

ENDEMIC TUBERCULOSIS IN A MUNICIPALITY IN THE METROPOLITAN REGION OF RECIFE: CONSIDERATIONS ABOUT COPING STRATEGIES FOR A NEGLECTED DISEASE

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Abstract: Tuberculosis is an infectious disease present throughout the world, whose discovery dates back to the times of Christ. In the year 2022, it was responsible for the deaths of around 1.3 million people worldwide. Brazil is considered one of the countries of interest for the pathology considered by many to be a Neglected Disease. Specifically, in Pernambuco, the city of Jaboatão dos Guararapes is considered an endemic location for the disease, with high incidence and prevalence rates. This study carried out documentary research on the combat strategies developed by the municipality against tuberculosis, focusing on Primary Health Care. There was extensive research using digital means, in addition to a visit to the Epidemiological Surveillance sector of the Municipal Health Department of the aforementioned County. Official documents were recovered, as well as specific news on the subject. Two documents stood out regarding the clarity of strategies to combat tuberculosis and the definition of feasible goals. The participation of civil society in the preparation of one of the documents stands out. There is a lack of documents that make clear a line of action, predictable and consistent over time in the fight against tuberculosis, especially in Basic Primary Care. However, new studies are needed to investigate the results of implementing measures to combat tuberculosis in the municipality. Furthermore, increasing the frequency of publications and mass advertising can be useful strategies for engaging in the fight against tuberculosis in this municipality.

Keywords: Tuberculosis. Public Health Surveillance. Epidemiology. Document Analysis.

INTRODUCTION

Tuberculosis (TB) is an infectious disease that has high morbidity and mortality if not treated properly. According to the World Health Organization, in 2022 there were 1.3 million deaths from TB in the world – which may even be underreported¹. In the most intense years of the Coronavirus Disease-19 pandemic, which causes the disease COVID-19, TB was the second leading cause of death from infectious diseases in the world, second only to the pandemic virus.¹

The disease can be caused by several subspecies of the complex: *Mycobacterium tuberculosis*, the best known being the: *M. tuberculosis*, but also *M. bovis* and *M. africanum*². The disease is transmitted by direct inhalation of sprays or aerosols containing viable pathogens, which enter the airway and begin to chronically colonize it. Not everyone infected with mycobacteria will necessarily develop clinical disease.²

There is data that elucidates a rate between 5 and 25% of the world's population infected, with significant regional differences. Countries in the Americas, Africa and Asia suffer more with diagnosis, access to medications and adequate longitudinal treatment^{1,2}.

When it presents with a classic clinical form, TB progresses with afternoon fever, weight loss, chills and respiratory symptoms, such as dyspnea and hemoptysis. However, in addition to the well-known pulmonary TB, the disease can affect practically any structure, system or organ in the human body; This is especially true in immunosuppressed people, such as people living with HIV (PLHIV) without adequate control of comorbidities^{1,2}.

It is also important to mention that TB is an eminently preventable and curable disease, despite its chronic nature. The way to prevent the most serious forms of the disease, such as pulmonary or extrapulmonary miliary TB, is to administer the Bacillus Calmette-Guérin

(BCG) vaccine, even in the first days of life.

It is estimated that all TB prevention and treatment strategies have saved around 70 million lives since the year 2000¹.

Considered a Public Health problem at a global level, TB is the target of several actions to mitigate the burden of the disease on health systems and reduce associated morbidity and mortality^{1,4}. There are promising results being achieved from actions taken by the United Nations and the aforementioned World Health Organization. From 2015 to 2023, when the newest report on the disease came out, a 35% reduction in gross mortality caused by TB, as well as 20% of the incidence rate^{1,4}.

Many of these results achieved so far come from the WHO strategy launched in 2014 and which had an ambitious goal of “making the world free from Tuberculosis”. The document in question, The End TB Strategy, laid the foundations for international collaborations aimed at achieving the goals defined by it⁴.

Among the main goals, which are already being partially achieved, is the reduction in absolute mortality by 95% by the year 2035. It is accompanied by another goal, to reduce the incidence rate, that is, new cases of TB, by 90%, taking the project launch year as a reference³.

