# Nurses' records on guidance for users with tuberculosis in Primary Health Care

Registros de enfermeiros sobre orientações aos usuários com tuberculose na Atenção Primária Registros de enfermeros sobre instrucciones a los usuarios de la Atención Primaria con tuberculosis

> José Nildo de Barros Silva Júnior<sup>1</sup> https://orcid.org/0000-0001-9958-8462 Haline Costa dos Santos Guedes<sup>2</sup> https://orcid.org/0000-0003-1892-4503 Amanda Haissa Barros Henriques<sup>2</sup> https://orcid.org/0000-0001-8735-225X Dilyane Cabral Januário<sup>2</sup> https://orcid.org/0000-0002-2319-3015 Matheus Figueiredo Nogueira<sup>3</sup> https://orcid.org/0000-0002-5787-7861 Anne Jaquelyne Roque Barrêto<sup>2</sup> https://orcid.org/0000-0002-6852-8480

#### How to cite:

Silva Júnior JN, Guedes HC, Henriques AH, Januário DC, Noqueira MF, Barrêto AJ. Nurses' records on guidance for users with tuberculosis in Primary Health Care. Acta Paul Enferm. 2024;37:eAPE02385

http://dx.doi.org/10.37689/acta-ape/2024A0000023855



### Kevwords

Nursing records; Nurses; Tuberculosis; Primary health care; Quality of health care

#### **Descritores**

Registros de enfermagem: Enfermeiros e Enfermeiras: Tuberculose: Atenção Primária à Saúde: Qualidade da assistência à saúde

#### **Descriptores**

Registros de enfermeira: Enfermeras y Enfermeros: Tuberculosis: Atención primaria de salud: Calidad de la atención de salud

#### **Submitted** September 22, 2023

Accepted

# Corresponding author

José Nildo de Barros Silva Júnior E-mail: nildoenfer@hotmail.com

#### **Associate Editor**

(https://orcid.org/0000-0002-1408-196X) Escola Paulista de Enfermagem, Universidade Federal de São Paulo, São Paulo, SP, Brazil

### **Abstract**

Objective: To evaluate the completeness of nurses' records on guidance given to users with tuberculosis (TB) followed in Primary Health Care (PHC).

Methods: This was a documentary and retrospective study whose population consisted of all records of new TB cases reported in Family Health Units in a municipality (State of Paraíba) in the period 2015-2019. The study was conducted from July to September 2020 with a sample of 190 medical records selected by systematic proportional and probabilistic sampling. The R software for statistical analysis was used with a 5% significance level, employing descriptive statistics, Pareto Chart, and trend analysis.

Results: In assessing the completeness of the guidance record about nutrition, treatment, and consultations given by nurses for patients with TB, 60% of the indicators were classified as very poor. The Pareto Chart highlighted guidance on food and treatment as the main problems in the record, representing more than 50% of the total incompleteness. The trend models showed increasing statistical evidence for the incompleteness of the *quidance on consultations* indicator (p=0.016) and a growing statistical trend for the incompleteness of the guidance on exams and consultations indicators. In contrast, guidance on nutrition and exams showed a decreasing trend in incompleteness.

Conclusion: Records showed inadequate completeness accompanied by an increasing trend for incompleteness in the registration of guidance for users with TB in PHC. This scenario points to the urgency of intervention measures in Public Health to improve TB monitoring in PHC.

### Resumo

Objetivo: Avaliar a completude dos registros de enfermeiros sobre as orientações dadas a usuários com tuberculose (TB) acompanhados na Atenção Primária à Saúde (APS).

Métodos: Estudo documental e retrospectivo, cuja população foi constituída por todos prontuários dos casos novos de TB notificados em Unidades de Saúde da Família de um município da Paraíba entre 2015 e 2019. O estudo foi desenvolvido entre julho e setembro de 2020, com uma amostra de 190 prontuários selecionados por amostragem proporcional e probabilística sistemática. Utilizou-se o software R para análise estatística, com nível de significância de 5%, empregando estatística descritiva, Diagrama de Pareto e análise de tendência.

