and pharmacovigilance.[7] The policy required that patients who would be managed in the primary health care facilities through task sharing would be those who were clinically stable, not pregnant, and did not have uncontrolled complications.[7]

This study was conducted by the researchers to assess the task sharing pilot for hypertension control in primary health care facilities under the NHCI.

MATERIALS AND METHODS

Study design: A cross-sectional study was conducted using key informant interviews for the collection of qualitative data.

Settings: The NHCI promoted task sharing for treatment of patients with hypertension in primary health care facilities with continuous increase in the number of facilities in the pilot program. Different levels of health care workers in these health facilities were trained prior to the commencement of the task sharing for hypertension management pilot. All levels could perform the tasks of blood pressure measurement, adherence counseling, pharmaco-vigilance and reporting of adverse reactions. Only medical officers, nurses, pharmacists, community health officers and CHEWs could prescribe anti-hypertensive medicines (Table 1).[7]

The NHCI's hypertension treatment protocol has the following steps:
Step 1: If blood pressure ≥140/90 mmHg, start amlodipine 5mg.
Step 2: After one month, measure blood pressure again. If still high, treat with amlodipine 5mg + losartan 50mg.
Step 3: After one month, measure blood pressure again. If still high, treat with amlodipine 10mg + losartan 100mg.
Step 4: After one month, measure blood pressure again. If still high, treat with amlodipine 10mg + losartan 100mg + hydrochlorothiazide 25mg.
Step 5: After one month, measure blood pressure again. If still high, refer for specialist hypertension management.

Note that if initial blood pressure ≥160/100 mmHg, but < 180/110 mmHg, start at step 2. If initial blood pressure ≥180/110 mmHg, give step 3 drugs and refer to the emergency unit of the nearest general hospital within one hour.

The study respondents were recruited in April 2022 and data were collected through key informant interviews between April and May 2022 using an interview guide developed by the researchers. This was to explore task sharing during the implementation of the pilot program in Kano and Ogun States which were selected for geographical representation of north and south of Nigeria respectively.

Participants: Six stakeholders were purposively selected from the Ogun and Kano States' Ministry of Health and the FMOH who were focal persons of health programs focused on non-communicable diseases (NCDs), HIV/AIDS, tuberculosis, and family planning, who were practicing task sharing during the pilot. These focal persons were supervisors of the facility-based health workers who provided task sharing services under the pilot.

Variables: The respondents were asked about their understanding of task sharing, importance of task sharing, capacity for task sharing, organization of task sharing practices, strengths/weaknesses associated with task sharing, the situation of task sharing for hypertension control in the pilot, and recommendations to improve task sharing for hypertension control.

Data sources/measurements/analysis: The primary researcher conducted the interviews via phone calls. Interviews were recorded and transcribed verbatim. Data was analyzed using thematic analysis. Themes were identified during analysis in line with the interview guide. It entailed identifying, analyzing, and reporting repeated patterns. The thematic analysis involved familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining themes, and producing the report.

Ethical approval: The study was reviewed and approved by the Research and Ethics Committee of Alex Ekwueme Federal University Teaching Hospital, Abakaliki, Nigeria. The approval number is 25/03/2022-10/05/2022. The study participants gave informed consent prior to their participation.

RESULTS

Demographic and baseline characteristics of study respondents: The six key informants (four men and two women) were program officers aged 41 to 59 years. Three of the informants were from Ogun State's health ministry, two from Kano State's health ministry and one from the FMOH. Three of the informants were focal points for NCDs, while the remaining three were focal points for HIV/AIDS, tuberculosis and family planning, but all had experience with task sharing.

Understanding of task sharing: All the respondents understood the concept of task sharing and were aware that there was a policy document. One respondent defined task sharing as a, "process that requires rational redistribution of tasks and responsibilities across the streams of health workforce primarily targeting human resources for health."

Importance of task sharing practice in primary health care facilities: The importance of task sharing was emphasized by another respondent who said, "Task sharing has been of good help, looking at the scarcity of human resources for health. Therefore, task sharing will help greatly in health systems strengthening."

Capacity for task sharing: Many of the respondents also reported that the gap in human resources for health was key to the implementation of task sharing. A respondent said "One of the areas in which the task sharing policy is making an impact is in human resources for health, because in Nigeria, there is high shortage of human resources for health. So, lives are being saved on a daily basis with this policy because it has actually detailed what each cadre of staff can do."

