







ORIGINAL ARTICLE

CARE PRACTICES PROVIDED BY NURSES OF THE FAMILY HEALTH STRATEGY TO USERS WITH TUBERCULOSIS

HIGHLIGHTS

1. Ensure privacy, prioritize care, understand the social context.
2. Dialogical relationship and care practices are part of nursing care.
3. Network and professional weaknesses impact on coping with TB.
4. New perceptions about tuberculosis with the advent of the pandemic.

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ABSTRACT

Objective: to understand the care practices provided by nurses to people with tuberculosis in the Family Health Strategy. **Method:** descriptive qualitative research, carried out with 11 nurses from family health units in the Rio Grande, RS - Brazil, in the first semester of 2021. The invitation was made by telephone and an online interview was scheduled. The data were analyzed according to content analysis. **Results:** three categories were evidenced; Practices related to nursing care: obstacles and misconceptions, (Re)Actions in nursing care for the user with TB, (Re)Thinking about the guidelines provided to the user. The care practices were based on the bond and on welcoming the user. However, there were misunderstandings in the guidelines and obstacles in coping with the disease. A change was observed in the conduct and perception about the disease in the face of the Covid-19 pandemic. **Conclusion:** good care practices, both relational and technical, are crossed by difficulties, whether internal or external to the unit.

DESCRIPTORS: Health Care; Primary Health Care; Nursing; Disease Prevention; Tuberculosis.

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INTRODUCTION

In Brazil, tuberculosis (TB) is a public health problem and a social problem that mainly affects the most vulnerable, including people with HIV/AIDS, the homeless population, indigenous people, people deprived of liberty and health professionals¹⁻³.

It is known that the transmission of *Mycobacterium tuberculosis*, the causative agent of the disease, occurs from the inhalation of aerosols containing TB bacilli, expelled by the cough, speech, or sneeze of the person with the active forms of pulmonary or laryngeal TB. The probability of a person being infected depends on the degree of exposure (proximity, environmental conditions, and time of coexistence), the infectivity of the case (number of bacilli eliminated) and individual immunological factors².

According to the Ministry of Health, the TB incidence coefficient in Brazil had been decreasing until 2015, however, in 2019, it increased, reaching 37.1 cases per 100 thousand inhabitants³. In 2020 and 2021, new cases of the disease showed a sharp drop³. It would be something to celebrate if there were no COVID-19 pandemics, which started in Wuhan, China, in December 2019, and is still ongoing. Researchers disclose that such evidence is related to the underreporting of TB, which may have repercussions on mortality from the disease in the future⁴ in the future⁴. This suspicion is in line with the similarity of the initial symptoms between both diseases, causing difficulty or delay in making the initial diagnosis⁴, a fact that may contribute to the increase and worsening of TB cases.

When thinking about COVID-19 and TB, researchers also mention the likelihood of *Mycobacterium tuberculosis* infection being a risk factor for SARS-CoV 2 infection and severe pneumonia in people affected by the disease in question⁵. Added to this, social distancing, important for the mitigation of the virus, the need to reorganize the work of health units and the removal of health professionals from the front line, the concern arose about how people living with TB are coping with the disease. In this sense, the Family Health Strategy (FHS) stands out as the user's gateway to tuberculosis treatment.

The FHS proposal is directed to longitudinal humanized care through care that starts from the expression of the individual's needs, considering their sociocultural and psychosocial conditions to meet health promotion and disease prevention⁶. In the context of TB, the mutual relationship between professional and user promotes trust and autonomy, making the subject active in overcoming fears, fears, and stigmas in relation to the disease and treatment, helping him in the coping process⁷. In addition, nursing care practices include the organization of the service, the identification of respiratory symptoms, home visits, the management of the flow of reference and counter-reference to the user, considering that the unit depends on the specialized care network⁸. Therefore, to discuss care practices is to talk about the care of the individual, the family, and the community, under the relational and technical perspective.

However, the literature discloses obstacles that hinder an effective and effective practice for users, such as the high turnover of users, such as the high turnover of professionals in basic health units, the difficulty of access to laboratory diagnostic tests and the unpreparedness of the health team⁸. Considering this, it is necessary to problematize such difficulties, from the perspective of health professionals, to create strategies that reduce the disqualification and weaknesses of the network. Nursing has an essential role in individual and collective health care, standing out in the supervision of directly in the supervision of directly observed treatment, as well as investigating the socioeconomic conditions of people living with the disease⁹ to find a cure and reintegrate the user into daily life activities.

