

Public-Private mix in tuberculosis control: An assessment of level of implementation in Jos, Plateau State

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Summary

Aims and Objectives: After the initial gains in Tuberculosis case detection and cure rates, progress became stunted by persisting constraints and challenges in the implementation of the Directly Observed Treatment Short course strategy. This prompted the Stop Tuberculosis partners in 2006 to adopt innovative approaches including the Public-Private Mix, to improve access to and quality of care. This paper assesses the level of Public-Private Mix in Tuberculosis control in Jos, Plateau State.

Materials and Methods: This was a facility-based, cross sectional study where data from all consenting private health care facilities owned by medically trained personnel and private medical practitioners in Jos North and Jos South Local Government Areas was collected using structured questionnaires.

Results: Eight (47.1%) of all 17 facilities assessed gave anti Tuberculosis drugs on clinical suspicion of Tuberculosis, 5(29.4%) required Acid Fast Bacillus result and 3(17.6%) referred elsewhere for the Tuberculosis management. Only 6 facilities (35.3%) were microscopy, treatment centres, or both. Ten (58.8%) of the facilities had the Directly Observed Treatment Short course guidelines, but these could be sighted in only 5 (29.4%), while six (35.3%) had Tuberculosis record and referral forms. In 13 (76.5%) of the facilities, no local government Tuberculosis and Leprosy supervisors had ever visited them. Only 30 (57.7%) medical practitioners had access to the Directly Observed Treatment Short course. Thirty two (61.5%) respondents treated Tuberculosis according to the Directly Observed Treatment Short course strategy, but 19 (36.5%) still used the conventional method. Only 22(42.3%) practitioners had ever received any training on the Directly Observed Treatment Short course strategy.

Conclusion: The level of Public-Private Mix in Tuberculosis control in Jos is low.

Key words: Private Medical Practitioners, Tuberculosis Control, DOTS

Introduction

Tuberculosis (TB) is an old human scourge that remains a major worldwide public health challenge.^{1,2} Globally more than 1.7 billion people are infected with the TB bacillus, while 8 million develop the disease and each year 1.7 million people die of TB.³ In Sub-Saharan Africa the situation is particularly critical, often because the Human Immunodeficiency Virus (HIV) fuels the TB epidemic.^{2,3}

About 95 % of the burden of TB is borne by the developing countries and some 22 countries are classified as high burden based on the per capita cases of TB and they contribute 80% of the global burden of TB. The first five among them are India, China, South Africa, Nigeria and Indonesia.⁴ Prompted by the magnitude of the problem, the World Health Organization (WHO) declared the disease a global emergency in 1993 followed by a similar

declaration by the African countries in 2002.^{3,4} Nigeria has the fourth largest burden of TB in the world and the largest number of TB infected persons in Africa with an estimated annual incidence of all cases of 311 per 100 000 population (460 000) and annual incidence of smear positive TB cases of 131 per 100 000 population (195 000).⁵

In spite of the quantum of resources and research efforts invested in TB control so far, there are still major gaps in our epidemiological knowledge of the disease.⁶ It is possible that the true magnitude of the epidemic is underestimated and many TB cases might never be diagnosed.⁷ Left untreated, a TB patient can infect between 10 and 15 persons per year.⁸ Such unknown cases, especially the more infectious sputum smear positive cases, could therefore play an important role in the spread of the disease and remain a challenge to TB programmes.⁹ The advent of HIV/Acquired Immune Deficiency Syndrome (AIDS) and the development of resistance to the first line anti TB drugs (MDR-TB) and recently, resistance even to the second line drugs (Extensively Drug Resistant TB-XDR-TB) added new dimensions to the control of TB. About a third of TB patients have been found to be co-infected with HIV. TB is the most common cause of death in HIV/AIDS patients; HIV is also known to convert latent TB to active disease. Recent estimates suggest that the incidence of XDR-TB is about 1.8% among new TB patients and 9.4% among patients who have been treated before.⁴ The presence of drug resistance in a population of TB patients indicates a problem of management either of the programme or of the individual patients.⁴

