

Challenges of Tuberculosis Control in Lagos State, Nigeria: A Qualitative Study of Health-Care Providers' Perspectives

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Abstract

Background: Tuberculosis (TB) burden in Nigeria is a reflection of the challenges of TB control strategy in the country. This study explored the challenges encountered by the health workers in public and private TB treatment centers in Lagos, Nigeria. **Methods:** In-depth interviews were held with 34 health workers providing TB services in private and public health facilities and the Lagos state Program Officer between October 1, 2016 and January 31, 2017. The transcripts were read severally and coded for qualitative data analysis. Themes were developed from coding. **Results:** Insufficient or lack of funds to track patients lost to follow-up, conduct home visits, collect drugs from the central stores, and shortage of laboratory reagents were some of the logistical challenges encountered by the health workers. There was shortage of health workers and some were yet to be trained resulting in work overload. This was situation aggravated by the frequent redeployment and health worker attrition in the public and private sector respectively. **Conclusion:** The government need be proactive and show leadership by finding lasting solutions to the logistical and human resource challenges facing the Lagos State TB and Leprosy Program.

Keywords: Challenges, Nigeria, private sector, public sector, tuberculosis control

INTRODUCTION

The foundation of the current global tuberculosis (TB) strategy was established in 1994 with the launch of the directly observed treatment short-course (DOTS) strategy¹ after the declaration of TB as a global public health emergency by the World Health Organization in 1993.² The goal of the DOTS strategy was to meet the global target set in 1991 by a World Health Assembly resolution to cure 85% of smear-positive patients under treatment and detect 70% of cases by the year 2000.³

The National TB and Leprosy Control Programme (NTBLCP) has started the implementation of DOTS strategy through public health facilities in 1993. As at December 2014, there were 5728 DOTS treatment centers and 1765 microscopy centers in 774 Local Government Areas (LGAs) in the country.⁴ In 2007, Nigeria commenced the private sector engagement in TB management based on the recommendations of the STOP TB strategy in 2007.⁵ This was done to improve access to DOTS services and leverage on the potentials of the private sector which provides 60% of health services in Nigeria.⁶ Besides, the NTBLCP implemented

several community DOT models, contact tracing, and community outreaches to achieve the national targets.^{4,7}

Despite these efforts, TB remains a public health challenge in Nigeria. The case detection rate in the country is one of the lowest worldwide at 16%, Nigeria is the fourth among the high-burdened countries for TB and one of the six countries contributing 60% of new TB cases globally. TB and HIV coinfection rate is about 17%, and the incidence of multidrug resistance TB in 2015 was 16/100,000 population.⁸ There is an urgent need to assess the challenges of TB management in Nigeria.

The Lagos State TB and Leprosy Control Program (LSTBLCP) commenced DOTS management of TB in 2003. As at 2015,

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Submitted: 17-Jul-2019 **Revised:** 26-Sep-2019

Accepted: 27-Oct-2019 **Published:** 02-Mar-2020

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How to cite this article: Adejumo OA, Daniel OJ, Adepoju VA, Femi-Adebayo T, Adebayo BI, Airauhi AO. Challenges of tuberculosis control in Lagos state, Nigeria: A qualitative study of health-care providers' perspectives. *Niger Med J* 2020;61:37-41.

Access this article online

Quick Response Code:



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10.4103/nmj.NMJ_108_19

there were 311 public and private health facilities offering DOTS services in all the 20 LGAs in the state. Lagos State contributes 9.4% of the national TB notification. Despite the increase in TB treatment centers and microscopy sites between 2011 and 2015, case notification rates decreased from 82.9/100,000 in 2013 to 72.1/100,000 in 2015.⁹

The challenges of TB control in Lagos State are complex. We have previously demonstrated poor policy implementation,¹⁰ health system factor (health system delays and poor availability of TB diagnostic materials),^{11,12} health-care providers' factor (poor adherence to TB treatment guidelines and suboptimal knowledge of TB management),^{13,14} and patients' factor (treatment interruptions) to affect TB control in Lagos State.¹⁵ This present follow-up study delved deeper to describe the challenges encountered by the public and private DOTS providers in Lagos State, Nigeria.

