TRANSITION TO FAMILY HEALTH STRATEGY: IMPLICATIONS FOR THE TREATMENT OF TUBERCULOSIS

TRANSIÇÃO PARA ESTRATÉGIA DE SAÚDE DA FAMÍLIA: IMPLICAÇÕES NO TRATAMENTO DA TUBERCULOSE

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ABSTRACT

Objective: to analyze the implications for the treatment of tuberculosis arising from the transition process from the Community Health Worker Program (CHWP) to the Family Health Strategy (FHS) in Rocinha, Rio de Janeiro, Brazil. Method: qualitative study using semistructured interviews with 26 nurses of the FHS. The analysis was performed using content analysis. Results: the following categories emerged: “Transition process from the CHWP to the FHS in Rocinha” and “Implications of the transition from the CHWP to the FHS for the treatment of tuberculosis in Rocinha”. From the latter, the following subcategories emerged: “Improvements in the treatment of tuberculosis caused by the transition from the CHWP to the FHS” and “Difficulties in the treatment of tuberculosis caused by the transition from the CHWP to the FHS”. Conclusion: the transition resulted in improvements and difficulties in the treatment of tuberculosis in Rocinha, as well as in the lack of training of the FHS teams to carry out the treatment of tuberculosis.

RESUMO


RESUMEN

Objetivo: analizar las implicaciones en el tratamiento de la tuberculosis derivadas del proceso de transición del Programa de Agentes Comunitarios de la Salud (PACS) a la Estrategia de Salud de la Familia (ESF) en la comunidad de Rocinha, Rio de Janeiro, Brasil. Método: estudio cualitativo utilizando entrevistas semiestructuradas con 26 enfermeras de la ESF. Para análisis se utilizó la análisis de contenido. Resultados: surgieron las siguientes categorías: “Transición del PACS a la ESF en la comunidad de Rocinha” y “Implicaciones de la transición del PACS a la ESF en el tratamiento de la tuberculosis en la comunidad de Rocinha”. De esta última surgieron las subcategorías: “Mejoras en la realización del tratamiento de la tuberculosis ocasionadas por la transición del PACS a la ESF” y “Dificultades para llevar a cabo el tratamiento de la tuberculosis ocasionadas por la transición del PACS a la ESF”. Conclusión: la transición dio lugar a mejoras y dificultades en el tratamiento de la tuberculosis en Rocinha, así como a la falta de capacitación de los profesionales de los equipos de la FHS para llevar a cabo el tratamiento de la tuberculosis.
INTRODUCTION

Tuberculosis (TB) is an infectious and communicable disease caused by Mycobacterium tuberculosis. In 2013, there were about nine million cases and one and a half million deaths caused by TB worldwide. Most cases occurred in developing countries.1 Internationally, from 1993, due to the significant increase in the number of TB cases, the World Health Organization (WHO) declared TB as a global emergency. The WHO proposed the Directly Observed Therapy, Short-Course (DOTS) strategy, whose main goals were to achieve 85% of successful treatment and 70% of detection of cases.2

The DOTS is recommended for the treatment of the disease and detection of cases. This strategy should be understood from the combination of five essential elements: political commitment; laboratory support; drugs supply; efficient use of the monitoring system; and treatment regimen under supervision (Directly Observed Treatment).3

In 2000, based on the Millennium Assembly, Brazil set a crucial goal for the "Millennium Development". It was to halve the incidence and mortality caused by TB in 1990 by 2015.4 Brazil has been prioritized by the WHO because it has the largest number of TB cases in Latin America and is one of the 22 countries that concentrate 80% of TB cases in the world.4 Within the Brazilian territory, the greatest incidence occurred in the State of Rio de Janeiro in 2011, with 72.3 new cases per 100,000 inhabitants.5

The problem of TB is more serious in this unit of the Federation. This is due to the incidence of the disease in addition to several phenomena, namely: population aging; the situation of individuals deprived of their freedom; homeless individuals; and peculiarities relating to treatment of patients residing in social communities, such as Rocinha, the scenario of the present study.