Resultados: Do total, 60% dos indicadores foram classificados como muito ruins (orientações sobre alimentação, tratamento e consultas) na avaliação da completude do registro sobre as orientações de enfermeiros a respeito das orientações à TB. O Diagrama de Pareto destacou as orientações relacionadas a alimentação e tratamento como os principais problemas no registro, representando mais de 50% da

<sup>&</sup>lt;sup>1</sup>Universidade de São Paulo, Ribeirão Preto, SP, Brazil. <sup>2</sup>Universidade Federal da Paraíba, João Pessoa. PB. Brazil. 3Universidade Federal de Campina Grande, Cuité, PB, Brazil. Conflicts of interest: The authors have nothing to declare.

incompletude total. Os modelos de tendência apresentaram evidências estatísticas crescentes para a incompletude do indicador 'orientações sobre consultas' (p=0,016) e tendência crescente para os indicadores 'orientações sobre exames e consultas'. Em contrapartida, as orientações sobre alimentação e exames mostraram tendência decrescente de incompletude.

Conclusão: Os registros mostraram uma completude inadequada, acompanhada por uma tendência crescente de incompletude no registro de orientações aos usuários com TB na APS. Esse cenário aponta para a urgência de medidas de intervenção na saúde pública, para aprimorar o acompanhamento da TB na APS.

#### Resumen

**Objetivo:** Evaluar la completitud de los registros de enfermeros sobre las instrucciones dadas a usuarios con tuberculosis (TB) que se atienden en la Atención Primaria de Salud (APS).

Métodos: Estudio documental y retrospectivo, cuya población estuvo compuesta por todas las historias clínicas de los casos nuevos de TB notificados en Unidades de Salud de la Familia de un municipio del estado de Paraíba entre 2015 y 2019. El estudio se llevó a cabo entre julio y septiembre de 2020, con una muestra de 190 historias clínicas seleccionadas por muestreo proporcional y probabilística sistemática. Para el análisis estadístico se utilizó el *software* R, con un nivel de significación de 5 %, y se empleó estadística descriptiva, diagrama de Pareto y análisis de tendencia.

Resultados: Del total, el 60 % de los indicadores fue clasificado como muy malo (instrucciones sobre alimentación, tratamiento y consultas) en la evaluación de la completitud del registro sobre las instrucciones de enfermeros respecto a las instrucciones de TB. El diagrama de Pareto destacó que las instrucciones relacionadas con la alimentación y el tratamiento fueron los principales problemas en el registro, que representan más del 50 % de la incompletitud total. Los modelos de tendencia presentaron evidencias estadísticas crecientes de incompletitud del indicador "instrucciones sobre consultas" (p=0,016) y tendencia creciente de los indicadores "instrucciones sobre exámenes y consultas". Por otro lado, las instrucciones sobre alimentación y exámenes mostraron una tendencia decreciente de incompletitud.

Conclusión: Los registros mostraron una completitud inadecuada, acompañada de una tendencia creciente de incompletitud en el registro de las instrucciones a los usuarios de la APS con TB. Este escenario indica una urgencia de medidas de intervención en la salud pública para mejorar la atención de TB en la APS.

# Introduction

Tuberculosis (TB) is an ancient infectious disease that is still considered a relevant public health problem, although it is currently preventable and curable. In the global scenario (2022), it was estimated that around 10.6 million people were infected and 1.1 million died from TB. In Brazil (2022), 81,539 new cases of TB were reported, corresponding to an incidence rate of 38 cases/100 thousand inhabitants. The State of Paraíba (PB; 2022) was among those that had cure percentages lower than the national cure percentage, equivalent to 61.2%, with an incidence of 30.8 cases/100 thousand inhabitants. (1-3)

Throughout the diagnostic and therapeutic itinerary of people with TB, the design of the Individual Care Plan is necessary, ensuring their protection and promoting their right to adhere to treatment. For this, people with TB need correct and precise guidance about their health status, treatment, nutrition, exams, etc. (4)

Thus, Primary Health Care (PHC) has essential and derivative attributes focusing on the user, families, and community; PHC is also the organizing axis of the Care Networks of the Unified Health System, the main scenario for the longitudinal therapeutic management of TB.<sup>(5)</sup>

In the face of TB, PHC professionals are fundamental in the following processes: guidance and monitoring; prevention of adverse consequences through assistance strategies that favor the best results; clarification of doubts, myths, and beliefs; and strengthening trust and bonds with users, thus contributing to increasing the cure rate and preventing new cases. In nursing consultations, the role of nurses is highlighted with active search, notification of confirmed cases, TB prevention, and guidance of users in all phases of treatment. (6-7)

We emphasize that nurse records comprise 50% of the care offered to users. Therefore, the data set must be recorded with quality, in a complete, reliable, clear, and coherent way, so that they favor appropriate decisions. (5-9) Nurses' records in medical records are an important tool in supporting the Health Care process. They must contain the guidance given to users, ensuring continuity of care and ethical and legal aspects. (7)

Through a bibliographic search, we were able to identify studies on the registration of nurses in caring for users with TB in the context of PHC. They allowed the understanding of the perception of health professionals about the records produced in the detection of respiratory symptoms of TB. (10) However, national and interna-

tional publications on nursing records related to the guidance given to users with TB in PHC were not found. This gap in the literature justified the need and design of this research as its content is relevant to Public Health.

