Esc Anna Nery 2022;26:e20210109

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Nurses' perceptions on care management and its intervening factors for tuberculosis control

Percepções de enfermeiros sobre gestão do cuidado e seus fatores intervenientes para o controle da tuberculose

Percepciones de enfermeros sobre gestión de la atención y factores intervinientes para el control de la tuberculosis

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Submitted on 04/17/2021.
Accepted on 09/06/2021.

DOI:https://doi.org/10.1590/2177-9465-EAN-2021-0109

Abstract

Objective: To analyze nurses' perceptions on care management and its intervening factors for tuberculosis control in Primary Health Care. **Method:** A descriptive and qualitative study conducted with 29 nurses who worked on tuberculosis control in 23 Basic Health Units in Belém, Pará. The data were produced by individual interviews, using a semi-structured script, and submitted to thematic content analysis, as proposed by Bardin. **Results:** Two thematic categories emerged, namely: "Care management by nurses for tuberculosis control in Basic Health Units" and "Intervening factors in the application of care management for tuberculosis control in Basic Health Units". **Conclusion and implications for the practice:** The nurses' knowledge about the care policy and management for tuberculosis control needs to be strengthened and, although nurses are aware of their competences, they are unable to fully implement them due to issues related to poor organization services, centralization of activities on them, low multiprofessional cooperation, scarcity of supplies and personnel, and socioeconomic issues related to tuberculosis patients.

Keywords: Primary Health Care; Public Health Nursing; Health Management; Perception; Tuberculosis.

Resumo

Objetivo: Analisar as percepções de enfermeiros sobre gestão do cuidado e seus fatores intervenientes para o controle da tuberculose na Atenção Primária em Saúde. **Método:** Estudo descritivo, qualitativo, realizado com 29 enfermeiros que atuavam no controle da tuberculose em 23 Unidades Básicas de Saúde de Belém, Pará. Os dados foram produzidos por entrevistas individuais, utilizando roteiro semiestruturado, e submetidos à análise de conteúdo temática, proposta por Bardin. **Resultados:** Originaram-se duas categorias temáticas: "A gestão do cuidado de enfermeiros para o controle da tuberculose nas Unidades Básicas de Saúde" e "Fatores intervenientes na efetivação da gestão do cuidado no controle da tuberculose nas Unidades Básicas de Saúde". **Conclusão e implicações para a prática:** O conhecimento dos enfermeiros sobre a política e a gestão do cuidado no controle da tuberculose precisa ser fortalecido, e embora eles tenham clareza sobre suas competências, não conseguem realizá-las em sua plenitude por questões referentes à pouca organização dos serviços, centralização das atividades nos enfermeiros, baixa cooperação multiprofissional, falta de insumos e de pessoal e questões socioeconômicas ligadas ao usuário com tuberculose.

Palavras-chave: Atenção Primária à Saúde; Enfermagem em Saúde Pública; Gestão em Saúde; Percepção; Tuberculose.

Resumen

Objetivo: Analizar la percepción de enfermeros sobre la gestión de la atención y los factores intervinientes para el control de la tuberculosis en la Atención Primaria de la Salud. **Método:** Estudio descriptivo cualitativo realizado con 29 enfermeros que pre en el control de la tuberculosis en 23 Unidades Básicas de Salud de Belém, Pará. Los datos fueron producidos por entrevistas individuales, utilizando un guion semiestructurado, y sometido al análisis de contenido temático propuesto por Bardin. **Resultados:** Se originaron dos categorías temáticas: "La gestión de la atención de enfermeros para el control de la tuberculosis en las Unidades Básicas de Salud" y "Factores intervinientes en la efectividad de la gestión de la atención en el control de la tuberculosis en las Unidades Básicas de Salud". **Conclusión e implicaciones para la práctica:** Es necesario fortalecer el conocimiento de las enfermeras sobre la política y la gestión de la atención en el control de la tuberculosis, y aunque tienen claras sus competencias, no pueden implementarlas en su totalidad debido a problemas relacionados con la mala organización de los servicios, la centralización de actividades en los enfermeros, baja cooperación multiprofesional, falta de insumos y personal y aspectos socioeconómicos relacionados con el usuario con tuberculosis.