Organization of task sharing practices: Respondents acknowledged that CHEWs and community health officers and nurses have been task-sharing and that training, retraining and supportive supervision are part of the strategies to ensure the successful implementation of task sharing practice. One of the respondents said "We have very few workers in the primary health care centers. And commonly, it is the CHEWs that head the facilities and do all the work.

Table 1: Task sharing duties of various levels of health care workers treating non-communicable disease patients as recommended by the task sharing policy of the Federal Ministry of Health, Nigeria, 2021

Task	CHEW	CHO	RN/ RM/ RPHN	Comm Pharm	Pharm	MO	LCN/ LCM	Pharm Tech	HRO/ HRT	HT	EHO/ EHT/ EHA	Rad/ RT	MLA/ MLT	MLS
Management of patients with hypertension														
Blood pressure measurement	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Prescribe anti-hypertensive medicine	√	√	√	√	√	√	X	X	X	X	X	X	X	X
Dispensing/ refilling of medicine	√	√	√	√	√	√	√	√	√	√	X	X	X	X
Home delivery/ drop-off of medicine at collection points	√	√	√	√	√	√	√	√	√	√	√	√	√	X
Adherence counseling, pharmacovigilance and reporting of adverse reactions	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Abbreviations: CHEW - Community Health Extension Worker; CHO – Community Health Officer; Comm Pharm – Community Pharmacist; EHA/EHO/EHT - Environmental Health Assistant/Environmental Health Officer/ Environmental Health Technologist; HRO/HRT – Health Records Officer/Health Record Technician/Technologist; HT – Health Technician; LCM/LCN - Licensed Community Midwife/Licensed Community Nurse; MLA/MLT - Medical Laboratory Assistant/ Medical Laboratory Technician; MLS - Medical Laboratory Scientist; MO - Medical Officer; Pharm – Pharmacist; Pharm Tech – Pharmacy technician; Rad/RT – Radiographer/Radiographer Technician; RN/ RM/RPHN – Registered Nurse/ Registered Midwife/ Registered Public Health Nurse

[a] *√ (Yes); X (No)*

Table 2: Themes and codes of qualitative data from study respondents

Theme	Code	Example Quote
Understanding of task sharing	Definition of task sharing	"Process that requires rational redistribution of tasks and responsibilities across the streams of health workforce primarily targeting human resources for health."
Importance of task sharing	Addressing HRH shortages	"Task sharing has been of good help, looking at the scarcity of human resources for health."
	Strengthening health systems	"Task sharing will help greatly in health systems strengthening."
Capacity for task sharing	Impact on HRH shortage	"One of the areas in which the task sharing policy is making an impact is in human resources for health."
	Saving lives	"Lives are being saved on a daily basis with this policy because it has actually detailed what each cadre of staff can do."
Organization of task sharing practices	CHEWs and nurses sharing tasks	"It is the CHEWs that head the facilities and do all the work."
	Training and retraining	"We usually train our staff and sometimes when we go for supportive supervision, we do on-the-job training."
	Supervision and advocacy	"There is ongoing monitoring and supportive supervision at the primary health care level."
Strength of task sharing	Availability of non-physician health workers	"There is availability of health workers that require minimal training to perform the tasks that are shared to them."
	National guidelines	"National guidelines for task-sharing practice exist."
	Efficiency in health service delivery	"Improved efficiency in health service delivery and reduction in patients' waiting time."
	Universal health coverage	"Improvement in achieving universal health coverage."
Challenges of task sharing	Staff attrition and fatigue	"Workers in the facilities are overwhelmed with the addition of the tasks on hypertension management."
	Professional territoriality	"Advocacy to health professionals is needed to address professional territoriality."
	Non-physicians exceeding task authorization	"Non-physician health care workers exceeding their task authorization."
	Inadequate supervision	"Supervision is inadequate for effective task sharing."
Task sharing for hypertension control	Increased diagnosis and management	"A lot of hypertension cases are being detected and appropriate therapy is provided at the primary health care level."
Recommendations for improvement	Training and supportive supervision	"There is need for training, monitoring and supportive supervision."
	Staff motivation	"Staff motivation is needed to sustain task sharing."
	Advocacy to health professionals	"Advocacy to health professionals to address professional territoriality."
	Expansion to other NCDs	"Addition of other NCDs into the task-sharing scheme."
	Infrastructure and funding support	"Provision of funds for equipment and infrastructures."