Therefore, this study is justified considering that the city of Rio Grande has a high TB burden, being located among the 15 priority municipalities for the control of the disease in the state¹⁰. Considering that the FHS is the place with the possibility of strengthening care,

and that by promoting the debate on the health care of this public, in times of pandemic, it is possible to maximize the implementation of best practices.

Thus, the question is: what are the care practices provided by nurses to people with tuberculosis in the Family Health Strategy? The objective is to understand the care practices provided by nurses to people with tuberculosis in the Family Health Strategy.

METHOD

Descriptive qualitative research, carried out in the first semester of 2021, in the municipality of the Rio Grande, Rio Grande do Sul - Brazil. This study was part of the macro-project entitled "Tuberculosis in Primary Health Care".

In the municipality of the Rio Grande there are 30 Basic Family Health Units (UBSF, in Portuguese) distributed in the urban, rural, and coastal areas. To participate in the study, the inclusion criteria were to be a nurse working in the units of the urban areas, with a minimum of one year in the unit. Nurses who were on leave for health treatment at the time of data collection, those on vacation and those who had worked for less than a year in the unit were excluded from the study.

The nurses were invited by telephone to the UBSF. After explaining the proposal and accepting the invitation, a virtual meeting was scheduled for data collection, which took place through the Zoom® and Meet® platforms. The meeting was scheduled through a WhatsApp® conversation, requested at the time of the first contact. All nurses signed the consent form, sent, and received by WhatsApp®.

The interview consisted of open-ended questions containing information about the informants' profile, the care practices carried out both in the unit and in the territory, as well as the facilities and difficulties to exercise such practices. All interviews were recorded by the platform with the informants' consent. After transcribing the data, the corpus was analyzed according to Content Analysis¹¹. The following steps were followed: pre-analysis of the corpus, organization, and selection of material according to evident content, exploration, and transformation into units and, finally, categorization of themes.

The project was approved by the Research Ethics Committee of the Federal University of the Rio Grande, under opinion number 4.583.188, and by the Municipal Center for Collective Health Education of the Health Department of the municipality of the Rio Grande, under opinion number 005/2021. To maintain the anonymity of the participants, the letter N for nurse was used, followed by the interview number (N1, N2...)

RESULTS

Eleven nurses from the UBSF participated in the study. All were women, aged between 31 and 54 years of white race. The length of professional experience ranged from 4 to 22 years. Only six nurses reported having taken a course or participated in events related to the topic. All of them mentioned never having been ill with TB. The following are the three categories elaborated from the thematic categorization of the corpus: (Rel) Actions in nursing care for the user with TB; Practices related to nursing care: obstacles and misconceptions; (Re)Thinking about the guidelines provided to the user. (Rel)Actions in nursing care for the user with TB.

The statements analyzed discuss practices that include the bond and the reception of the TB user by nurses and the team. Practices related to nursing care for users and their

families and the monitoring of directly observed treatment were also listed.

Regarding the bond, it is observed in the reports that it is a process that strengthens the relationship between team and user, favoring the understanding of TB and adherence to treatment:

What makes the patient adhere to the treatment is the team that assists, usually the care with the neighbor, the care that has confidence, is the care of the nurse. The availability that the nurse gives to that user. That's basically it, this is our moment of protagonist, I think, within Primary Care, to better handle all situations. The patient, because he feels welcomed, valued, really cared for, he ends up giving in to the treatment. (N9)

We must be open with the patient so that they feel safe and create this bond in the service as a whole and be this bridge. When the patient needs more care, a specialty, we need to be the mediator of this because he'll come back to us again and, even if he's cured, he'll still be ours. (N8).

For the interviewees, welcoming is considered a humanizing practice from the moment the user arrives to the moment the user arrives at the unit, reducing the waiting time for the treatment directly observed, until the moment when they provide guidance and monitor the case:

I try to see if they are already there, to call them for care, so they don't wait too long, which also sometimes makes them give up coming.(N5).

The reception is with the nurse, the nurse receives all the warnings, all, everything, gives all the treatment guidelines and from then on, the conversation is only with the nurse, the nurse does all the reception with the TB patient, until the end of the treatment. (N1)

Other nursing care practices are composed of assistance that deals with the prevention, control, and cure of users with TB. Its planning starts from the organization and evaluation of user care, including actions to identify respiratory symptoms and contacts, provide guidance and recognize the difficulties of the person with the disease:

Our role is to identify the communicants to make the earliest possible diagnosis and ensure their care, both in the agility of referring to do the rapid test (GeneXpert), also do the monitoring tests because they need to do the x-ray frequently, the laboratory tests. So, in fact, it is a partnership work; the unit with the thisiology sector. So, the nurse's role is to ensure quality care, to ensure continuity of treatment, the nurse's role is to coordinate health care for the tuberculosis patient and his family. (N3).