Palabras clave: Atención Primaria a la Salud; Enfermería en Salud Pública; Gestión en Salud; Percepción; Tuberculosis.

INTRODUCTION

Tuberculosis (TB) is an infectious disease, generally related to poverty and urban agglomerations. Diagnosing and correctly and immediately treating cases of pulmonary TB, a transmissible form, are the main measures for its effective control. However, even with universally available diagnosis and treatment, barriers to accessing the services are common[1]. Despite being preventable and curable, TB is still considered a global health problem[2].

It is estimated that nearly 10 million people worldwide contracted TB in 2018 and that, of them, 1.5 million died. In Brazil, there were 4,490 deaths with a mortality rate of 2.2 /100,000 inhabitants. As for incidence, in 2019, there were 73,864 new cases in Brazil, with an incidence rate of 35.0/100,000 inhabitants, and 1,354 in Belém, with an incidence rate of 90.7/100,000 inhabitants[3].

The National Tuberculosis Control Program (*Programa Nacional de Controle da Tuberculose*, PNCT) is developed in a unified manner, executed by the Federal, State and Municipal spheres, with defined technical and care standards[4]. It proposes actions for the prevention, control, treatment and surveillance of cases, in a horizontal and decentralized manner. Its implementation is mainly carried out in Primary Health Care (PHC)[5].

In this scenario, Nursing stands out in TB control, as nurses operate from the search for respiratory symptoms to the realization of the diagnosis. They perform Directly Observed Treatment (DOT), monitor confirmed cases with control bacilloscopy until the end of the treatment and perform daily control of absentees, using strategies to avoid abandonment. They also act in the control of contacts, treating, when indicated, latent infection, fill out the surveillance instruments recommended by the PNCT (case notification form, registry books of respiratory symptoms and treatment and follow-up of cases) and carry out educational activities, emphasizing health promotion and disease prevention[1].

It is in this context that Nursing care management stands out, which includes six dimensions: individual, family, professional, organizational, systemic and societal. The individual dimension consists in taking care of oneself, in the sense that each person has the power to produce a unique way of making their own choices; it is the most nuclear of all dimensions. The family dimension deals with the care management aspect involving the relationship with family members, friends and neighbors[6].

The professional dimension is governed by three elements that confer greater or lesser ability to produce good quality care, such as technical competence, ethical posture and the ability to build a bond with those who need their care[6].

The organizational dimension of care shows new elements, such as teamwork, coordination and communication activities, in addition to the managerial function itself. The systemic dimension deals with the formation of care networks or lines, from the perspective of building comprehensive care; and the societal dimension deals with how, in each society, health and public policies in general are produced[6].

Although there are many studies on TB, few deal with care management by nurses, showing the need to invest in this theme of Nursing care in disease control since, generally, nurses are at the forefront of these actions in the Basic Health Units (BHUs). From this perspective, care management is revealed as a care system considering several aspects, such as: autonomy, individuality, relationships and professional attitudes. Understanding a care system refers to several dimensions with practices and attitudes that, in their entirety, support the care dynamics[7].

For the development and improvement of the Nursing practice in Public Health, it is necessary that nurses understand that care and management constitute the management of comprehensive Nursing care and must be thought of and developed in all care dimensions[7], mainly in the PHC context, perceived as a structuring and ordering axis of the health services network, with the functions of resolution, coordination and accountability[8].

Seeking to overcome access barriers and to horizontalize the care provided to users with TB in Brazil, the decentralization of the PNCT actions to PHC has been considered an indispensable organizational arrangement for effective disease control, constituting a prominent element in the recommendations adopted by the Ministry of Health (*Ministério da Saúde*, MS)[8]. In this sense, it means that it is necessary to understand how Nursing care is managed in TB control and which factors can interfere with its implementation. Thus, the objective of this research was defined as follows: To analyze nurses' perceptions about care management and its intervening factors for tuberculosis control in Primary Health Care.