However, we usually train our staff and sometimes when we go for supportive supervision, we do on-the-job training."

In both the pilot states of Ogun and Kano, training was conducted for the non-physician health care workers before they started managing cases of hypertension. Advocacy to stakeholders was done and some necessary infrastructural support and equipment were provided. Supportive supervision in the primary health care facilities was ongoing. A respondent reported that "Usually, whenever a new task or responsibility is to be deployed to primary health care facilities, it is usually preceded by training. So what we did was that we had a federal level training, then we had local level training that is at the state level. There is ongoing monitoring and supportive supervision at the primary health care level. There is also advocacy and provision of some infrastructural support and equipment."

Strengths/weaknesses associated with task sharing: Respondents noted that the availability of non-physician health care workers, national guidelines for task sharing practice, improved efficiency in health service delivery, reduction in patients' waiting time, and improvement in achieving universal health coverage were strengths of the pilot. On availability of non-physician health care workers, a respondent reported that "There is availability of health workers that require minimal training to perform the tasks that are shared to them".

The identified challenges associated with task sharing included staff attrition, staff fatigue, professional territoriality, non-physician health care workers exceeding their task authorization, and inadequate supervision. On staff fatigue, a respondent said that "Workers in the facilities are overwhelmed with the addition of the tasks on hypertension management as they are the same people providing other health services. More health workers are rarely added to work in the primary health facilities".

Task sharing for hypertension control in primary health care facilities: Following reports from the interviews, the two pilot sites have been able to increase the diagnosis and management of hypertension through task sharing. This was emphasized by a respondent who said "Task sharing for hypertension control has been a good development for us and what we have been longing to have for a long time. We should have done this many years ago. A lot of hypertension cases are being detected and appropriate therapy is provided at the primary health care level in the states for piloting."

Recommendations to improve task sharing for hypertension control: The recommendations made by the respondents included training, monitoring/ supportive supervision, staff motivation, and advocacy to health professionals to address professional territoriality. Other broader recommendations included addition of other NCDs into the task sharing scheme, provision of health insurance for vulnerable clients, improvement of the revolving drug fund system, improvement of the data management system, and provision of funds for equipment and infrastructures. (Table 2)

DISCUSSION

This assessment explored the knowledge and learning arising from the piloting of a task sharing policy focused on hypertension management in primary health care facilities. The study respondents were knowledgeable about the concept and importance of task sharing. The practice of task sharing was organized and implemented through stakeholder advocacy, provision of infrastructures and equipment, training and supportive supervision.

A key strength was the availability of non-physician health care workers with whom critical tasks could be shared, providing an opportunity to improve service delivery at the primary health care level. Task sharing by non-physician health care workers in HIV/AIDS, tuberculosis and family planning programs have shown that these workers have played important roles in improving health service delivery.[11,12] Study participants reported improvement in access for hypertension care with an increase in diagnosed/managed cases of hypertension through primary health care in both Ogun and Kano States.

However, a key weakness of task sharing was professional territoriality which may be fueled further by reports of non-physician health care workers exceeding their task authorization. Professional territoriality in this context refers to physicians' insistence that it is their role to manage hypertension. One of the respondents said "Some doctors were of the opinion that it was out of place to begin to give people who had limited knowledge responsibilities they cannot carry, because that is not their professional area. They felt if you give the non-physician health workers maybe little responsibilities, they can go further to create a lot of chaos." Nigeria is experiencing a burden of inter-professional rivalry and conflict in the health care sector, with negative effects on health service delivery.[13] This may require more professional stakeholders' engagement to address it as the pilot program intends to be expanded to other states of the country.

Limitation: A limitation of this study is the small number of stakeholders interviewed. However, they represent the health programs that are currently practicing task sharing in primary health care facilities in the two states piloting task sharing for hypertension management.

CONCLUSION

With the evidence of task sharing from established health programs and the ongoing piloting on hypertension control, Nigeria may be able to implement nationwide task sharing for the control of hypertension in primary health care facilities. The task sharing policy in hypertension control is expected to guide the way forward in strengthening the primary health care level. However, the policy will require financial and infrastructure resources to fully be operational. To narrow the gap that exists between the policy makers and actual practice,[14] future research should focus on a wider group of health care workers

in primary health care facilities to access their perspectives on task sharing for hypertension management.

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Conflict of Interest Statement

The authors affirm that they have no conflict of interests to declare.

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