Rocinha is a shantytown located in the Programmatic Area 2.1, in the south of Rio de Janeiro. This community stands out in the urban setting of the city for having high TB rates. In 2012, the incidence rate was 386 new cases per 100,000 inhabitants. Therefore, this incidence is considered the greatest in the country, surpassing the indexes of the country, the state and the city of Rio de Janeiro.5

In this community, in line with the actions proposed by the National Tuberculosis Control Program, the control of the disease through the DOTS strategy was established in June 2003 coupled to the Community Health Worker Program (CHWP). The treatment performed by the CHWP enabled surpassing 85% cure rate and decreasing the cases of treatment abandonment from 20 to 5.1% in Rocinha.6

The Family Health Strategy (FHS) became a structuring model for basic healthcare in Brazil. The municipal departments became responsible for expanding the FHS in their services networks as a priority model for primary healthcare organization in their cities.7

In Rio de Janeiro, as well as in other cities of Brazil, the FHS is still undergoing an expansion process.8 In this sense, the present study aims at contributing to the treatment of tuberculosis from the experiences of the establishment of the FHS in Rocinha. To that end, the goal of the study is to assess the implications of the transition from the CHWP to the FHS for the treatment of TB in Rocinha.

METHOD

The present study is based on the UNIRIO/USP research project "DOTS strategy for the treatment of tuberculosis: performance of primary healthcare in Rocinha, Rio de Janeiro, Brazil". It was approved by the Committee of Ethics in Research of the Municipal Health and Civil Defense Department of Rio de Janeiro (SMSDC-RJ), under the Research Protocol No. 134/11, in accordance with Resolution 466/12 of the National Health Council.9 It is a qualitative research relating to studies of meanings, signification, mental representations, social representations, symbols, perceptions, life experiences, and analogies.10

The research was conducted in the Family Health units located in Rocinha after agreement of the Health Coordination of the Planning Area 2.1 (CAP 2.1) of the Municipal Health and Civil Defense Department of Rio de Janeiro. Two Family Health units were opened in Rocinha in 2010 and January 2011 and one unit was reformed to meet the new model, totaling 25 FHS teams. Each team consists of a nurse, a physician, a nursing technician, and six community health workers (CHW).

The population of the study consisted of nurses who were working in the FHS of Rocinha. The inclusion criterion included nurses who were part of the FHS teams and the Tuberculosis Control Program in Rocinha during the period of data collection. The participants were 25 nurses of the FHS teams.
and a manager nurse linked to the Tuberculosis Control Program in Rocinha. They accepted to participate in the research and signed an informed consent form.

The data were collected using the technique of semistructured interviews. The interviews were conducted individually and in a quiet place intended for that purpose from October 2011 to February 2012. They were recorded, transcribed and stored in the Atlas.ti 6.2 software. To ensure the anonymity of respondents, the statements are presented with the encoding EE, representing nurses interviewed, followed by Arabic numerals that represent the order of the interviews.

The data were collected using the categorical thematic content analysis proposed by Bardin. Content analysis was carried out in three steps: (1) pre-analysis carried out with the first reading of the transcription of the interviews; (2) exploration of the material and codification of the respondents’ statements; and (3) interpretation of the results, seeking to highlight the information provided by the analysis. For the analysis, we used the Atlas.ti 6.2 software, which allowed the creation of the database with the encoding of excerpts of the respondents’ statements. We grouped all the primary documents in a single project called hermeneutic unit.

In the exhaustive reading of the interviews, each document was divided into statements, which correspond to excerpts relevant to the study. After the selection, the statements were related to the corresponding categories.

The following categories emerged: “Transition process from the CHWP to the FHS in Rocinha” and “Implications of the transition from the CHWP to the FHS for the treatment of tuberculosis in Rocinha”. From the latter, the following subcategories emerged: “Improvements in the treatment of tuberculosis caused by the transition from the CHWP to the FHS” and “Difficulties in the treatment of tuberculosis caused by the transition from the CHWP to the FHS”.

**RESULTS AND DISCUSSION**

Transition process from the CHWP to the FHS in Rocinha

The Brazilian Government launched the CHWP in 1991 aimed at combating the high rates of maternal and child morbidity in the northeast region of Brazil. The CHWP was established in Rocinha along with the treatment of tuberculosis in 2003.

During the CHWP, Rocinha was divided into 15 areas, called working zones (WZ). In these WZs, the teams conducted an epidemiological survey identifying the TB distribution pattern and risk areas for other diseases, such as: ditches and waste dumps; poorly-ventilated areas; areas with agglomerations; and those with low sunlight incidence.

