Original Article

Peculiarities of tuberculosis control in a scenario of urban violence in a disadvantaged community in Rio de Janeiro, Brazil*

Fabiana Barbosa Assumpção de Souza¹, Tereza Cristina Scatena Villa², Solange Cesar Cavalcante³, Antonio Ruffino Netto⁴, Luciane Blanco Lopes⁵, Marcus Barreto Conde⁶

Abstract

Objective: To describe the difficulties and peculiarities encountered by health professionals during the treatment and investigation of contacts of tuberculosis (TB) patients in disadvantaged communities. **Methods:** A qualitative study carried out at health care facilities in Health Programming Area 1.0, located in the city of Rio de Janeiro, Brazil, which has a TB incidence rate of 240/100,000 inhabitants. From among the professionals responsible for visiting and treating TB cases and their contacts, two home visit agents and one clinical nurse were selected to be interviewed for the study. Data were transcribed and structured in the form of quotations, emphasizing the predominant ideas. **Results:** The central ideas focus on the issue of violence, one significant facet of which is the set of rules imposed by narcotraffickers, and on the barriers to the movement of patients/health professionals for TB treatment, as well as on public safety (police). **Conclusion:** This study provides public health officials, as well as institutions that graduate health professionals, data for reflection and analysis of the difficulties that urban violence creates for the control of TB in a disadvantaged community.

Keywords: Tuberculosis; Prevention and control; Violence; Directly observed therapy; Community health nursing.

Correspondence to: Fabiana Barbosa Assumpção de Souza. Rua Ribeiro Guimarães, 217, apto. 504, Tijuca, CEP: 20.511-070, Rio de Janeiro, RJ, Brasil.

Phone 55 21 2542-6404. Fax 55 21 2542-6455. E-mail: fabsouza@centroin.com.br

Submitted: 9 June 2006. Accepted, after review, 27 September 2006.

^{*} Study carried out in Health Care Facilities located in the city of Rio de Janeiro (RJ) Brazil.

^{1.} PhD in Sciences from the Alfredo Pinto School of Nursing, *Universidade Federal do Estado do Rio de Janeiro* – UNIRIO, Federal University of the State of Rio de Janeiro – Rio de Janeiro (RJ) Brazil.

^{2.} Tenured Professor at the University of São Paulo – USP – at Ribeirão Preto School of Nursing, Ribeirão Preto (SP) Brazil.

^{3.} Physician at the *Instituto de Pesquisa Clínica Evandro Chagas/Fundação Instituto Oswaldo Cruz* – IPEC/FIOCRUZ, Evandro Chagas Institute of Clinical Research/Oswaldo Cruz Institute Foundation – Rio de Janeiro (RJ) Brazil.

^{4.} Full Professor in the Department of Social Medicine of the Faculdade de Medicina de Ribeiro Preto, Universidade de São Paulo – FMRP/USP, Ribeirão Preto School of Medicine, University of São Paulo – Ribeirão Preto (RJ) Brazil.

^{5.} Specialist in Respiratory Medicine at the Fundação Nacional de Saúde - FUNASA, National Health Foundation - Brasília (DF) Brazil.

^{6.} Attending Physician at the Thoracic Diseases Institute of the Clementino Fraga Filho University Hospital, *Universidade Federal do Rio de Janeiro* – UFRJ, Federal University of the State of Rio de Janeiro – Rio de Janeiro (RJ) Brazil.

Introduction

According to data from the 9th Annual World Health Organization Report on Tuberculosis (TB) Control, it is estimated that 8.8 million new cases of TB occurred worldwide in 2003. Brazil ranks 16th among the 22 countries with the highest numbers of TB cases.⁽¹⁾

In 2000, the TB incidence rate in the state of Rio de Janeiro was 99/100,000 inhabitants, and the TB mortality rate was 6.13/100,000 inhabitants. (2) Although the efficacy of the drugs used in its treatment is higher than 95%, the efficiency of the regimen used does not exceed 70% in most regions of high prevalence. (3) Factors that are typically associated with this low efficiency are disorganization of public health care services, poor social conditions, and low adherence to treatment. As a result, the World Health Organization has proposed a set of interventions, known as the direct observed therapy, short-course (DOTS) strategy, comprising activities that include the following five components: 1) political and financial commitment from health authorities; 2) identification of cases using direct sputum smear microscopy; 3) supervised treatment; 4) registry to track and evaluate the treatment results; and 5) ensuring the supply of anti-TB drugs.(4)

In the city of Rio de Janeiro, the first experience of implementation of the DOTS strategy took place in 1999 in Health Programming Area 1.0. In the supervised treatment component implemented, the drugs are administered under the supervision of a health professional. (5) The DOTS strategy was successfully implemented at 13 health clinics (HCs) by five Community Agent Program teams.

Due to the difficulties and restrictions related to the mobility of TB patients, their contacts, and health professionals after the implementation of the DOTS strategy in Rio de Janeiro, this study aimed to describe the difficulties and particularities encountered by health professional teams, especially nursing teams, in the treatment of TB patients in poor communities.