METHOD

A qualitative and descriptive research study, based on the Consolidated criteria for reporting qualitative studies (COREQ)[9]. Developed in 23 of the 24 BHUs located in Belém, state of Pará, where the Tuberculosis Control Program (TCP) was operational at the time of data collection. Twenty-nine (93.5%) nurses participated in the study, out of a total of 31, who worked in TB control in these units. Nurses with at least one year of experience in the TCP actions at the BHUs were included, and two nurses chose not to participate.

Data collection took place from November 2018 to March 2019 through individual interviews, with a mean duration of 50 minutes, carried out by the main author using digital media recording, upon acceptance. A script with semi-structured questions was used, divided into two parts: the first referring to the participants' profile and the second with open questions, which explored the study object.

Initially, the project was presented to the nurses working in the Units and an invitation to participate was made. This happened before, during or after working hours, so as not to interfere with the full exercise of their activities. With those who accepted, the interviews were carried out at the time of the approach or scheduled on different days, and the place of choice for everyone was the Unit itself, in a private room, ensuring comfort and privacy to the interviewees.

The recorded statements were transcribed in full to compose the *corpus*, which was later submitted to thematic content analysis.[10] Nine themes were predominantly identified based

on the regularity with which they appeared in the statements, in occurrence and co-occurrence, and they were organized into two thematic categories according to their similarities.

The themes related to the nurses' knowledge, practices and actions comprised the first category, entitled "Nurses' care management for tuberculosis control in Basic Health Units". In turn, the themes that pointed out the intervening factors in the context of the TCP made up the second category, entitled "Intervening factors in effective care management for tuberculosis control in Basic Health Units". The absolute and relative frequencies, which indicate the representativeness of the themes, are highlighted throughout the research results.

Resolution No. 466/12 was complied with, and the project was approved in October 2018 by the Research Ethics Committee of a Public University in the city of Belém/PA, under opinion No. 2,963,880/CAAE: 98289018.3.0000.5170. The participants signed the Free and Informed Consent Form and confidentiality of their identities was ensured with the use of alphanumeric codes.

RESULTS

The participants' age ranged between 24 and 61 years old, with a predominance of 46 to 56 (12/41.4%) and female gender (25/86.2%). Regarding time since graduation, 12 (41.4%) reported from one to ten years; seven (24.1%), from 11 to 20 years; another seven (24.1%), from 21 to 30 years; and three (10.4%), over 30 years. Among the specializations, Collective Health/Family Health predominated for 11 (37.9%) participants.

The time working in the Units ranged from one to 21 years, with one to five years being the most frequent (14/48.3%). The time of experience in TB control varied from one to 30 years, with predominance of from one to five years (13/44.8%). Regarding the type of employment contract, 24 (82.8%) were tenured. The thematic categories originated from the analysis are presented below.

Category 1: Nurses' care management for tuberculosis control in Basic Health Units

In this category, the nurses' care management to control TB cases in their area of expertise is discussed, based on their knowledge of the policy, practices and programmatic actions, team planning, community health education activities, follow-up of cases and control of contacts.

Regarding knowledge about the care policy and management, 16 (55.2%) professionals expressed understanding about it, but many answers provided explanations that were superficial or focused only on the care routine in the Units; in relation to their knowledge about it, 15 (51.7%) were unable to clearly conceptualize:

> *I don't know about the policy itself, only about the TB program, the manual, the protocols to be followed, the TB policy itself I don't know how to express it (E1).*

> *Interesting, we end up not observing care management. The big problem here in the Unit as I believe in other Units is also lack of time (E26)*.

Regarding the Nursing care practices developed in the BHUs, 100% of the participants mentioned the activities carried out to monitor cases and their contacts, most based on the recommendations of the MS manuals and care protocols:

> *Here we do the Nursing consultation, see what this patient needs during treatment, guidelines, the exams he will undergo (E2)*.

> *We request exams, sputum smear microscopy, culture, QMT* [Quick Molecular Test] *and other exams, detection of new cases, of respiratory symptoms, call for contacts, prescription of medications, according to the protocol (E22).*

Regarding the tools that the Nursing professionals used in the Units to keep track of the cases, 100% of them mentioned case recording books, bulletins and scheduling forms as the main instruments for this monitoring and evaluation of the program in the Unit:

> *We have a control book that keeps all the patients, so you can know how many patients are under control of the disease, there's also the scheduling form that we use to know the day the patient comes for a visit, if they were absent or not to do the active search (E2)*.