METHODS

Study design

In-depth interviews were held between October 1, 2016 and January 31, 2017, with the Lagos State TB program officer and 34 health workers providing DOTS services in selected private and public DOTS facilities in Lagos State, Nigeria.

Study background

Lagos State is one of the most populous states in Nigeria with an estimated population of 12,155,337 in 2015.¹⁶ Administratively, Lagos State is made up of 20 LGAs. At the State and LGA level, TB control activities are coordinated by a control officer and TB local government supervisors (TBLS), respectively. The TB supervisors oversee the activities of the DOTS providers (DPs) within their LGAs and send reports of TB activities within their LGAs to the LSTBLCP on a quarterly basis. DPs also double as TBLS in some cases.

Study selection and procedure

DPs from health facilities selected in our earlier study were purposively recruited for this study. The selection of DOTS facilities was earlier published.¹¹ DOTS facilities that were in operation as at 2010 and served both as treatment and microscopy centers were selected from a sample frame of DOTS facilities in Lagos state provided by the State control officer. All the DPs of the 34 facilities were contacted individually, and interviews were scheduled at the convenience of the DPs. Of the 34 DPs interviewed, 8 were TBLS. Interviews were conducted between October 1, 2016 and January 31, 2017. The Lagos State TB control officer was also interviewed.

The DPs were assured of strict confidentiality and written informed consents were obtained before interviews were conducted. An interview guide was developed to explore the DPs perception on the challenges of TB control. The Lagos State TB control officer was interviewed to confirm the claims of the DPs. Open-ended questions/prompts were used, and discussions were not led along predetermined

lines. Interviews were conducted either in English, Pidgin English, or Yoruba (local language) depending on the DPs' choice. Each interview lasted between 20 and 30 min and was audio-recorded after verbal permission was obtained from the DPs. Translation and transcription of all audiotapes were done by two co-authors (VAA and BOF) independently. They later worked together along with another co-author to reconcile the differences in translation. The third co-author (TFA) served as the tiebreaker in the event of discordant opinions. Thematic analysis was done with the English version of the transcripts.

Ethical considerations

Ethical approval was obtained from the Health Research and Ethics Committee of Lagos State University Teaching Hospital Lagos. Written informed consent was obtained from the DPs and they were assured of confidentiality.

Data analysis

All recordings were transcribed verbatim within 48 h of the interview. The transcripts were read several times and scrutinized, and the data were systematically tabulated into six themes that were identified *a priori* to facilitate comparison and interpretation by two independent researchers. These themes were challenges of TB management and supervision, challenges with laboratory tests, challenges with DPs' training, and work overload. A codebook was developed of emergent themes following training on the application of the codes. Verbatim quotes were selected to stress concepts and recurring discourses.

RESULTS

Participant's characteristics

Of the 35 participants interviewed, one was the TB control officer for the State, while 23 and 11 were from DPs public and private sector, respectively. Eight of the DPs from the public sector also worked as TBLS. Seven DPs from the private sector were from private-for-profit (PFP), whereas 4 were private not for profit (PNFP) organizations.

Logistical challenges with tuberculosis management and supervision

The DPs were faced with similar challenges regardless of where they offer services. They complained of insufficient or lack of funds to track patients lost to follow-up, do home visits, or collect drugs from the central store. Some DPs who were TBLS complained about the gross insufficiency of the funds for supervision. They had to underwrite the deficit and occasionally support poor patients with transport fares or food.

"...we don't get money for making calls, we are not even reimbursed when we use our money, today, I still called a patient with my phone. Nobody is paying for the calls ..." (DP, Public facility 7).

"...oh let me tell you, things no dey easy for us, can you imagine, the motorbike meant for supervision is bad, no money to repair it, I spent my money to repair it..." (TBLS, Public facility 3).

“...let me tell you, we sometimes buy patients food and give transport money to patients who are poor and stranded, some of them come, they tell you, auntie, I have not eaten today how will I take my drugs, I trekked here today, if it is you what will you do. This is part of what we go through daily....” (DP, PFP facility 1).