TB is encountered at all levels of the health service in the world.¹⁰ Evidence suggests that all segments of the population seek care from private health care providers who play a major role in care for infectious diseases. Available studies suggest that in many low-income TB endemic countries with large private health sectors, private physicians play a significant role in the initial stages of health seeking by TB symptomatic individuals.¹¹ This is in keeping with the private sector's presence in both urban and rural areas and the fact that the initial symptoms of TB are virtually indistinguishable from those of other chest symptomatic individuals.^{11,12} To ignore private practitioners would be an omission on the part of national TB programmes, particularly in places where a substantial proportion of TB patients visit private practitioners whose management practices are suspect. Such doctors seem to pose both threats to and opportunities for improved TB control. In recognition of this fact, the World Health Assembly (WHA) in 2006 adopted the Stop TB Strategy. The plan aims to sustain the current achievements of the DOTS strategy, while effectively addressing the persistent constraints and challenges of DOTS implementation. Such challenges include the persistently low case detection and cure rates,

Multi Drug Resistant (MDR) TB and the emerging XDR - TB, TB/HIV co -infection and weak health systems. The second Global Plan to Stop TB Plan 2006-2015 details the scale of activities that need to be implemented in order to meet the goal and objectives of the Stop TB Strategy. To address the low case detection rate, capture all patients on TB treatment into national statistics and improve the quality of care, one of the components of this plan is to engage all care providers through Public Private Mix (PPM). Four years to the end of the lifespan of the plan, how far has the PPM component been implemented in Jos? This paper is aimed at assessing the level of awareness and implementation of the PPM in TB control among private medical practitioners in Jos, Plateau State.

Materials and methods

This study was conducted in Jos North and Jos South Local Government Areas (LGAs) of Plateau State. Both are located on the northern end of the State. These LGAs together house the seat of government in the State as the State capital. Both LGAs have almost become merged by adjoining settlements to form one continuous city. Together, they contain the highest concentration of social amenities in the State including the number of private hospitals and clinics. Jos North LGA has a population of about 429, 000.¹³ It is a cosmopolitan urban area,^{13,14} while Jos South LGA has an estimated population of 318,943.^{15,16} The target population for this study were private hospitals and clinics run by clinicians and the physicians working in such facilities. Therefore health facilities operated by paramedical health workers were excluded. A descriptive cross sectional study design was used. All the clinics that met the selection criteria (private hospitals and clinics run by clinicians) and consented to participate in the study were included. As such seventeen (17) health facilities out of seventy nine (79) were randomly selected and fifty two (52) physicians, who made up the cluster, were included in the study. Data were collected between 31st January and 25th February 2011 using a structured, interviewer administered facility questionnaire and a structured, self- administered questionnaire for the 52 physicians. All data generated were processed and analysed by the use of the Statistical Package for Social Sciences (SPSS) software, version 15. All respondents were assured of the confidentiality of the information they were to give and that no information would be traced to them.

The study is limited to the extent that other private health facilities run by non clinicians were not included in the study. It is possible that TB suspects also patronise them for treatment and their inclusion might have shown a different level of PPM.

Results

The private for profit facilities constituted 82.4% of the facilities and the not for profit, 17.6%. As a practice, 8

(47.1%) of all facilities give anti TB drugs on suspicion of TB, 5 (29.4%) require AFB result before treatment with anti TB and 3 (17.6%) refer to where they think the patients will be better managed, (Table i). Only 6 (35.3%) of the 17 facilities assessed were either microscopy or treatment centres or both as accredited by the National TB and Leprosy Control Programme (NTBLCP), (Figure 1). Ten (58.8%) of the facilities said they had the DOTS guidelines, but these could be sighted in only 5 (29.4%) of the facilities. Six (35.3%) had TB record and referral forms. (Table ii). In 13 (76.5%) of the facilities, no local government Tuberculosis and Leprosy Supervisor (TBLS) had ever visited them, (Table iii).

Forty two (80.8%) medical practitioners knew of the DOTS treatment guideline, but only 30 (57.7%) had access to it. Thirty two (61.5%) respondents treat TB according to the DOTS guidelines, but 19 (36.5%) still use the conventional method. Only 22 (42.3%) practitioners had received any training on the DOTS strategy.