> *We end up evaluating our books, monthly bulletins, because the bulletin is a document that gives an overview of where we're failing or where we can improve (E6)*.

Regarding the planning activities, improving case monitoring, evaluation and teamwork, 16 (55.2%) stated that they sought to gather and agree together with the multidisciplinary team; however, it was acknowledged that this effort was fruitless in most cases, as there was no frequency in those meetings, in addition to the lack of involvement of some professional categories in such planning:

> *There are specific months when we gather about a given disease. The management calls and we schedule, always demanding the other about the guidelines to the users, but not all the team gets involved and participates (E15)*.

> *The meetings are held only when necessary, there's no periodicity, I believe, mainly due to lack of time, because the Unit is very sought out and the professionals end up running out of time to hold meetings periodically (E24)*.

As for education in health activities, with the aim of informing and guiding users with TB and family members to improve treatment adherence and monitoring, 15 (51.7%) stated that they carried out educational activities with the community through lectures, dramatizations and conversation circles, among others, seen as

fundamental for raising awareness in the clientele, but there was no frequency and they were held at specific times of the year, such as campaigns:

> *During campaign times, we held educational lectures for the patients (E23)*.
>
> *I give lectures and a* [theatrical] *play too, we're always doing it! We do it where "the people" are, on Tuesdays, which is usually the day the doctor comes, as he sees a lot of people, he has a fuller agenda, and they like the play a lot, because it catches, draws more attention (E28).*

Participation of the family after adherence of the user with TB to disease treatment and control was considered important, as 10 (34.5%) mentioned that they sought to guide and attract both the patients and their family members, not just aiming to evaluate household contacts, but also to improve adherence to the control actions, as the family was configured as an important support to the TCP:

> *The patient usually adheres very well to the treatment, comes to appointments and takes the medication when the family is around to help, of course there are very complicated cases but, in general, we have this support (E22)*.
>
> *We don't have a Family Health Strategy in our area and that's what makes it difficult, because we don't have an active search, but we always get in touch with a family member and call them when they don't show up for a long time, that's what we can do, count on help from the family itself (E17)*.

Category 2: Intervening factors in effective care management for tuberculosis control in Basic Health Units

In this category, the factors that interfered with the implementation of the TB control program in the BHUs are presented. According to the testimonies, they were mainly related to services for 27 (93.1%) and to the users with TB for 25 (86.2%) of the participants.

In the context of the services, in relation to the practicalities and difficulties, the relationship with the local management (direction of the BHU), responsible for the Unit's service and its articulation with the municipality, and central management (Municipal Coordination for TB control) stood out.

The majority, 27 (93.1%), stated that they had a good relationship and discussed the practices related to TB control with the local management, facilitating smooth running of the actions in the Units. With central management, 24 (82.8%) reported that they had difficulties, as there was not, so far, a municipal coordinator in the TB program, relying in this circumstance only on technicians who, despite showing good will, could not meet the demands on many occasions:

> *The manager here is very attentive and participative, she's concerned about the lack of materials and she's always looking for feedback from the team (E28)*.
>
> *The difficulty I think is more in a central issue, for example, now the reference for tuberculosis and leprosy in the city has no coordinator, I think it's been uncoordinated for more than 1 or 2 months (E19)*.

Centralization of tests for diagnosis and control in some Units was also mentioned as a problem, which implied sending the sputum samples and receiving the results through a specific service called "route", which sometimes had delays, slowing down treatment initiation and causing harm to users with TB and the community, especially in positive cases of disease:

> *Nowadays, "the route" picks up once a week and sometimes doesn't come, this delays the patient's diagnosis and treatment start, especially in those positive for the disease (E14)*.
>
> *Now we're having a problem with the delay in diagnosis, we make the order, someone always comes to pick it up, but return takes a long time and it turns out that things tend not to work more efficiently (E19)*.