When someone is under investigation and tests positive, we actively search for concomitants of everyone living in that house who has direct contact with him. This is significant, not only do you treat the person, and they have already passed on to someone else, so we try to provide this guidance to call the people in the house or go to the house and do this investigation of all the concomitants. (N7)

When analyzing the statements of the professionals, the management of the treatment directly observed through the encouragement of adherence to the treatment from the first nursing consultation stands out:

The nursing team is responsible, both the nurse and the technician, for the supervised treatment, for ensuring the delivery of the medication... we see, we follow all the medication. Sometimes it happens that they change areas too, and we call the units they went to let them know that the user needs to do the supervised treatment. We facilitate their access when they arrive at the unit, when they arrive and inform the reception, sometimes the receptionist herself already identifies that they have TB. (N3).

Practices related to nursing care: obstacles and misconceptions

This category addresses some obstacles in coping with TB, either for the user or for the extensive work routine of health professionals and the fragility of the support network. It also points out some misconceptions of nurses regarding practices related to care guidelines.

From the nurses' point of view, the use of chemical substances, such as alcohol and other drugs by users, can become a determining factor for non-adherence to treatment. Poor socioeconomic conditions also interfere in this process:

I think the most difficult thing is for them to understand that they must take their medication every day, and not drink alcohol. For them to disassociate themselves from the addiction is sorrowful for them, so they stop taking the medication to drink alcohol. (N1)

The patient is very reluctant to take the treatment because it is very long, so making him adhere to the treatment is very difficult [...]. The issue of social vulnerability, sometimes there is a bit of domestic violence associated. When you go to talk, you end up discovering other contexts. You give all the guidance, but if she lives in a house where there is only one room and ten people living there [...] Sometimes the person doesn't even have money to eat. You have more difficulty in making interventions because your hands are tied." (N9)

The reality here is very complicated, there are homes that are rooms without a bathroom... it's different from what we learn in college: it guides hygiene, bathing every day... and you arrive at a house where the mother lives with five children in a room without a bathroom." (N2)

From the professional point of view, they report that due to the workload they are often unable to carry out the nursing consultation, home visit, accompany the user in the directly observed treatment and do active search with the team. In addition, there is the fragility of the support network itself, which should meet other user needs, but does not work:

I've already had to do active search... this need to have a very exclusive attention to the patient with tuberculosis. But sometimes the demand of the unit does not allow us to have this dedication and this care as it should be. The sector cannot handle the entire municipality, the demand we have in the unit that slows down the system. We have too much demand and not enough staff, not enough people to handle this work, I mean to do it with quality." (N4).

Primary Care has limitations, sometimes we need to share this with the responsible sectors. So, patients need to be accompanied by a psychiatrist, they need CAPS AD, they need hospitalization, patients with heavy drugs. So, managing the clinic and the specific disease is one situation, but when there is a combo together, it is very complicated. So, you must have this support to be able to access these specialized services. You must have a certain agility, and it gets complicated, that you arrive and there is no psychiatrist in place, there is no certain professional to make the referral or the tuberculosis program was left without a professional... It's complicated. It's complicated." (N10)

Regarding the monitoring of the treatment directly observed, the COVID-19 pandemic made it difficult for nursing to supervise, generating uncertainty about the user's medication adherence. On the other hand, it provided the user with no obligation to go to the unit every day: It worked much better before the pandemic because we accompanied them daily. Now with the pandemic, we thought it was better, due to the distance here in the countryside to get to the unit, we established that they should take the medication once a week. But, before it was much better because we gave the medication, saw them taking it right there in front of us, and now it's changed. (N5).

I think it made this pandemic issue a little easier because they come and take medication for a week or 15 days, but we don't have as much control, we think they are taking the

medication and put it in the report. (N8)

Finally, there were some misunderstandings related to the guidance on TB to users, such as the period of transmission of the bacillus and the time of withdrawal from the service:

In the first month the patient is removed from the service, he cannot be in the service, he cannot work. He is assisted, medication is given every time he comes to the clinic, and he is removed from the service, he cannot work with TB because he is transmitting it, he is six months away from the service. (N1).

We ask for respiratory isolation, with the mask and not mixing cutlery utensils, reinforcing the first 10 days of treatment. (N7)

(Re)Thinking about the guidance provided to the user.