The strategy's pillar is the comprehensive monitoring of patients with suspected or confirmed TB, as well as everyone around them. Timely diagnosis, risk classification, identification of patients with therapeutic failure and longitudinal monitoring are auxiliary lines in this global strategy^{1,3}. Once the guidelines and pillars were launched, the WHO then decided that each country would develop its own epidemiological surveillance actions and create or improve indicators to monitor whether the goals were being achieved or not.^{3,4}

It is worth noting that another concern

increasingly present in international debates – and also in Brazil – is multidrug-resistant TB (MDR-TB), a form in which there is a therapeutic failure to medications traditionally prescribed to treat the infection.^{1,2}

Despite being less common, MDR-TB tends to be quite aggressive and fatal if adequate treatment is not carried out. It is estimated that 40% of people with MDR-TB do not have access to medications, especially in underdeveloped countries. This is quite serious and has the potential to harm the global TB eradication strategy, in addition, of course, to increasing the lethality of the disease¹.

Bringing it to the Brazilian scenario, the Global Tuberculosis Report states that between 2020 and 2022 there was an absolute reduction in the notification of new TB cases. However, along with 25 other countries, Brazil actually suffered loss of follow-up and underreporting of cases, being among the negative highlights in the aforementioned document¹.

Cortez and employees⁵ conducted a multi-pronged study on tuberculosis in Brazil and assessed that, although there was a reduction in incidence and mortality over a period of eleven years, it was still not enough – in accordance with national and international goals. Taking into consideration, that the country is among the 30 in the world where the burden of TB is greater, that is, it causes more economic and human costs, there is a discrepancy between goals and results⁵.

The Manual of Recommendations for Tuberculosis Control in Brazil⁶ provides more specific information about combat strategies and notable inter-regional and social differences. To achieve this, the authors believe that a more complex approach is necessary, with the collaboration of multiple agents, as it was seen below:

Brazil has been seeking in intersectoral articulations the answer to the concentrated

epidemic that we have in some populations, especially in the indigenous population, in the population deprived of liberty, in people living on the streets, in people living with HIV and in those living in extreme situations. poverty, all with increased risks of developing the disease.⁶

The document is emphatic in stating that controlling TB necessarily and undoubtedly involves controlling the infection in these specific populations. Breaking the cycle of mortality and disease transmission requires a global approach with capillarity across the entire national territory⁶.

Speaking in these terms, the combat strategy involves Primary Health Care, focusing on the actions available in Primary Care. This is because it is precisely at this level of care that the Unified Health System finds its maximum level of capillarity, reaching the population's homes through Community Health Agents.^{5,6} It is imperative that any form of long-term combat against TB goes through a plan originating from PHC, following the logic of the complexities of the SUS – Unified Health System⁶.

The same document also states that the Northeast region has high rates of TB infection, and stands out, negatively, for the coexistence between TB and diabetes mellitus (DM) (TB-DM). This combination, despite not being as serious as TB-HIV, makes it difficult to respond to treatment and is related to relatively simple issues of controlling chronic non-communicable comorbidities.⁶

Entering a regional perspective, more specifically in the state of Pernambuco (PE), we have a prominent situation in the TB scenario. Lira and collaborators⁷ carried out a retrospective study covering the years 2009 to 2019 and found 61,449 cases reported in the period, with 70% of the individuals being male and the most prevalent age being between 20 and 39 years old⁷.

Another interesting fact noted was

low education as a predictor of risk of TB infection, also associated with reproductive age.⁷ In terms of incidence, almost 7 thousand new cases of TB were confirmed in 2022 in Pernambuco, according to data from DATASUS, in the public domain.

The health macro-region that stood out in terms of incidence was the Metropolitan Region, largely due to the absolute population, which is quite high, but not only because of this, but also because of a reality of resistance to classically used antibiotics; this may be attributed to inadequate treatment, e.g.⁷ In the case of the Metropolitan Region of Recife (RMR), the largest number of MDR-TB cases are concentrated, as well as co-infections with other diseases.⁸

The same authors point to the city of Jaboatão dos Guararapes (JG) as an important place for the maintenance of TB, especially MDR-TB⁸. Furthermore, JG is considered one of the municipalities of interest for TB in the state of PE, precisely due to its high prevalence and socioeconomic and geographic issues that make it difficult to eradicate the disease in the city.^{7,8}

The city of Jaboatão dos Guararapes is located in the RMR, having a territorial area of 258,724 km² and an estimated population of 644,037 people in the year 2022, which gives a population density of 2,489.28 inhabitants/m². It is the second most populous city in the state, second only to the capital, Recife⁹.