When asked about the meetings with managers and staff to improve actions to benefit the service and care provided, 13 (44.8%) stated they were not carried out and, although 12 (41.4%) mentioned that the meetings did take place, everyone recognized that they did not have periodicity, in general, due to lack of time because of the great demand for assistance, lack of physical space and lack of planning and organization, as well as disinterest of the majority:

> *Meeting no! We end up talking individually (E6)*.
>
> *They're not carried out very often and the reason, I believe, is lack of time and lack of planning about it, because if there was planning, there would be time to meet (E11)*.

Regarding the updates and training offered related to the policy, for their theoretical and professional improvement, 19 (65.5%) participants stated that there was no periodicity in training and updates on TB since they joined the service, as well as there was difficulty leaving the activities in the Unit when called, since there was a high demand for care:

> *From time to time we have training, but there's no regular frequency (E6)*.
>
> *They were never held again and, when they do, we have difficulty leaving the Unit, because there's no one who can do substitutions and the manager is on the "tight rope", since the service stops and the demand of patients is high (E14)*.

Through the speeches, centralization of the control actions on the nurses was noticed, since 22 (75.9%) pointed to the poor adherence by the other professionals, especially the physician, and to the refusal of some to treat users with TB due to lack of knowledge, stigma and fear regarding the disease, problems that are often aggravated by the low frequency of training on TB and, in general, when they took place, only the Nursing staff attended:

> *The problem is that there's still a lot of fear in the professionals' mind about TB. We have doctors who get desperate when they go to see a patient with TB (E4)*.
>
> *The Nursing team finds it difficult to put the actions into practice due to excessive work and attributions, professionals from other areas are not well prepared to care for patients with TB, as well as many have prejudice and fear (E7)*.

The difficulties they faced in the Units to maintain TB control actions were evident. In this sense, 15 (51.7%) mentioned lack of inputs and personnel as main obstacles:

> *Due to excess work, few professionals are providing services. If there were more nurses to take over the program, it would work more efficiently (E7)*.
>
> *There was a certain period when medication was missing, but we knew how to be flexible, give a little to one, a little to another, until getting the rest of the medication (E28)*.

Regarding the users with TB, the most reported difficulties refer to the socioeconomic issue and its consequences, mainly characterized by drug addicts (users of legal and illegal drugs) and homeless people, as well as difficulties going to the Unit, causing absences and making them more susceptible to treatment abandonment, and hindering control of the disease, as mentioned by 20 (69%) participants:

> *There's difficulty in the social issue, treatment dropout, drug users, patients who change address and we lose their contact, and here in this neighborhood this social issue is very strong, so, unfortunately, there's a lot of abandonment (E15)*.
>
> *In relation to the patient, what ends up presenting a little more of a problem is exactly having the DOT and having no resources, it has nothing to do with the link, with the Unit, but with the social issue (E19)*.

DISCUSSION

In order to develop comprehensive Nursing care management, nurses must resort to management tools such as health indicators, planning of materials and human resources, safety standards for care and decision-making process, among others. For this, the direct care provided to the population must encompass techniques, technologies, procedures and actions for prevention, promotion and education in health[7].

It is noteworthy that the health professionals who work in care management need to be prepared for this activity in all its dimensions, so that they understand their role and are able to monitor users with TB, showing them that they can and should act in favor of their own health, with actions aimed at promoting and maintaining it[7].

In this context, with regard to knowledge about the care policy and management, the nurses in this study showed an understanding of its concepts, although it was somewhat superficial or only focused on the care routine in the Units. This lack of in-depth knowledge about the themes can be closely linked to lack of training of the professionals.

In this sense, a study carried out in South Africa[11] showed that it is of paramount importance that the TB control practices are influenced by key factors such as in-depth knowledge and prevention actions; however, in the PHC reality, nurses with low knowledge and inadequate TB control and prevention practices are still identified, capable of affecting the care provided.

Another survey carried out in Divinópolis, MG, showed that the local TCP presented the following difficulties: planning weakness, lack of a model for the dissemination of information and insufficiency of training and trained professionals who, in turn, showed lack of knowledge in areas such as surveillance, diagnosis and performance of the DOT[12]. It is thus understood that permanent education is an extremely important strategy, as it expands theoretical knowledge about the elements that are directly linked to the practice.