This research was then based on the following guiding question: What is the degree of completeness of nurses' records on the guidance given to users with TB monitored in PHC? Therefore, the objective of this study was to evaluate the completeness of nurses' records on the guidance given to users with tuberculosis in Primary Health Care.

# Methods

This documentary and retrospective research was conducted in Family Health Units (FHU) in a city in the State of Paraíba (Northeast region of Brazil). The choice of the research scenario has been considered a priority for TB control by the Ministry of Health (MH) since 2001. The city has 90% Family Health coverage, is divided into five Health Districts (HD), and includes 211 Family Health teams (FHt) fragmented into 99 FHUs. We also emphasize that during the period analyzed in the study scenario, care was recorded physically in the medical record and documents standardized by the MH for notification and monitoring of users.

The study population consisted of all records of new TB cases reported at FHU in the study scenario in the period 2015-2019. For the selection of medical records, the following inclusion criteria were adopted: the user must reside in the municipality researched, be over 18 years of age, and have completed his/her treatment; only records made by nurses were considered. Records of users who were terminated due to changes in diagnosis or transfer to another city were excluded.

To calculate the sample size, the total number of new TB cases reported in PHC services that began and completed treatment between January 2015 and December 2019 was considered; the total included 1,191 records that were integrated into A (255), B (410), C (224), D (214), and E (88) Health Districts. In this case, to calculate the sam-

ple size with the known population size the following equation was used:

$$n = \frac{Nz^{2}_{(1-\alpha/2)}p(1-p)}{p(1-p)z^{2}_{(1-\alpha/2)}+(N-1)\varepsilon^{2}}$$

For this, the *R* software (v. 4.0.2) was used considering sampling error (0.04), confidence level (0.95), and prevalence (0.105), resulting in a sample value of 190 medical records. The sampling process was conducted in two stages: in the first stage, sampling was proportional, equally fragmenting the sample between HDs. *A priori*, *the* systematic probabilistic sampling method was considered using an index with information collected in HDs; the method was later changed to simple random sampling, proportionally organizing the SDs/HDs sample according to the TB cases. Thus, a specific sample set for A (41), B (65), C (36), D (34), and E (14) HDs was obtained.

In the second sampling stage, the population number divided by the sample volume was used to achieve the systematization factor (k=N/n). Thus, a systematization factor k=6 ( $k=1191/190=6.27\approx6$ ) was obtained. To ensure sampling randomness, the first component of the sample (from the  $1^{st}$  to the  $6^{th}$ ) was drawn; the value equal to three was randomly admitted, continuing the systematization line starting from this element until the sample size was complete.

Data were collected in the morning and afternoon shifts in the period July-September 2020. Analysis of each medical record by the data collection team took 30 min on average. The team was composed of three researchers experienced in the area, and the analysis was conducted in a private location using a systematized form, which was developed from: Manual of Recommendations for TB Control, Nursing Protocol for Directly Observed Treatment (DOT) of patients with TB in Primary Care, and institutional documents that regulate nursing records in PHC. The aforementioned form was subjected to a pilot test to test, rectify, evaluate, and improve the instrument and the research process. Thus, the number of records was estimated at 10%, i.e., 19 records that were proportionally designated by draw. After its application, the form underwent analysis of some inquiries to improve the variables. We highlight that the records observed at this stage were included in the final sampling of this research.

The form, which was designed based on variables related to sociodemographic and clinical data (gender, age, and clinical form of TB), was also originated from specific data from nurses' records at the clinical record on guidance for users with TB, originating the corresponding indicators with a more robust scope of data (Chart 1).

**Chart 1.** Indicators on the record of guidance in medical records and variables used in the study

Indicators on guidance record	Variables
Food	Food
Treatment	Drug treatment Side effects of medications Drug interaction Intake of the medication dose Adherence to treatment
Consultations	Return to consultations
Disease	Guidance on tuberculosis Guidance for contactants
Exams	Carrying out exams

To formulate the indicators, the percentage of incompleteness of records was considered, with basis on the proportion of the number of incomplete records concerning the selected indicator under the total number of records. To analyze completeness, systematization was considered as a guiding framework, (12) being organized according to the completeness levels of each indicator: excellent (incompleteness < 5%), good (5%  $\leq$  incompleteness < 10%), regular (10%  $\leq$  incompleteness < 20%), poor (20%  $\leq$  incompleteness < 50%), and very poor (incompleteness  $\geq$  50%).