The statements discuss the guidance provided by nurses regarding TB, including its concept, specific care, transmission, and about the stigma of the disease. They also list some changes in the perception of the disease in the face of the COVID-19 pandemic:

We explained that it is a contagious disease by respiratory route, that it has treatment, that it must be diagnosed early so as not to leave lesions.(N10).

Finally, the reports show the transfer of fear and fear of tuberculosis to COVID-19, by users. They also disclose that, with the pandemic, the guidelines provided on the use of masks are directed both to those with TB and to the community that attends the unit, minimizing the shame of the person with the disease using this protective equipment.

When we guide, most are afraid of what others will think, the fear of having contaminated a family member, a close person, the doubt also of how they became infected. Today we have COVID, which is a highly transmissible disease, but before 2020 people were much more afraid of tuberculosis. Today, I think this fear has been transferred a little bit to COVID, but they still have [fear].” (N8).

We guide the use of the mask. I think it has decreased; it may have decreased [TB cases] because now they have the obligation to wear a mask while on the street. So, it is more difficult to contract the disease because they are wearing a mask and those who are positive wear the mask now without shame. One of the difficulties was the shame they had to wear the mask and only him wearing a mask on the street, at the beginning of the treatment while it is still transmitting, but today there is no such thing because everyone wears a mask.” (N2).

DISCUSSION

Among the practices carried out in the FHS, the establishment of the bond between people with TB and nursing professionals stands out, resulting in the resolution of health actions. In this light, it is evident that the establishment of the bond contributes to the control of TB, considering that the feeling of trust in the professional motivates the user to face the disease and not to give up treatment. The disease and not to give up on treatment.⁶ This relationship is favored in units that are FHS units due to their attributes of territoriality, longitudinally, and being the gateway to the support network¹².

Regarding reception, it is observed that nurses view the TB user beyond the concept of someone who seeks the service only to perform systematic follow-up. Ensuring privacy, prioritizing care, offering humanized and singular attention are mentioned by them, increasing the possibilities of successful treatment, considering the high abandonment and problems surrounding the population with TB^{9,13-15}.

In this context, welcoming is part of a relationship that aims to stimulate self-care and autonomy of the individual, important during TB treatment. Welcoming, the exchange of affection and empathy are actions recognized by users¹⁶ that go beyond technical assistance, configuring, in this sense, as care based on the relational approach¹².

On the other hand, practices were observed that aim to achieve care in a relationship that includes other facets, in addition to the dialogical relationship with the user. According to the reports, it includes the identification of respiratory symptoms, prevention actions, active search for contacts, ensuring access to the specialized support network and the recognition of user difficulties.

Ensuring referral to the intersectoral network is also the nurse's competence, as observed in the statements, exercising the role of care management. The FHS is the gateway, but it is also a coordinator, depending both on the services that perform the monthly follow-up of users, through imaging and laboratory tests, and those capable of meeting social demands, including alcoholism, smoking, use of psychoactive substances, etc².

Active search is another practice that integrates nursing care. This action is recommended for all household contacts of the source case, in the workplace, at school, considering the degree and time of exposure of the individual, as well as it should be performed with respiratory symptoms, people with cough and sputum for three weeks or more¹⁷. This strategy is a fundamental part in breaking the cycle of transmission of the disease, although it is not always carried out by nurses, who end up delegating it to the community health agent¹⁸.

Nursing has a leading role in coping with the disease in Primary Health Care, with emphasis on the execution of directly observed treatment (DOT), promoting therapeutic adherence, as evidenced. The decentralization of DOT is configured in better chances of solving the disease, if it is not seen by professionals only as a pill intake. It is necessary to invest in building a shared responsibility between services and users because even with supervision there is a risk of treatment abandonment¹⁹.

The second category highlighted obstacles and misunderstandings in daily user care practices. Professionals mentioned the difficulties of adherence to treatment by drug users, as they stop using medications due to chemical dependence. The association between the consumption of alcohol and other drugs and a higher rate of treatment abandonment is listed in previous studies^{14-15, 20}.

National and international studies¹⁴⁻¹⁵ reveal that patients with HIV coinfection, with re-entry after dropout and relapse also find greater resistance to adhere to treatment, which reinforces the importance of treatment, which reinforces the importance of prioritizing the needs of these groups. Nevertheless still, it is known that it is not an isolated fact, that other problems such as low schooling¹⁹⁻²⁰, living far from health services^{14-15, 21}, mental problems¹³ and socioeconomic problems²⁰ overlap.

Thus, they recognize the need to investigate the life context of these individuals, since other problems, such as domestic violence and cases of depression,²¹ may be present in the user's life, requiring the adoption of care strategies beyond the disease. As for socioeconomic adversities, nurses feel unable to act, as they know that guidelines regarding precautionary measures and disease prevention are unlikely to be followed.