Logistical challenges with laboratory test

Some of the DPs from the public sector were frustrated at the way DOTS laboratories turned down the request for follow-up smear microscopy test because of work overload, breakdown generator set, laboratory renovation, and shortage of reagents.

“...we don’t have enough laboratory in our LGA, the laboratory technicians are overworked, and they don’t want to take additional samples from other health facilities....” (DP, Public facility 6).

“It is about 6 months since the General Hospital stopped doing sputum test, most of my patients have finished their treatment but have not done the last sputum test” (DP, PFP facility 2).

“I have a patient who has not been able to do sputum test for 2 months because the samples were not collected from her at the laboratory because of no reagents” (DP, PFP facility 3).

Logistical challenges with directly observed treatment short providers’ training

Lack of training was another logistical challenge identified by the participants. Redeployment, retirement, and staff attrition were identified as the reasons for the shortage of skilled personnel in the public and private sectors. Although the trained workers do conduct some informal training for the recruits, the DPs claimed this was not enough.

“...majority of them that were trained earlier have been disengaged from service, some have retired so since they have retired, there’s no training for the existing ones that are there. It is the step-down training that we know we are giving them, and there is no how you can do that step-down training that will be like the state training them as they want....” (DP, PFP facility 2).

“...Training is the first challenge, we cannot give what we don’t have and we don’t have enough skills or capacity. We are not trained and it is a big challenge...” (DP, PNFP facility 1).

Interviewer: Are you saying you have not had any form of training before taking up this role?

“...Yes, I have not been trained at all. I was asked to come and work here and the TBLS came here to explain somethings to me, but I heard that people go for training. I do call the TBLS each time I have issues, is this how we shall continue? I beg we need proper training.” (DP, PNFP facility 1).

The incompetence of some health workers was a cause for concern for two DPs who were TBLS. The quotes below summarize their frustrations.

“...Some of the DPs don’t have a good record, it is a big problem, imagine during supervision, their work is full of

errors, we have to do the work all over again, I have been correcting over and over again, I simply don’t know what to do. They are making the work to be more and more difficult....” (TBLS, facility 5).

In his response, the State TB control officer confirmed that some of the DPs in the public and private sectors have not been trained. The frequent redeployment in the public sector and staff attrition in the private sector complicated matters.

“...training is done by the national programme. Okay. And they are doing a lot on it. At least they are planning training for 15 more staff. The problem is a lot of time, you will just see someone you just trained being transferred out of the DOTS center and the person coming in has never been trained before. We are currently compiling the names of those who have not been trained. So when we have the opportunity, we train such people. We have had an occasion where people trained in the private sector never went back to the hospital after training because they got a better offer from another organization. My brother, we don’t have control over that. The state itself has organized one training session that was sometimes last year, we are trying our best....” (State TB Control Officer).

Work overload

All the DPs complained of work overload due to the shortage of trained workforce. They performed other duties apart from attending to TB patients. The DPs from the public sector engaged in activities such as immunization, family planning, and treatment of patients with malaria and other diseases. Some of the DPs who were TBLS also supervised between 16 and 22 DOTS facilities. Similarly, those in the private sector had other functions to perform which increased their workload compared to their colleagues in the same organization who were not DPs. Some TBLS complained that the work overload could affect the quality of supervision and data collation. The work is affecting the family life of some DPs.

“I have about 16 DOTS facilities to supervise and they are planning to create more DOTS facilities in my LGA. The workload is too much.” (TBLS, Public facility 1).

“I am the person in charge of other nurses here, I have some other duties to perform in the hospital in addition to the paperwork” (DP, PFP facility 7).

“...For me as an example, I am the clinician in my facility. I am expected to go on outreach, consultation of patients that come to my facility is my responsibility. I am the DOTS provider. I used to have 22, now I have 27 centers under me to supervise. Then how do I share myself,....” (TBLS, facility 7).

“...they expect you to do outreach services, they expect you to attend to patients, they expect you to do community mobilization, they expect you to participate in immunization plus days, they expect you to ensure that you do health talk while child welfare clinic is going on...” (DP, Public facility 4).