The collected data were organized in an electronic Microsoft Office (Excel\* 2019) spreadsheet, with double typing to ensure reliability in data selection. For analysis, data were transferred to and processed in the free *R* (v. 4.0.3; https://www.r-project.org/) software. A 5% significance level was adopted.

Initially, the absolute and relative frequencies of qualitative variables were calculated. Regarding the trend for incompleteness, all indicators in the period 2015-2019 were covered using a simple linear regression model, where y is the percentage of incompleteness, x is the time variable (year),  $\alpha$  and  $\beta$  are the unknown indicators to be considered, and  $\epsilon$  is the unknown random error. The trend was considered important for p <5% (this value increases if the  $\beta$  estimate is positive and decreases if negative). In addition, the Pareto Chart was used to confirm indicators that increased the percentage of incompleteness in clinical records.

This study was approved by the Ethics Committee in Research (Opinion: 4.003.210; CAAE: 30324820.6.00005188) respecting the Brazilian/National Health Council (Resolution 466/2012).

# **Results**

The study sample consisted of 190 medical records of users with a mean age of 39.9 years (SD: 15.8), with a predominance of males (n=122; 64.2%), and pulmonary clinical form (n=167; 87.8%). Regarding the assessment of the completeness of the record of guidance related to the care of patients with TB in PHC, three indicators were classified as "very poor" (60.0%), while two were considered "poor" (30.0%) (Table 1).

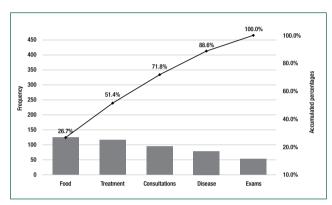
In the analysis of incompleteness using the Pareto Chart (which made it possible to visualize the priority points for intervention according to the curve of accumulated percentages), the guidance related to food and treatment was identified as the main problems concerning registration. This corresponded to more than 50% of the total incompleteness (Figure 1).

The incompleteness trend models and their main components for the analyzed variables are presented in Table 2. The indicator related to guidance on consultations showed a significantly increasing trend (p=0.016), followed by the indicators relating to guidance on exams and consultations, which also showed an increase in incompleteness. On the other hand, guidance on food and exams showed a decreasing trend in incompleteness.

**Table 1.** Distribution and classification of completeness of nurses' records on guidance for tuberculosis care given in the Primary Health Care

Indicators on guidance record	n (%)						Completeness rating*
	2015	2016	2017	2018	2019	Total	Completeness rating
Food	8(66.7)	14(82.4)	18(56.3)	33(58.9)	51(69.9)	124(65.3)	very poor
Treatment	7(58.3)	10(58.8)	21(65.6)	31(55.4)	46(63.0)	115(60.4)	very poor
Consultations	4(33.3)	6(35.3)	16(50.0)	27(48.2)	42(57.5)	95(50.0)	very poor
Disease	5(41.7)	8(47.1)	13(40.6)	21(37.5)	31(42.5)	78(41.1)	poor
Exams	2(16.7)	1(5,9)	9(28.1)	18(32.1)	23(31.5)	53(27.9)	poor

n= number of incompletely filled records; \* Completeness rating was measured based on the number of records with incomplete filling (ROMERO; CUNHA, 2006)



Source: Research data (João Pessoa, PB, Brazil; 2020).

**Figure 1.** Pareto chart of incompleteness in nurses' records of care guidance for patients with tuberculosis in the Primary Health Care

# **Discussion**

Given the results obtained, the completeness of nurses' records on care guidance for users with TB in PHC was considered unsatisfactory because guidance on food, treatment, consultations, the disease itself, and exams had their completeness classified between *very poor* and *poor*.

These findings negatively depict the guidance given to such users, as their importance for better awareness and implementation of care and adequate treatment is known. The lack of guidance, low quality of information, and incomplete records affect the content offered to users and prevent guidance evaluation by health surveillance, as identifying

whether the incompleteness arises from guidance deficiency or record failures is not possible.