Once empowered with the necessary knowledge, nurses become adequately prepared to plan TB control. In Brazil, the PNCT seeks to improve qualification of planning and decentralization of the control actions to expand patients' access to the health services[13]. This reinforces the study carried out in the province of Tak, Thailand, which pointed out planning as one of the main elements for TB control, together with the effective sharing of information and improvement in the diagnosis, among others[14].

Thus, education in health is understood as one of the primary elements for Nursing planning, in order to guide users with TB and family members, as well as improving adherence to the treatment. In this study, it was present in the Units' routine, but with little frequency or only during campaigns, which would need to be modified to achieve better results. A research study on social representations of health professionals and users with TB showed that education in health exerts a positive impact on adherence to the treatment, as it is a tool to reduce the chances of abandonment, raising critical awareness and favoring the power of healthy life choices[15].

The family and social support network becomes extremely necessary for these users, being positively associated with health-seeking behaviors, adherence to the treatment and satisfactory health results, and the family can act as a stress absorber for their psychosocial well-being[16].

A study conducted in Pakistan[17] evidenced that, when the users with TB were treated with care and observed by the family and the surrounding community, higher rates of adherence to the treatment and greater psychological well-being of the users were found, revealing that this support network is beneficial to health, since these users have biological and not biological needs that must be met to cure the disease and, if they do not receive support from the family and community, this can lead to non-adherence to the treatment.

Based on this understanding, the Nursing consultation can be used as an instrument in this process, as it allows for a closer relationship with the user with TB and their family and the planning of their care. Its potential as a strategy for effective care offers advantages, assisting in the identification of problems, needs, decision-making, planning, behaviors and facing other daily demands of this user. Thus, care fragmentation is avoided, seeking, to the extent possible, to remedy their needs[18].

It is also noteworthy that, for the comprehensive care of users with TB, participation of the interdisciplinary team for the development of actions in the Units is indispensable. However, as described by the nurses, there was little cooperation from other members of the multidisciplinary team, especially physicians. In this context, TB care actions require an interdisciplinary approach, in a coordinated manner, operationalization based on relationships that involve people, technologies, resources and shared responsibility, considering that everyone involved in the process has the same importance[19].

A study carried out in the Family Health Units of the city of Rio de Janeiro, RJ[20], also identified that most of the nurses in these Units participated in training on TB, showing greater interest in the topic or more availability. On the other hand, the lack or high turnover of physicians in the services increased the demand for care and limited the participation of these professionals in the training sessions.

This reduced cooperation of the multidisciplinary team can explain why the centralization of TB control actions on nurses was identified in the testimonies. A study that addressed the weaknesses and limits of the nurses' practices in PHC in Brazil also pointed out difficulties related to the lack of human resources with centralization of activities on the nurse, showing the need to articulate process management shared with the multidisciplinary team, so that the nurses' work is carried out effectively in the dimensions of care and health management in the PHC Units[21].

From this perspective, understanding that there is a symbiotic relationship between the resources, structures and the health management model, it is fundamental that the managers are able to carry out a dynamic and accurate situational reading of the health system context[22]. Hence the importance that the local and central managements are in frequent contact with the professionals working in the Units, through continuous meetings or technical visits, dimensioning existing problems and seeking resolutions for the intervening factors in the management of comprehensive Nursing care in partnership with the teams in the TB context.

It is a fact that structural and logistical problems related to the services can compromise the health team's involvement with TB control actions and, consequently, with the resoluteness and quality of the services offered, showing that the professionals and the local and central management, as well as in this study, need to be qualified to work in the management of comprehensive care with the patients, with the need to establish greater integration of the health services, a service flowchart to access the necessary technologies and monitoring of users with TB, in order to ensure supported and comprehensive care[23].

A study covering Brazilian municipalities showed that the adequate provision of inputs and human resources, as well as the request for sputum smear microscopy, are positively associated with the detection of cases in PHC services[24]. This allows understanding why lack of inputs and personnel was associated, in this study, with problems in the proper monitoring of the TB cases.