It was great even though I didn’t see much. There was this program, people were housed in the church of the Foundation, [...] the areas were separated into WZs, WZ 1, 2, 3, 4, 5. As for the community workers, they had a great commitment within the DOTS strategy here, [...] always with a gigantic commitment [...] (EE 21)

The CHWP teams were composed just by CHWs and nurses. The latter were responsible for supervising CHWs’ work. Some authors stress that the nurses played an important role in managing the CHWP in Brazil, by monitoring the families residing in their areas of operation, as well as guiding and training the CHWs.

During the CHWP in Rocinha, the team performed all actions for TB control, as can be observed in the following statements:

[...] in the CHWP there was only one nurse to supervise the CHWs. The CHWs performed this control and supervision of the treatment of TB cases [...] (EE 15)

So, the CHWP had two nurses who were responsible for all community workers [...] if I'm not mistaken, there were 20 or 26 workers and they were separated into WZs. There were, if I'm not mistaken, 15 WZs [...] (EE 11)

[...] And there were only community workers, like it was exactly in the CHWP and the supervisor nurse [...] the CHWP operated very well, each community worker was responsible for a lot of people. (EE 25)

Due to the successful experiences of the CHWP, the Ministry of Health launched the Family Health Program in 1994 for the reorganization of primary healthcare in accordance with the precepts of the Unified Health System, i.e., universality, completeness, decentralization, and community participation. In 1997, the Family Health Program became FHS, a structuring primary healthcare model in Brazil.

It should be noted that even with the propose of the FHS in 1997 as a strategic model for the organization of primary healthcare in Brazil, the establishment of the FHS is very recent in Rio de Janeiro, since in 2003 the CHWP was still being established in Rocinha.

In Rio de Janeiro, the operation of the FHS was around 7% in 2009, which increased to 40% in 2012. In this respect, according to the statements of the respondents, three Family
Health units were opened in Rocinha in 2010 and January 2011.

The transition from the CHWP to the FHS in Rocinha was gradual. Initially, the CHWP still operated in parallel when two new Family Health units were opened. Their operation took place until January 2011, when the third health unit was opened in accordance with the FHS model, as can be observed in the following statement:

It was gradual. The first clinic was opened in March last year [...] then, that transition was easy, because we made a flow, we drew a flow, didn’t we? [...] we made a flow, not only the health workers, but the other medical professionals, nurses, they would experience the CHWP to know how the dynamics of TB was. (EE 1)

As well as in Rocinha, a study conducted in Belo Horizonte, where the CHWP had previously operated, revealed that the establishment process of the FHS in this place also occurred gradually.16

With the transition that took place in 2011, the diagnosis and treatment of TB cases in Rocinha became the responsibility of the Family Health teams. With the purpose of helping these professionals, many CHWs that worked in the CHWP became part of those teams. The old CHWs of the CHWP that were distributed in Family Health teams played an important role in this transition process, since they were used to carrying out the treatment of TB. This fact can be observed in the statements of the participants:

So, this way, the transition from the CHWP to the FHS was first like this: we had a division for each team, in which each older health worker would be included in each team in order to be a reference [...] (EE 1) [...] when I arrived, the CHWP was falling apart, it was undergoing a transition and the patients were being referred to be followed up by the teams, wasn’t it? And at that time you had the CHWP as far as I can remember, there was that church, up here in Rocinha, and then the clinics were opened; the community workers began working with their teams. Some community workers still made a shift to stay in the CHWP, the CHWP still existed and they were community workers of a team, but they had that shift there in the CHWP, and then there was pressure, because the CHWP had to end, there was the FHS. At least this is how I felt it! And suddenly the CHWP was overlaid and then there were many documents and went to Family Health. And this way the patients arrived in their teams. (EE 5) [...] the workers came to work with us. So, this way, all the knowledge, not all the knowledge, but some knowledge that they had to work with tuberculosis using the

DOTS strategy, they came here and transmitted the knowledge to us [...] (EE 17)

The previous functioning of the CHWP was a facilitator element for the establishment of the FHS, because it allowed the CHWs to create closer relationships with the families under their responsibility, experience the work to be performed and teamwork.16