According to MH guidance, periodic verification of the completeness of data and records as well as analysis of inconsistency and duplicates of information must be included in local surveillance actions.<sup>(4)</sup>

The incompleteness of records on guidance for PHC users may be related to the perception of some nurses that completing user forms and records is a merely bureaucratic task, ignoring that producing data and information is necessary to manage the actions, care, and services offered. (11-12)

It is also necessary to mention that such findings may be associated with inadequate registration, causing underreporting of guidance offered to users. This guidance is often given but its record is left aside or disregarded due to overload in the work routine. (4,12)

Correctly completing medical records is a resource within the reach of this proposal to improve the assistance provided to users. Medical records are devices for continuous communication between professionals and legal documents for daily recording of information about care and guidance given by the healthcare team.<sup>(13)</sup>

Nurses are responsible for half of the recording information about user care as nurses monitor users 24 h a day. (14) Furthermore, nursing records are an ethical-legal duty of both nurses and nursing tech-

Table 2. Trend of incompleteness in nurses' records regarding care guidance for patients with tuberculosis in Primary Health Care

Indicators on guidance record	Model	R <sup>2</sup>	p-value	Trend	Growth %
Food	y = 3515.91 -1.71x	0.0687	0.670	descending	-
Treatment	y = -1149.98 + 0.60x	0.0549	0.704	growing	-
Consultations	y = -12319.35 + 6.13x	0.8897	0.016	growing	50.15
Disease	y = 1655.48 - 0.80x	0.1320	0.548	descending	-
Exams	y = -11232.00 + 5.58x	0.6069	0.120	growing	-

nicians in all healthcare environments, standing out as tools that document and qualify the assistance provided. Although nursing records are essential and mandatory, they are still incipient, thus contributing to professional invisibility. (15) We emphasize that the responsibility for users with TB is not exclusive to nurses. It must be shared by the health professionals who accompany them, equally valuing the quality records carried out by all of them. (4)

Nursing records must be adequately filled out to better describe the actions and care provided to users with TB in PHC. They must include guidance on what these users can and should avoid eating, treatment, and necessary medications, consultations and their frequency, the disease and its symptoms and complications, as well as the necessary exams for early diagnosis and adequate treatment. Such information is valuable and must be given and recorded by nurses to characterize positively and with quality the care provided, as well as to support that such guidance was given.

Although the record of nutrition guidance is responsible for the highest incompleteness rate when the incompleteness trend was verified, we can observe its decrease over time. This can be understood because foods and their nutrients significantly contribute to the recovery of people with TB, thus valuing dietary guidance as essential to the treatment of these users.

A study identified that a healthy eating habit with a frequency below that recommended can change the nutritional profile of people with TB, facilitating infections and the consequences of the disease. The consumption of healthy foods must be encouraged and well-guided by professionals since the diagnosis of TB as both malnutrition and excess weight interfere with immunological functions, increasing susceptibility to infections. (16)

Therefore, the correct guidance from nurses on the importance of a healthy diet in the first care and reception of users with TB in PHC is essential to improve the immune system, identifying foods that should be consumed more frequently and those that should be avoided. This guidance must be given in a correct, clear, and understandable way, considering the economic condition of these users and providing guidance on the consumption of available foods to them

Also considering the economic condition of users with TB, the MH recommends that the administration of municipalities offer them incentives such as snacks, food assistance, and transportation vouchers. Incentives are offered to improve disease indicators and motivate adherence to treatment as they generally have important vulnerabilities concerning their living conditions. These social incentives can alleviate the most immediate needs of people affected by TB.<sup>(4)</sup>

In addition to the incentives mentioned above, the social protection measures available in Brazil are not aimed only at users with TB, helping to alleviate social vulnerabilities in general. (9) Among them, we highlight the following: sickness benefit for contributors to the Brazilian Social Security Institute, Family Subsidy Program, Continuous Installment Benefit, etc. (17) Such measures support the fight against diseases not only for users with TB but also for people who live with them, strengthening the bond between these users and their families, enabling better guidance on nutrition, treatment, consultations, etc. (18)

In Health, all information and/or guidance must aim to reduce uncertainty and identify priority situations to support adequate planning for the execution of actions that adjust reality to the necessary transformations. Thus, for actions to be properly put into practice, providing information is not enough if it has not been correctly understood. (19)

Regarding the recording of treatment guidance, very poor completeness was identified, tending towards increasing incompleteness, being understood as determining a general incompleteness. This finding reinforces that the treatment of people with TB remains a challenge: In its approach, considering the individual and collective health contexts is necessary. Furthermore, social and economic issues, especially their inequalities, are variables to be considered for treatment effectiveness. Therefore, this entire context must be considered when guiding users about the importance of treatment.