In addition to these intervening factors to control the disease, the still present stigma of the disease was also pointed out, hindering referrals and resoluteness to assess and remedy problems. Quality of care and treatment success permeate countless aspects of the relationship between the patient and the health teams, that is, care requires that the professionals transform the economic and technical dimension of their work into a relational and comprehensive dimension[25].

The attitudes adopted by the professionals that result in stigmatizing behavior related to the patients are unveiled by discriminatory actions arising from those who should provide care. This reality creates barriers in accessing the health services and influences TB diagnosis and treatment, further aggravating the reality of these people[26]. It is worth emphasizing the importance of an ethical posture that permeates by not showing any rejection to the sick person, for fear of contracting the disease, which could impact the bond and adherence of this TB user to the treatment[19].

The nurses' statements regarding the difficulties faced with the socioeconomic issue and its consequences, such as chemical dependence on legal and illegal drugs and homelessness, make evident the social vulnerabilities that are closely linked to TB. These findings were also found in a study carried out in 645 municipalities from the state of São Paulo, showing that drug users and homeless people are socially excluded and vulnerable and have emotional and psychological conflicts aggravated by the lack of family support, situations that directly affect the treatment, leading to successive dropouts and to the development of multidrug-resistant TB, as the bond between professionals and users with TB is weakened, such bond being essential for treatment success[27].

A study carried out in Kazakhstan[28] showed that incarceration, dependence on alcohol and other drugs, diabetes and poor access to medical care were associated with a higher rate of positive pulmonary TB cases, and that action, treatment and prevention policies should take these factors into account to contain the disease. The vulnerability situations in which the TB users find themselves should be recognized and valued in order

to better assist and protect them, as the vulnerability analysis allows knowing and understanding the differences in how each person experiences and faces the health-disease process[29].

Therefore, in order to be able to face the intervening factors in care management, it is necessary to search for new, well-designed and integrated models in PHC with access to the TB treatment, increased case notification and better adherence to the established therapeutic plan, built on the understanding of the individual as a whole, plural and complex. Therefore, the successful integration of the service around TB control should include material availability and specialized training of human resources, combined with managerial competence and supervision of the TB service[30].

CONCLUSION AND IMPLICATIONS FOR THE PRACTICE

The description of care management and the identification of factors that interfere with TB control in Primary Care allowed identifying that the nurses' knowledge about the care policy and management for TB control needs to be strengthened, as this weakness hinders disease control in PHC, with lack of training being a potentiating factor in this scenario. Although nurses were clear about their competences, they were unable to fully perform them due to issues related to poor organization of the services, centralization of activities on nurses, low multidisciplinary cooperation, lack of inputs and personnel, and socioeconomic issues related to the user with TB.

The care management dimensions (individual, family, professional, organizational, systemic and societal) were weakened, as the strategies were insufficient to control the disease and exerted a direct impact on the quality of care provided to users with TB. These are aspects that need to be resolute and deserve a more critical analysis from the professionals involved and from the managers, in favor of their effective control in the municipality.

Given the gaps in publications about care management in the TB control policy, the discussion on the topic may have brought limitations to the study. Another limitation is the fact that the study only had the participation of professionals linked to care, and the participation of managers was also necessary to expand the discussion on the theme. Even so, it is understood that this study can contribute to stimulating the implementation of strategies for TB control, considering the context of Nursing care management, evidenced as little valued, in addition to supporting new research studies.

It is expected that the findings of this research may raise reflections on care management for TB control in PHC, assuming that it is a necessary tool for comprehensive care of users with TB and the community. Therefore, the managerial and educating role of Nursing in Public Health stands out, considered, despite the difficulties, as a reference and indispensable element for case monitoring.

AUTHOR'S CONTRIBUTIONS

Study design: Fabiane Oliveira da Silva. Ivaneide Leal Ataíde Rodrigues.

Data collection or production: Fabiane Oliveira da Silva.

Data analysis: Fabiane Oliveira da Silva. Ivaneide Leal Ataíde Rodrigues. Alexandre Aguiar Pereira.

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