Table i: Management of TB suspects

Patient Mgt	Frequency	Per cent
Give antibiotics	1	5.9
Give antiTB Drugs	8	47.1
Send to laboratory	5	29.4
Refer	3	17.6
Total	17	100.0

Table ii: Availability of TB Treatment Guidelines and Recording/Referral Forms

Item	Available		Total
	Yes (%)	No (%)	
Treatment guidelines	10 (58.8)	7 (41.2)	17
Forms	6 (35.3)	11 (64.7)	17

Table iii: Supervisory Visits to Health Facilities

TBL Supervisor Visited?	Frequency	Per cent
Yes	4	23.5
No	13	76.5
Total	17	100

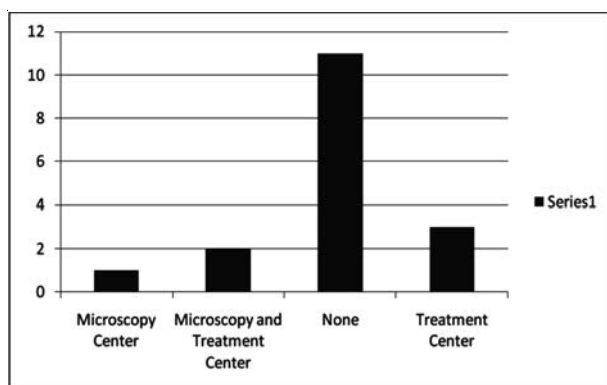


Figure: Status of Hospital

Discussion

This study has shown the level and quality of involvement of private medical practitioners in TB care. The private for profit facilities constituted the majority, 82.4% of facilities assessed in this study. This is comparable to that observed in a similar study carried out in Uganda, where 80.0% % of the facilities were private for profit and 20.0% were not.¹⁷ In a household survey carried out in India, 60% of the individuals with a longstanding cough first went to a private for profit facility.¹⁸ This underscores their ubiquitous presence in all communities and also reflects the high level of patronage of these facilities by patients of all diseases including TB. Where data from such facilities are not captured in the management information system of some countries, such data is incomplete and inaccurate and adequate planning is hampered.

Contrary to findings in a study conducted in Enugu, Nigeria, only 29.4% of the practitioners required AFB results before commencing suspected TB patients on anti TB drugs. The study among private practitioners in Enugu was conducted among 340 doctors and majority, 91.2% of them based their diagnosis on AFB.¹⁹ This could be due to the regular training and re-training most of them were said to have undergone. A similar study carried out in India recorded that 50% of such patients were requested to bring AFB results from their doctors.²⁰ This is still higher than that obtained in this study. This is hardly surprising since less than half of our respondents had ever attended any specific training or workshop on current guidelines on TB management.

Fifty seven per cent of the practitioners in this study knew about the NTBLCP guidelines though fewer of them had access to them. This was higher than that observed in a study conducted in Chandigarh, India.²¹ This study involved 114 private medical practitioners and only 46.6% were aware of these guidelines. This might have contributed to the low knowledge of TB in that study.

In this study, majority, 61.5% of the Practitioners claim to be treating TB according to the DOTS Strategy despite the finding that only 42.3% of them had received such training. They probably learned about DOTS during their training as physicians as well as from personal studies. This was in contrast to the study in Enugu, Nigeria where none of the Doctors were practising according to the DOTS guidelines.¹⁹

Through regular training and collaboration with private practitioners, the Stop TB Strategy envisages that the quality of TB care in these facilities will be optimised. This is to be achieved through promoting the adoption of the International Standards of TB care, the practical approach to lung health and the patients’ charter. The NTBLCP has made provision for a TBLS for every LGA in

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the country. Such supervisors are expected to supply drugs to the clinics in the LGA and collect monthly statistics from them. They are also expected to identify training needs so that higher levels can carry out such trainings. However majority (76.5%) of the facilities in this study had no supervisors visiting them. This is a similar finding to those in majority of the studies conducted earlier in India and Enugu, Nigeria.¹⁹⁻²¹ All of these could be as a result of non – functioning of the collaboration that should exist between the public and private sectors in healthcare delivery. The implication of this finding is that many patients are being treated outside the DOTS programme, many may not be receiving the appropriate treatment and many may not be receiving any treatment at all. In such a scenario transmission of TB, including transmission of drug resistant strains continues unabated with grave public health implications.

Conclusion

The level of PPM in TB control in Jos is very low as evidenced by the findings of this study. Therefore there is a need to improve this situation through increased collaboration by training and re-training of private medical practitioners, provision of recommended guidelines and supportive supervision. There is also a need for a larger research involving private medical practitioners, pharmacy shops and other health facilities run by paramedical health workers to ascertain the level of involvement of all private health facilities and workers in PPM DOTS.

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