A study signaled that people diagnosed with TB who receive detailed information about the

disease, the importance of undergoing treatment, potential adverse reactions, and consequences of irregular treatment are more likely to adhere to treatment. (20)

Receiving written information about the treatment is another point that we highlight, as this positively helps with adherence. This must be done simply and clearly, as users of health services do not always assimilate and process messages received orally. Therefore, we believe that written information and guidance can more easily be converted into behavior. (21)

In Health Care Networks (RAS/HCN), the role of organizing and coordinating care for people with chronic conditions such as TB falls under PHC services, including treatment, responsibility for articulation, and strengthening ties with the regional population. Furthermore, as PHC is considered the preferred gateway for users with TB into the health system, it must be able to manage weaknesses in actions to control the disease, (22) including guidance on treatment and provision of necessary medications.

In turn, the completeness of guidance on consultations received a very poor rating, tending towards an increasing incompleteness over the years. However, consultation guidance has shown significant growth. This was due to the importance and need to better guide users with TB on attending appointments to achieve better adherence and treatment outcomes. In TB control in PHC, the term *first contact* is related to the front door or access to consultations with health professionals to request the tests necessary for diagnosis and prescribe medications for treatment based on them. (23)

Informing users with TB about consultations and their importance in treatment is important to control the disease. However, a study pointed out difficulties in accessing consultations, exams, and treatment as well as failures in the referral and counter-referral systems as bottlenecks in TB control in PHC. (23) This also has a negative impact on the recording of such points, with insufficient quality of care offered and documentation required to track and monitor people with TB throughout treatment.

The absence of guidance for the user to attend the scheduled appointment is an indication that there may be an intention to interrupt treatment. In these cases, the team's initiative to actively search for defaulters is essential to prevent TB recurrence and opportunistic diseases. (20)

Regarding the recording of guidance on TB, this study classified its completeness as poor, with a decreasing trend of incompleteness, *i.e.*, an improvement in the recording of this information has been observed over the years. A study on nursing records in PHC was conducted, showing that divergence may be associated with work overload, lack of motivation due to poor working conditions, ineffective communication between the team and community, deficit in permanent education, and low remuneration.<sup>(24)</sup>

A study sought to understand the perception of health professionals about the records produced in the detection of respiratory symptoms of TB. The study concluded that professionals recognized the importance of the records produced in the detection of TB, especially those related to medical records, but they were perceived as excessive, bureaucratic, and not usable in daily practices. In addition, professionals pointed out disadvantages related to the low quality in filling them and the recurrence of lost records. The study also highlighted that the use of computerized systems enhances and qualifies information about the disease in terms of completeness, legibility, timeliness, and organization of records compared to the use of a manual recording system.<sup>(10)</sup>

Failure to complete records by nurses and other health professionals compromises their applicability in case monitoring and may be associated with misunderstanding of their relevance by local health teams in planning and monitoring actions. Thus, a study pointed to the need for ongoing education with training of all professionals working in TB detection to make full use of properly completed records. Given the proximity between users and nurses during consultations, these professionals must see their guidance and records as important tools in monitoring and controlling the disease.

Therefore, users with TB must have the necessary guidance about their disease and treatment in

PHC. In addition, TB diagnosis and monitoring are offered free of charge by the Brazilian public health service, requiring trained professionals. This is necessary to avoid not only the transmissibility of the disease but also the interruption of treatment, which is one of the obstacles to its control.

Finally, the indicator responsible for exam guidance had the lowest incompleteness rate in the Pareto Chart, but completeness was classified as poor with a growing trend of incompleteness. Although this indicator has shown a greater frequency in nurses' records, it is still pertinent that users with TB have guidance on the necessary tests for early diagnosis and adequate treatment. The results of these tests must also be included in the medical records to provide monitoring of what has already been done and requested to better monitor the disease.

We reinforce the importance of presenting and explaining the tests and their results to users with TB, as this will improve their ability to deal with the disease and their clinical condition, making them multipliers of knowledge and protagonists of their self-care in the search for a cure for the disease.