Thus, they highlight the failure arising from university training, as the social and economic problems of people with TB are not considered, focusing only on pathology, thus hindering the approach in professional practice. Similar reports were described by nursing students from a Federal University in the state of Mato Grosso do Sul, indicating that the classes were not enough to train them about the disease²².

From the professional point of view, they mention that the high demand for work

in the unit and the low number of professionals make it impossible, in most cases, to carry out activities related to disease prevention and active search with the quality they desire. Weaknesses in the organization, lack of connection between services, lack of materials, equipment and human resources were also evidenced in other studies^{8, 23-24}.

To achieve what is proposed in the National Plan for the End of Tuberculosis as a Public Health Problem, it is necessary to invest in the teams, in the organization of the unit, of the reference and counter-reference, to guarantee the availability of tests and medications, to promote discussions of TB cases among health professionals, as well as the articulation of PHC with other levels of care²⁵, especially considering that this public has numerous health demands.

It was also reported that the COVID-19 pandemic interfered with patient care practices in the municipality's UBSF, as users traditionally went to the unit daily to take the medication. With the pandemic, to maintain social distancing, there was a consensus between the municipal management and the units on the delivery of medication to the user for a period of up to 15 days. If on the one hand it facilitated the life of the person with TB, it made the monitoring process by nurses difficult, bringing insecurity in the effectiveness of the treatment. TB and COVID-19 make up a pessimistic scenario, in this sense, greater attention should be paid to the user to minimize the occurrence of severe cases and hospitalizations in this population.⁴

In addition, nurses' misconceptions related to TB treatment stand out. It is known that after 15 days of treatment the user is no longer bacillus positive, without risk of transmitting *M. Tuberculosis*², although he needs to follow the treatment. In addition, professionals reported the need to take time off work, as well as to separate personal utensils. The person with the disease can return to work after starting treatment, ranging from 15 to 30 days, which will depend on their physical and clinical conditions².

The separation of cutlery, glasses and plates is not necessary, considering that transmission occurs through airborne particles, expelled by air. The lack of knowledge about the forms of prevention reinforces taboos and stigmas about the sick person^{16,21}.

Finally, the third category showed that guidelines also emerged as practices that integrate care. Guidance on the disease, transmission and prevention by nurses is essential, since ignorance about the disease is present among individuals and family members, as evidenced in a study in which people with tuberculosis related the etiology of the disease to poor diet, poorly cured flu or pneumonia¹⁶.

They also highlighted social stigmas, fear and prejudice about the disease, a fact that was attenuated and transferred to COVID-19. Considering the mandatory collective use of masks in health services, they emphasize that people with TB feel more comfortable, as they are not targets of stares.

Due to this new habit practiced by all users, the participants believe that TB cases may decrease in a while. The literature warns that due to the similar characteristics between both diseases, such as fever and respiratory symptoms, TB cases may have a late diagnosis in this pandemic period, causing losses in their future incidence and mortality⁴.

This study presented limitations in data collection due to the pandemic, making it impossible for some nurses to assist the researcher due to the demand for flu syndrome cases in the unit. Other negatives occurred due to illness and diagnosis of COVID-19.

FINAL CONSIDERATION

The study met the objectives, evidencing care practices based on establishing a bond and welcoming people living with TB. In addition to dialogical and relational practices, actions related to the prevention, control and cure of the disease were highlighted.

However, some obstacles and misunderstandings were highlighted. Participants mentioned that drug use and socioeconomic difficulties of users make it difficult to adhere to treatment and ensure a good quality of life to cope with the disease. From a professional perspective, they highlighted the high demand for work, the lack of human resources, and the fragility of the support network. The pandemic was also cited as an aspect that hindered the observation of DOT in the unit. Misconceptions were related to the time of bacillus transmission and isolation, as well as the form of contagion, which was associated with sharing cutlery.

They considered that the guidelines are focused on treatment, forms of transmission, prevention, including aspects on the use of a mask and on the stigma of the disease, temporarily transferred by the population to COVID-19.

Therefore, the evidence from this study serves as subsidies for professionals, by demonstrating that the care practices provided by nursing can contribute to bringing or pushing people with TB away from the service, depending on both personal/professional attributes and those external to the unit. Real versus ideal health care shows that the road is still long. Humanized, unique, and welcoming practices are as fundamental as the need for an articulated network, with trained professionals, reflecting on the guarantee of qualified care to people living with tuberculosis.

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