Methods

This was a qualitative study performed in order to describe the treatment given by the nursing team to TB patients and their contacts enrolled in the Tuberculosis Control Program (TCP) at three HCs in Health Programming Area 1.0 of Rio de Janeiro. These units were designated HCs 1, 2, and 3. Different treatment strategies have been developed at these HCs: the DOTS strategy combined with the identification and investigation of TB contacts according to the norms established by the National Ministry of Health; the DOTS strategy accompanied by the investigation of contacts of pulmonary TB cases according to international guidelines; and unsupervised treatment of TB, together with the identification and investigation of TB contacts according to the norms established by the National Ministry of Health.

Professionals meeting the following criteria were interviewed: working with the TB patients and contacts enrolled in the TCP of the HCs studied; making home visits or treat TB cases and their contacts in the HCs studied; and agreeing to participate in the study. Based on these criteria, two home visitors and one nursing assistant were selected.

This project was approved by the Ethics in Research Committee of the Clementino Fraga Filho University Hospital (memorandum nº 243/05, dated April 13, 2005).

The interview covered: "the difficulties encountered in promoting adherence to treatment by TB patients and their contacts, as well as adherence to chemoprophylaxis by contacts". The interviews were recorded and the transcripts were delivered to the participants for their knowledge and acceptance. In order to ensure their anonymity, each professional was identified by a color (yellow, blue, and green). Data was fully transcribed and structured as quotations, emphasizing the predominant ideas. In the analysis of the interviews, the central ideas of the statements were identified by analyzing the units of meaning around which the answers revolved. (6)

Results and discussion

The units of meaning related to the obstacles to TB treatment were similar. The axes of the central ideas were the dimension of the violence expressed through the drug trafficking rules, the barriers imposed on the movements of health professionals/patients with TB in seeking to treat/be treated, and the public security force (the police).

The statements show the concern of the professionals regarding the freedom of patients to travel from their houses in the slum to the HC.

"The patients have to show their IDs and the police still don't believe them. The difficulties they face in coming here (!)... several times the police even invaded the slum, and then they have all these problems as well..." (Blue)

The team principle is to recognize the inequity among people and social groups, and is related to the re-orientation of measures to be taken, according to the profile of the needs and problems of the population that seeks treatment at the HC.⁽⁷⁾ Therefore, in order to decrease the inequity, it is critical to acknowledge that the problem exists, and that it must be faced so that it can be solved.

In the DOTS strategy, the health professional, represented principally by the home visitor, is identified as a source of treatment by TB patients and their families, although the inverse is also true, since the health professionals are also aware of their responsibilities. Therefore, it is possible for health professionals and TB patients to establish a rapport and to take joint responsibility for the treatment process. The role that nursing professionals play in the TCP, serving as a link between the patient and the HC, is critically important to the success of the DOTS strategy. (8)

In cases where the movements of the patient are restricted, there is also a huge demand on those who should be responsible for the security of the population. It is difficult to know who should be protected and who protects, especially in view of the following statement:

"The drug traffickers have never prevented me from visiting a patient. In all of the communities I visit, each one is from a different faction. I have more difficulties with the police. The policemen don't respect the community, they come into the slums with their guns blazing, asking me, in front of the patient's house, if I'm taking medicine to some worthless tramp. They don't respect those who live in the community, the workers, the way they express themselves." (Yellow)

The situation of the police denying freedom of movement to those who live in the community is also addressed in the statements given by the other professionals.

> "Even patients who are not involved, because they live in these high-risk areas, have to be

inspected, have to show the documentation that proves they are under treatment here, if they don't have a document; the document is DOTS ID." (Blue)

"I also have difficulties because of the drug trafficking. We don't have access to the community because the people themselves tell us when the place is not available for us to work. So we go away and come back another time." (Green)

"What prevents them from going to the HC is the confrontation between the drug trafficking and the police, which frightens them, don't you think?" (Green)

The health professionals are contradictory when they say that they have never been approached by the police, while giving statements about the police operation preventing the free movement of patients and professionals.

> "Some patients are connected with the drug trafficking. Sometimes he schedules a visit with me, and there is a boy who's always waiting to take me to where he is. He can't leave that place, but then the next day he's already at another place." (Yellow)

> "When he was arrested, sometimes he has to leave that place, and I say to my immediate boss: - He is going to such-and-such place, because that place is crawling with police. . . The police'll stay. . . He'll be gone for two days . . . So I don't see him taking the medicine, but he knows." (Yellow)

As we can see, the document used by the patients is no longer the official one issued by the Secretary of Public Safety but rather the TCP identification issued by the HC.

"The drug traffickers have never denied a patient access to the HC, but the police have." (Blue)

The extreme violence that characterizes the relationship between the 'cops' and the 'robbers' can be explained by the symbolic dimension of the illegal drug market, which tempts gangsters and policemen alike, both fascinated by the ambition of becoming rich at any cost.

The HCs have a highly diverse clientele, all of whom have considerable economic difficulties and live in precarious conditions as victims of big city violence. These HCs are frequently prevented from functioning by the drug trafficking, i.e., when there is shooting in the area. We observed that one of the HC teams seemed not to worry about what was happening, since the violence is part of the daily routine of that territory. There were two statements such as "It's always like this in the morning."