According to the statements, the old CHWs of the CHWP that were redistributed in the FHS teams were responsible for the follow-up of patients with TB in the whole area belonging to their teams. In addition, they provided healthcare to all users belonging to their micro-areas. This way, they became overloaded with work, as evidenced in the following statement:

The transition was simple, it was simple. It was, each worker was distributed, right? One or two workers in each team in whole Rocinha [...] and then everything ended up on the back of these two workers who came to our team [...] they wouldn’t stop providing care to hypertensive patients, diabetic patients, pregnant women, because of it. They continued with their micro-areas in addition to the people with tuberculosis of the whole area, didn’t they? (EE 13)

It is possible to note the work overload of the CHWs in this statement, since, according to the National Program of Basic Healthcare, each CHW should be responsible for no more than 750 patients corresponding to one micro-area.7

In this context, the relevance of the old CHWs in this CHWP was notorious in this transition process. They contributed to the accomplishment of the work carried out by the Family Health team due to prior knowledge acquired in the old model of the CHWP.

- Implications of the transition from the CHWP to the FHS for the treatment of tuberculosis in Rocinha

- Improvements in the treatment of tuberculosis caused by the transition from the CHWP to the FHS

According to the interviews, the establishment of the FHS expanded user access to the treatment of TB, mainly due to the division of areas and micro-areas and the adoption of multidisciplinary teams with the prospect of interdisciplinary work. All interviewees reported that the new multidisciplinary teamwork in the FHS had collaborated to the treatment of TB, as can be observed in the following statements:

What happens? I think it was a facilitator, it was not concentrated in one area. The
CHWP was there, it had a lot of CHWs, but, anyway, [...] to an extent that today we divided Rocinha more, it is re-divided, so we have more access. Each team has its area, each area has its micro-areas, which have a community worker for each micro-area, then it decreased, then it just got easier. (EE 3)

Because usually the patient has an appointment with the doctor, the nurse, the community worker and the nursing technician [...] all of them know the patient, all of them speak with the patient, the nurse, the doctor and the community worker. So, I think they feel more welcomed and any problem they have we also discuss it within the team to solve it, so I believe it is an advantage for the patients. (EE 17)

The FHS aims to enhance the guidelines advocated by the Unified Health System, namely: universality; completeness; equity; territorialization; and decentralization. In this context, the service provided by the FHS includes the conception of territory that occur from the registration of the families, the community health diagnosis, and the identification of families at risk in the territory.17-19

As observed in the statement of the participant, the territorialization is a prerequisite for the performance of the Family Health teams in Rocinha aiming at the expansion of access to TB treatment. The FHS is based on multiprofessional teams which are responsible for the monitoring of a registered population located in a particular and delimited geographical area, i.e., the territory where the service is provided.20, 21

Regarding the work performed by the Family Health teams, a study conducted in Natal, State of Rio Grande do Norte, Brazil, found the prevalence of team-integration in the service provided by Family Health units in that location. This finding was also noticed in the reports of professionals who worked in Family Health teams in Rocinha.22

The respondent's statement revealed that the work performed by the multiprofessional teams had some characteristics of a collective work of team-integration, as shown in the studies conducted by Peduzzi.23 It can be understood as a way of working with the interaction of community workers through a communicative practice among team members who discuss the conflicts and practices in the meetings of the teams.21

It is understood that the work of the Family Health team should be based on interdisciplinarity, generating health practices with the integration of clinical actions and public health, both being fundamental for the control of TB and the success in the treatment of the disease. It should be noted that the relationship between Family Health teams and patients with tuberculosis is strengthened in the Family Health units in which access is facilitated.21

Access is essential to the achievement of health services quality. Its terminology presents a complex concept that varies between a number of scholars. It is used in an ambiguous manner and interspersed with the term "accessibility". This is the presence or availability of the resource at a given time and place and may present the socio-organizational and geographical classes.24

The socio-organizational class relates to the aspects of services functioning, which interfere in their relationship with the users. They are non-spatial resources that facilitate or not users' efforts to obtain healthcare, such as meeting the needs and demands of the clients and the relationship between users and health professionals. The geographical class is related to the distance to the health units, and time and cost of commuting, among other aspects.24, 25

This way, the transition from the CHWP to the FHS has enhanced access, with respect to both the socio-organizational and the geographical classes, since it increased the operation with the registration of the families, contributed to the increase in the number of units in the community (reduced distance and commuting time spent by users), and favored meeting other users' needs with teams that performed interdisciplinary work.