The results of the tests that diagnose TB must be well recorded in the medical records of FHU users so that all professionals who accompany them have access to clear, legible, precise, and objective information. This was exemplified in a study on the quality of data and information recorded by primary care health professionals concerning the treatment of users with TB. Essential information about their conditions was neglected, highlighting the poor quality of the records and the absence of important data and information that should be included in the medical records, thus compromising the quality of assistance provided to users. (25)

Thus, the present study allowed us to know that nurses carry out records incompletely and possibly do not document the guidance given to users with TB in PHC, representing a challenge in daily nursing. We also point out that nursing records should not be seen just as a bureaucratic obligation. Understanding its importance and the implications arising from the lack or incompleteness of records is necessary. Thus, the technical-scientific competence of nurses is essential for complete records. This re-

flects the need for institutions and nursing councils to emphasize and promote measures that help professional training so that the quality of records on the guidance given to people is not compromised.

Therefore, training and awareness are necessary for the quality of records of nurses who are directly involved in the care of people with TB in PHC. Such actions will allow nurses to value more the power of correct information and adequate recording in medical records, helping everyone involved to be well-informed about clinical conditions, evolution, test results, and procedures performed. In this sense, the findings of this study could play a fundamental role (1) increasing the completeness of nurses' records in medical records, especially regarding guidance for users with TB monitored in PHC, and (2) sensitizing professionals to their role for maintaining quality records, highlighting the importance of these documents in effective monitoring and promoting assertive interventions in the care of users with TB in PHC.

As a limitation of the study, we highlight the following: lack of organization in medical records in the FHU studied; unreadability in some records due to handwriting (discarding findings that were not readable enough to be included in the study); type of study, which does not allow considerations to be made about specific municipalities in the state; and a possible information bias due to using secondary data. However, these limitations do not invalidate the study findings, further contributing to the care practice of nurses and signaling the need for improvements in the quality of records in the care of users with TB in PHC.

## Conclusion

The records showed inadequate completeness, accompanied by a growing trend of incompleteness in the recording of guidance for users with tuberculosis in Primary Health Care. Complete records of guidance for Primary Health Care users with infectious diseases are necessary to formulate public health policies and evaluate disease prevention, monitoring, and disease control actions. The ade-

quate completion of user guidance records should be encouraged in record quality control programs and continuous training of nurses, which can enhance the planning of public health policies. Future investigations focusing on innovative strategies and multidisciplinary approaches will contribute to improving nursing care in Primary Health Care, especially in monitoring people with infectious diseases.

# **Collaborations**

Silva Júnior JNB, Guedes HCS, Henriques AHB, Januário DC, Nogueira MF, and Barrêto AJR contributed to the design of the study, analysis and interpretation of data, writing of the manuscript, relevant critical review of the intellectual content, and approval of the version final to be published.

# References

- Sousa GJ, Maranhão TA, Leitão TD, Souza JT, Moreira TM, Pereira ML. Prevalence and factors associated with abandonment of tuberculosis treatment. Rev Esc Enferm USP. 2021;55:e03767.
- Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde e Ambiente. Boletim epidemiológico de tuberculose 2023. Brasília (DF): Ministério da Saúde; 2023 [citado 2023 Dez 14]. Disponível em: https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos/especiais/2023/boletim-epidemiologico-de-tuberculose-numero-especial-mar.2023
- World Health Organization (WHO). Global tuberculosis report 2023: executive summary. Geneva: WHO; 2023 [cited 2023 Dec 14]. Available from: https://www.who.int/teams/global-tuberculosis-programme/tbreports/global-tuberculosis-report-2023
- 4. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância Epidemiológica. Manual de recomendações para o controle da tuberculose no Brasil. Brasília (DF): Ministério da Saúde; 2019 [citado 2023 Dez 14]. Disponível em: https://www.saude.mg.gov.br/images/documentos/manual\_recomendacoes\_tb\_2ed\_atualizada\_8maio19.pdf
- Oliveira NB, Peres HH. Quality of the documentation of the Nursing process in clinical decision support systems. Rev Lat Am Enfermagem. 2021;29:e3426.
- Tasca R, Massuda A, Carvalho WM, Buchweitz C, Harzheim E. Recommendations for strengthening primary health care in Brazil. Rev Salud Publica (Bogota). 2020;44:e4.
- Silva Júnior JN, Guedes HC, Januário DC, Silva AC, Palha PF, Nogueira MF, et al. Unsatisfactory completeness of nurses' records in the medical records of users with tuberculosis. Rev Bras Enferm. 2021;75(3):e20210316.