In terms of work, the population has an average unemployment rate of between 10 and 14% in the historical series and an average monthly income of 2 minimum wages - taking only formal workers into account. Regarding health, it has an infant mortality rate of 12.19 per 1,000 live births, ranking 81st out of 185 in the state of Pernambuco⁹.

Speaking in terms of combat, it is necessary to talk about the so-called “neglected diseases”, they comprise a set of 17 diseases that have

in common that they are highly prevalent in poor regions with high social vulnerability. Furthermore, these are normally located in tropical areas and have a direct connection with the degree of environmental sanitation, access to drinking water, availability of health services, etc..¹⁰.

There is some criticism of the classification of these diseases as being neglected, not because of their importance, but because there are several others that are not considered in the same group.¹⁰

In the case of the present study, for example, the case of TB appears to be a Public Health problem with harmful repercussions on society as a whole, affecting mainly people of economically active age and reproductive age⁷.

So, despite the aforementioned global efforts to combat TB and its co-infections and comorbidities head-on, the disease finds itself in a limbo between being a neglected disease or not. What substantiates this vision are precisely the data on incidence, prevalence, mortality and others, still considered unacceptable today.

Based on all of the above and taking into consideration, that TB is an infectious disease that requires a multidimensional and structured approach, this study aims to carry out some assessments.

In view of this, the present study is a bibliographic review as a base procedure, but with documentary research at its core, focusing on the municipality of Jaboatão dos Guararapes.

The study took place through the analysis of official documents, in a broad sense, issued by the Municipal Health Department (SMS) of JG and/or the State Health Department (SES) of the state of Pernambuco, but which were directed in some way to the city studied.

Thus, the main objective of the study was to identify the combat strategies developed by

the municipality against tuberculosis, with a focus on Primary Health Care. We sought to identify positive points and points to improve in terms of structured combat against tuberculosis in the municipality of JG, in order to make considerations from a critical view of reality.

MATERIALS AND METHODS

GENERAL FEATURES

The main characteristics of the present study are the use of a multimodal approach regarding data collection procedures. As Gil points out ¹¹, the use of more than one procedure confers, in theory, a greater ability for the study to achieve its objectives.

In terms of approach, this is qualitative research, since documentary research requires content analysis, categorization of findings and subsequent critical evaluation ¹¹. Eventually, little quantitative data will be cited, but not enough to classify the research as a whole as being of a mixed approach; leaving, therefore, the qualitative approach ¹¹.

DOCUMENTARY RESEARCH

This research has an eminently exploratory character and uses documentary sources ¹¹. In quick analysis, bibliographic and documentary research can be confused as data collection and evaluation procedures ¹³. What they have in common is simply the fact that they both deal with documents as sources of investigation. ¹³.

But a first point of differentiation concerns the nature of the selected documents, as mentioned by Sá-Silva, Almeida and Guindani ¹⁴. In the case of bibliographic research – used in the initial part of this study – the documents are mostly secondary, that is, they have already undergone some type of prior analysis. In documentary research, on the other hand, we deal with data that has not yet been processed,

in other words, primary documents ¹⁴.

Cellard ¹⁵ points out that document analysis must be more careful, requiring more care from the researcher. This is due to the fact, among other reasons, that it is the author himself who judges the relevance of the document, as well as evaluating various characteristics that satisfy a high-quality document to compose the corpus of documentary research. ^{11,15}

This possible difficulty in interpreting documents and possible errors in selection even allows researchers greater freedom to arbitrarily select documents, as long as they follow some quality criteria. ¹³.

As Scott postulated ¹⁶, Documents must have 4 essential attributes to be considered high quality for documental research. Are they:

- **Authenticity:** need to be a primary document or, if secondary, that there have been no previous interpretations.
- **Credibility:** a well-written document, without spelling or grammatical errors, with accurate information and external reliability. Example: State institutions, well-established Non-Governmental Organizations, etc.
- **Representativeness:** the document analyzed must be in line with what is intended to be studied and be minimally representative of the topic studied. This is a question of congruence between study objective, document selection and relevance to the topic.
- **Meaning:** the document must be in the public domain or be available for access and preferably registered, catalogued, indexed or other ways that make the document have a “meaning” of existing.