Difficulties in the treatment of TB caused by the transition from the CHWP to the FHS

Even in the face of the improvements mentioned, the respondents also reported difficulties in the performance of the treatment caused by the transition from the CHWP to the FHS. According to them, the generalist model of the FHS is seen as a factor that hinders the treatment of TB, i.e., unlike the FHS, the CHWP was a specific program for the control of TB in the community. The generalist characteristic of the FHS has been considered the cause of workload for the nurses interviewed, as can be observed in the following statements:

The CHWP was something only for the number of patients with tuberculosis and today a community worker has thousands of functions; the DOTS is one more thing. It's not the only thing; it is one more thing, so they fail. (EE 14)

As we are FHS and the idea of strategy is generalist, tuberculosis is no longer the...
star, isn’t it? Then you have “Pink October”, which is the women’s month and you must promote prevention, you have people with hypertension, diabetes, prenatal care, people with wounds, the vaccine [...] There are various chiefs, so to speak, of primary healthcare. So, I found that it is difficult for them to be organized to go to the area and medicate the users. (EE 13)

In the CHWP, the nurses and CHWs only performed TB control actions throughout Rocinha. The respondents’ statements revealed new roles and actions to be performed by the nurses due to the change to the FHS.

The workload in Family Health teams is seen as a great detrimental factor for healthcare completeness, the relationship between health professionals and patients, and the quality of healthcare services provided by the professionals of the teams. Since these professionals are overloaded with work, they do not perform some tasks. 21

Another difficulty pointed out by the nurses interviewed was the lack of training for the treatment of TB. They stated that the government had offered training courses; however, not all the professionals attended those courses, as can be observed in the following statement:

Not everyone had this training. Until today, I had no training like the other people, so it is important for the old CHWs of the CHWP that are here with us today where the people come: ‘Hey, come here, what do you think about this and that’, ‘What am I supposed to do?’ ‘What else should I ask?’ […] (EE 4)

In the first moment of the FHS establishment, health professionals should be qualified to work in the new model, because they can be crucial in the success of the program. 16 The inadequate ability of health professionals to deal with TB is considered a qualitative weakness in human resources of the FHS. 26

The interviews revealed that the lack of training of FHS professionals caused their stigmatizing behaviors. The following statement reveals the stigma of TB exhibited by Family Health professionals:

The people were not yet prepared to receive. When they say coughed, sneezed, which sometimes it’s not, and not even the issue of TB, they are already desperate, they get crazy, mad. Another problem is that there is a large number of TB cases here in Rocinha; the structure of the clinics were not built to provide healthcare to respiratory symptoms. So, the people are scared! There is the issue of PPE, personal protective equipment. […] they have questions all the time with respect to filling out records, instruments, what the DOTS card is, patients’ cards, until today the SINAN1 has errors, the Green Book has errors […] (EE 1)

This statement reveals that TB still represents the last stage of human misery, even though it is considered a curable disease. In this sense, the stigma of TB and carriers of TB persists in the social imaginary and as a form of relationship between society and individuals with TB.27

FINAL CONSIDERATIONS

The present study revealed that the establishment of the FHS in Rocinha took place gradually. It should be noted that the CHWs of the old CHWP had a key role in the transition to the FHS in Rocinha, since they continued to be a reference for the treatment of TB in that location. This status is due to the knowledge and experience acquired in the CHWP.

The interviews revealed that the transition to the new model of FHS improved the treatment of TB, increased access due to the territorialization, and encouraged the inclusion of multiprofessional and interdisciplinary teams. It was also found that the generalist model of the FHS causes workload to nurses and CHWs, which is a factor that hinders the treatment of the disease. It should be highlighted that all health professionals of the FHS have access to training on TB control.

FUNDING

The present study received financial support from Grupo de Estudos Epidemiológico-Operacional em Tuberculose (GEOTB) (Epidemiological-Operational Study Group on Tuberculosis), and Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNpq) (National Council for Scientific and Technological Development).

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Transition to family health strategy