- World Health Organization (WHO). WHO end TB strategy. Geneva: WHO; 2015. [cited 2023 Mar 18]. Available from: https://www.who.int/tb/post2015\_strategy/en/
- Conselho Federal de Enfermagem (COFEN). Resolução 0514/2016. Aprova o Guia de Recomendações para os registros de enfermagem no prontuário do paciente, com a finalidade de nortear os profissionais de Enfermagem. Brasília (DF): COFEN; 2016 [citado 2023 Mar 18]. Disponível em: http:// www.cofen.gov.br/resolucao-cofen-no-05142016\_41295.html
- Tomberg JO, Spagnolo LM, Valerão NB, Martins MD, Gonzales RI. Records in tuberculosis detection: perception of health professionals. Esc Anna Nery. 2019;23(3):e20190008.
- 11. Romero DE, Cunha CB. Avaliação da qualidade das variáveis sócioeconômicas e demográficas dos óbitos de crianças menores de um ano registrados no Sistema de Informações sobre Mortalidade do Brasil (1996/2001). Cad Saude Publica. 2006;22(3):673–84.
- Canto VB, Nedel FB. Completeness of tuberculosis records held on the Notifiable Health Conditions Information System (SINAN) in Santa Catarina, Brazil, 2007-2016. Epidemiol Serv Saude. 2020;29(3):e2019606.
- Carneiro SM, Dutra HS, Costa FM, Mendes SE, Arreguy-Sena C. Use of abbreviations in nursing records in a teaching hospital. Rev Rene. 2016;17(2):208–16.
- Ferreira LL, Chiavone FB, Bezerril MD, Alves KY, Salvador PT, Santos VE. Analysis of records by nursing technicians and nurses in medical records. Rev Bras Enferm. 2020;73(2):e20180542.
- 15. Conselho Federal de Enfermagem (COFEN). Resolução Cofen nº 545/2017. Revogou a Resolução Cofen nº 191/1996. Dispõe sobre a anotação de enfermagem e mudança nas siglas das categorias profissionais. Brasília (DF): COFEN; 2017 [citado 2023 Mar 18]. Disponível em: https://www.cofen.gov.br/resoluo-cofen-1911996-revogou-resoluo-cofen-1751994/
- Beserra KA, Silva KN, Januário TG, Oliveira SS, Cavalcante JL, Silva IG, et al. Itinerário terapêutico de pessoas com tuberculose resistente e em retratamento. Av Enferm. 2021;39(1):21-9.
- Torrens AW, Rasella D, Boccia D, Maciel EL, Nery JS, Olson ZD, et al. Effectiveness of a conditional cash transfer programme on TB cure rate: a retrospective cohort study in Brazil. Trans R Soc Trop Med Hyg. 2016;110(3):199–206.
- Orlandi GM, Pereira EG, Biagolini RE, França FO, Bertolozzi MR. Social incentives for adherence to tuberculosis treatment. Rev Bras Enferm. 2019;72(5):1182–8.
- Cordeiro DC, Gonçalves MJ. Implantação do protocolo de vigilância do óbito com menção de tuberculose e seus efeitos na vigilância de um município brasileiro de grande porte. Cad Saude Publica 2022;38(2):e00356120.
- Pinto FG, Garcia WM, Silva Junior RG, Ferro GB, Costa AG, Carvalho Zavarise, et al. Adherence to tuberculosis treatment in Primary Health Care: favorable and unfavorable factors for this process. Res Soc Dev. 2022;11(4):e3011426962.
- Rabelo JV, Navarro PD, Carvalho WD, Almeida IN, Oliveira CS, Haddad JP, et al. Assessment of the performance of primary health care services in controlling tuberculosis in a metropolis in Southeastern Brazil. Cad Saude Publica. 2021;37(3):e00112020.
- Ferreira MR, Santos AA, Orfão NH. The bond in the treatment of tuberculosis in primary health care: an integrative review. Rev Bras Promoç Saúde. 2019;32:e9540.
- 23. Rabelo JV, Navarro PD, Carvalho WD, Almeida IN, Oliveira CS, Haddad JP, et al. Avaliação do desempenho dos serviços de atenção primária à saúde no controle da tuberculose em metrópole do Sudeste do Brasil. Cad Saude Publica. 2021;37(3):e00112020.

- 24. Canêjo MI, Silva Lima TM, Lima AP. Registros de enfermagem nas Consultas em puericultura. Enferm Foco. 2021;12(2):216-22.
- 25. Silva Júnior JN, Guedes HC, Nogueira JD, Palha PF, Nogueira MF, Barrêto AJ. Completeness of nurses' records in the care of people with tuberculosis: a trend study. Texto Contexto Enferm. 2022;31:e20210305.