The research used such criteria to select documents, to guarantee methodological validity and credibility. Furthermore, it is worth highlighting the documentary research proposal proposed by Flick13 used in this

work, which consists of 3 phases:

- **Pre-analysis:** moment in which searches for documents are carried out in virtual and in-person environments, such as libraries and college repositories, as well as state institutions. Documents are filtered for the purpose of selecting those that have minimum quality elements, as described by Scott¹⁶.
- **Organization:** this involves organizing documents into thematic groups, using software or even writing by hand. At this stage, new documents can still be arbitrarily deleted.
- **Analysis:** at this point, the documents are duly registered and the content is critically analyzed, according to the objectives of the study in question.

The way in which each phase of the research was carried out will be briefly explained in the following subsections. Other information in this regard is in the Results section.

PRE-ANALYSIS

To select the documents that make up the corpus of this study, there were two fronts of action.

First, there was an exhaustive manual search through the internet for any flowcharts, news, technical notes, reports, etc. that were available for collection. The websites of the City Hall of Jaboatão dos Guararapes (<https://jaboatao.pe.gov.br/>), the Municipal Health Departments of Jaboatão dos Guararapes (<https://jaboatao.pe.gov.br/secretaria-da-saude/>) and the Health Surveillance Strategy Information Center CIEVS) in the state of Pernambuco (<https://www.cievspe.com/informacoes-estrategicas>) were used for research between the months of October and November 2023.

On the other hand, an in-person visit was carried out at the headquarters of the municipality's Municipal Health Department,

specifically in the Epidemiological Surveillance division, in November 2023.

At this meeting, the researchers were in search of physical documents, if they existed, but above all guidance on possible technical notes on the fight against TB in the municipality of Jaboatão dos Guararapes. No physical documents were found; however, guidance was given by those responsible for the sector to search in certain digital domains, also used by the team as a source of guidance.

ORGANIZATION

In total, 5 potential documents were identified to compose the document analysis corpus. With the initial documents selected after the first filtering, they were organized into thematic groups using Microsoft Office Excel® software.

Each document was registered, aiming to clarify their suitability and quality for the proposed research, at which point some were removed for not meeting Scott's criteria.¹⁶ The remaining documents then went to the last phase, critical analysis.

ANALYSIS

The analysis of the documents itself was based on Flick's vision¹³, where for the author each one must be analyzed in terms of what it refers to (what is it?) and what reference standards it uses ("in what context?"). The author proposes a critical analysis, but with parsimony, to avoid excesses and basic interpretative errors¹³. For this interpretative adequacy, documents dear to PHC in Brazil will be taken as a basis, which outline the most strategically effective way of dealing with TB at this level of complexity.^{5,6} The Manual of Recommendations for Tuberculosis Control in Brazil⁶, for example, it emphatically states that as PHC is the gateway to the SUS, it is precisely where the strategy to combat TB must focus - therefore, the documents will

be analyzed from the perspective of primary prevention and timely identification of TB cases in PHC ⁶. Anything beyond this can be misleading and result in extrapolations and erroneous conclusions. ¹³, which are more pertinent in the Discussion section.

RESULTS

Through research on different digital media, public domain websites, the official address of the city hall and SMS, in addition to CIEVS-PE, five individual documents were selected, summarized in Table 1.

Furthermore, several news items were found that addressed the issue of TB directly, such as joint efforts for early detection of the disease or training; or tangentially, in prevention and health education actions carried out in various locations throughout the years in the city. We chose to group them in a single cell in Table 1, categorized as “news”. As main findings, it was seen that health education strategies, accountability to society and creation of health strategies with popular participation were used in the selected documents. Action on more than one front is seen as positive.

In the communication directly with the user of health services, as set out in the Booklet ¹⁷, with simple, accessible language and an instructive nature; In this group you can add news taken together, which refers to health efforts, awareness campaigns and other actions of this nature. Secondly, accountability and exposure of indicators on TB control, which enables critical analysis by researchers and health professionals, sponsoring new, more assertive proposals ¹⁸. Finally, the call for popular co-participation to jointly build health goals and objectives, including TB ¹⁹.

As for issues that require attention, for better care of the disease in the municipality, it is believed that such strategies need to be more evident in other documents - quantitative

factor - and addressed in more depth in those that already exist. Tangential approach to some cited documents ^{17,18,20,21} and which will be discussed below, precisely hinders the deepening of the topic and the possibility of proposing optimized approaches aimed at improving the epidemiological indicators of the disease, for example.