For the health professionals, the violence seems to be incorporated into the work environment and treatment dynamics of the HCs, thereby preventing them, and the patients, from coming and going freely.

This situation is extremely confusing for the professional, who needs to adapt to the situation and take into consideration the preference and convenience of the patients, who are frequently hiding from the police. The relationship between the health professional and the patient, who might be involved in illegal situations/behaviors and connivance with organized crime, is founded on mutual trust. As can be seen, when commenting on issues involving drug trafficking, the professionals became confused, demonstrating fear when they spoke, using codes, and not speaking clearly.

At the end of the interview, 'Yellow' made the following statement:

"Some of the drug traffickers want to know what the patients have, if they're taking the right medication, if they're missing their appointments, etc., demonstrating concern because they know the disease can spread. So, rather than hindering treatment, they function as social workers, transmitting the idea that people have to treat themselves. It's a precaution they take."

An inversion of values is observed in this statement, since what is seen as a negative attitude by society may be considered 'social work' by the poor community. The same professional says that the impediment to treating the patient was imposed by the police rather than by the drug trafficking.

"He wanted to stay here, but, because of the constant shooting and the police, a lot of people move, look for other places. . ." (Yellow) The principal question, according to the definition of violence, is knowing whether there are noncontextual values, basic rights, or universal values that oblige us think about violence from the standpoint of the limits that those values and rights impose on individual and collective freedoms.⁽⁹⁾

We observe in these statements that the professionals worry about the individual dimension of the treatment, as well as about the collective dimension of the epidemiological surveillance.

The violence dimension is expressed in a contradictory situation between the presence, in the communities, of the police in confrontation with the drug traffickers, which makes the treatment difficult, since it prevents the entrance and exit of professionals, patients, and their families, and in situations in which patients have to lead clandestine lives, either hiding from the police or hiding from rival factions of drug traffickers.

Our results show that, in order to implement the DOTS strategy in poor communities, health professional teams have to deal with situations that require them to negotiate and make agreements with the leaders of the drug trafficking factions, the police, and the patients.

The development of supervised treatment is permeated by contradictory feelings on the part of nursing assistants, who question the protection role and the rules posed by the drug trafficking, while banalizing the daily familiarity with several forms of violence, expressed by shootings in the community, and the authoritarian/coercive closing of HCs by drug traffickers. There seems to be an inversion of social values regarding who provides the social services to the community.

Scenarios such as the supervised treatment of TB in poor communities where violence is present have to be discussed by policymakers.

It is necessary to find mechanisms to support and train health professionals, as well as to define ways to approach and intervene in complex situations such as this scenario, in which people are subject to the rules imposed by the drug traffickers and by the police. These questions are not covered in the graduate courses offered to health professionals (physicians, nurses, and nursing assistants) and need to be again taken up by the schools, since they deal with a practical scenario of TB treatment in various urban centers of Brazil.

The control of TB has to be understood in terms beyond those of a biomedical intervention. In treating patients with TB, the perspective of the patient, as well as the context in which the treatment is given, must be taken into consideration.

Acknowledgements

We would like to offer our special thanks to the interviewees for their cooperation and attention.

References

- World Health Organization. Global tuberculosis control: surveillance, planning, financing. WHO Report 2006. WHO, 2006:250.
- Secretaria de Estado de Saúde do Rio de Janeiro [homepage on the Internet]. Rio de Janeiro: Assessoria de Pneumologia Sanitária. Plano Estratégico para o Controle da Tuberculose no Estado do Rio de Janeiro 2002. [cited 2004 Aug]; Available from: http://www.saude.rj.gov.br/tuberculose/planos.shtml

- 3. Kritski AL, Conde MB, Muzy de Souza GR, editors. Tuberculose: Do ambulatório à enfermaria. 3rd. Rio de Janeiro: Atheneu; 2005. 259 p.
- 4. World Health Organization. Global Tuberculosis Programme. Framework for effective tuberculosis control. WHO/TB/94. WHO. 1994:23.
- 5. Secretaria Municipal de Saúde do Rio de Janeiro. Boletim Epidemiológico do Programa de Controle da Tuberculose do Município do Rio de Janeiro. (Revisão dos casos notificados de 1995 a 2000; Avaliação do Programa de DOT 1999 a 2001). Superintendência de Saúde Coletiva. Gerência do Programa de Pneumologia Sanitária, 2002.
- Minayo MCS, org. Pesquisa Social: Teoria, Método e Criatividade. Petrópolis: Vozes; 2002. p. 67-80.
- Teixeira CF, Paim JS, Vilasbôas AL. SUS, modelos assistenciais e vigilância da saúde. Informe Epidemiológico do SUS. 1998;7(2):7-28.
- 8. Vendramini SHF, Monroe A, Villa TCS. Tratamento Supervisionado no Controle da Tuberculose em uma Unidade de Saúde de Ribeirão Preto: a percepção do doente. Bol Pneum Sanit. 2002;10(1):5-12.
- Zaluar A. Integração Perversa: Pobreza e Tráfico de Drogas. Rio de Janeiro: FGV; 2004.