The stress and work overload sometimes took its toll the DPs as some of them become irritable and unfriendly to patients.

“... I have been sending my patients for a laboratory test at a particular hospital, but she refused to go because of the way she was treated the last time she went. I decided to visit the place myself to see with my eyes what was going on. You cannot imagine what I saw. Immediately they (the health workers) saw me approaching them, they shouted at me to go back as I walked in not knowing I am a DP. I can imagine what the patients go through....” (DP, PNFP 4).

The state program officer confirmed the staff shortage syndrome; however, the issue is beyond him since it borders on government policy.

“...well that is true, we have staff shortage mainly in the public sector and staff attrition mainly in the private sector, when there’s an opportunity for greener pasture, they leave. What can you do about that, it’s the nature of the private sector. The decision to employ has to do with government policies. We have to make use of what we have presently... I have discussed with the special adviser for public health, she seems to understand the situation and has promised that no DOTs provider will be redeployed for the next 3 years...” (State control officer).

DISCUSSION

Many of the challenges encountered by the DPS in public and private sectors were due to poor handling of logistics. Logistical support needed to track patient lost to follow-up, conduct contact tracing and supervision, collation of data, and report writing were either lacking or grossly insufficient warranting many DPs to supplement from personal earnings. A similar finding was reported from Uganda where there were insufficient resources to support DOTS activities and follow-up TB patients.¹⁷ Funding for health in Nigeria is below par generally, a Nigerian study demonstrated government budget for health as a percentage of government general expenditure to be far less than the agreed 15% at the African Union declaration in 2001.¹⁸ Poor funding of the TB programme was documented in a Ugandan study due to poor political will and undue reliance on donors to provide support for basic health services.¹⁷ In many high-burden TB countries, there are gross underfunding and low or absent political will. In countries that have experienced extraordinary progress in TB control, there was a purposive increase in revenue allocation to health.¹⁹ There is a need for the Nigerian government to learn from these countries.

Lack of reagents and consumables to do TB diagnosis, shortage of laboratory technicians, and microscopic centers were also experienced by DPs, similar to what was documented previously.^{12,20,21} Although necessary steps were being undertaken to resolve this issue according to the State TB programme officer, the physical, economic, and public health effects of this challenge are noteworthy.

TB has been described as an economic disease,²² there is substantial financial loss up to about 30% of yearly household earnings for people and their families.²³ Studies from Nigeria, China, Burkina Faso, and South Africa²⁴⁻²⁶ have reported a high incidence of catastrophic cost with half of the cost incurred before TB diagnosis.²⁴ Several hospital visits due to delayed TB diagnosis were partly responsible for the economic burden of TB treatment in Uganda.¹⁷ In our study, the DPs offered financial help to poor patients who lacked money for food or transport fare. This financial burden often leads to loss to follow-up, treatment failure, and poor national TB outcomes.²⁷ Although TB diagnosis and treatment are free, this may not be enough given the numerous costs that TB patients face.²⁴ The government should put mechanisms in place that will remove logistical and financial barriers that may endanger adequate and comprehensive TB care. Transport fare subsidy was opined in a previous study.²⁸

Similar to what was documented in studies from Uganda and Ethiopia, there was a shortage of skilled workforce in this study.^{17,21,29} The DPs complained of the heavy workload due to shortage of skilled workforce. This situation was aggravated by poor handling of redeployment exercises in the public sector and staff attrition in the private sector which left some of the DOTS facilities with untrained staff. This training gap may be responsible for poor performances of the DPs. The lack of adequately trained health workers has been identified as one of the major factors preventing the achievement of TB targets.³⁰ Lack of adequate TB training could compromise the quality of TB care, treatment adherence, treatment outcomes, and proper documentation.

CONCLUSION

This study demonstrated numerous logistical challenges characterized by LSTBLCP. The provision of free TB diagnosis and treatment is not enough. There is an urgent need for the government to take the leadership role in seeking alternative avenues to fund the TB programme and also review policies regarding the redeployment of trained DPs. The engagement of the private sector and the civil societies may be the first step in the right direction.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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