DISCUSSION

Regarding technical notes ^{20,21}, it is worth noting that they are more focused on the RMR municipalities that send samples to the Central Laboratory (LACEN) than specifically to the municipality of Jaboatão dos Guararapes. According to the content analysis proposed by Flick ¹³, it is possible to infer that both technical notes have the very technical and pragmatic proposal – as is to be expected from these types of documents ¹³.

One of them²⁰, it only deals with the standardization of the sputum smear test for Leprosy and Tuberculosis, alluding to the need for collection and storage care. The other²¹ asserts that TRM-TB is increasingly used to diagnose TB, especially in new cases.

These two documents can be seen from the perspective of an attempt to optimize the use of public resources, something essential when talking about the Unified Health System (SUS). One area of knowledge that focuses on this type of optimization is Translational Epidemiology, which, according to Szklo,²² it is an applied science that helps in decisions about resource allocation. At the Basic Care level, the Technical notes ^{20,21} they have a merely instructive and technical function – which is still important.

Continuing, the Annual Management Report ¹⁸ addresses more questions about TB in the municipality studied. In the specific part that deals with TB, there are 3 central points addressed in the document. First, there is talk about the proportion of cured people, which

Document Type	Title/year	Content and main features	Target Audience	Combat strategies developed by the municipality against tuberculosis
Primer	Health Care and Services Network – Jaboatão dos Guararapes (2019) ¹⁷	Description of the services provided by the municipality, from Basic Care, through municipal programs, RAPS and Specialized Care. In the latter, it is the only part of the document that mentions TB, explaining in which polyclinics in the network that sputum smear and PPD tests are available. Therefore, purely instructive character. There is nothing in the Primary Care section that talks about TB.	Health network users in general.	Work on Health Education with a population-based approach, aiming to raise awareness and actively participate in the management of one's own health.
Report	Annual Management Report – Jaboatão dos Guararapes SMS (2021) ¹⁸	Accountability/transparency type document. It discusses the results obtained in actions to control the main illnesses in the municipality, as well as challenges for subsequent years. Conducts a sociodemographic survey of users of the health network. There is a specific section on TB, with various epidemiological data.	Users of the health network in general; health professionals – as it points out health-disease indicators in a technical way.	It used classic indicators to measure the effectiveness of actions to combat TB in the municipality. Furthermore, it related success/failure to sociodemographic variables.
Resolution	Municipal Health Plan 2022-2025 (2022) ¹⁹	Document created after intense debate between municipal actors in the health sector and civil society, through the 8th Municipal Health Conference. The document has 5 axes (Management, Pharmaceutical Assistance, Health Surveillance, Basic Care and Specialized Care), in addition to 210 goals for the proposed four-year period.	User of the health network in general; health care professionals; municipal health managers.	Document that explains several fronts of action in the fight against TB, with ambitious targets for epidemiological indicators for the four-year period 2021-2025.
Technical note	LACEN PE technical note No. 30/2021 ²⁰	According to the technical note, “Periodicity and deadlines for sending quality control samples for tuberculosis and leprosy smear microscopies”.	Assistance healthcare professionals.	It seeks to improve sample flows between requesting health units and the Central Laboratory - LACEN.
Technical note	LACEN PE technical note No. 019/2022 ²¹	According to the technical note, “Guidelines for health units and prison units regarding the request for the Rapid Molecular Test for tuberculosis - TRM-TB using the Genexpert equipment in samples from new pulmonary and extrapulmonary cases and in samples from patients undergoing retreatment”.	Assistance health professionals.	It aims to instruct health professionals to improve the cost-benefit of TRM-TB, also via LACEN.
News*	Example: “Week of actions in reference to the World Campaign to Fight Tuberculosis” (2017)	Early identification of TB; screening; joint efforts on commemorative dates; training for health and related professionals. Various news between 2017 and 2023 about specific actions. They generally occurred in the context of festivities, important dates for the theme or at points of intense movement in the city.	Users of the health network in general; health professionals in general.	They summarize specific actions within a broader context of combating TB in the municipality of JDG.

Table 1: rescued documents and main characteristics

* Aiming for brevity, it was decided not to individualize the news, but to take it together.

(Source: author himself, 2023)

remained above 70% until the COVID-19 pandemic began and this rate fell abruptly¹⁸.

Further on, the document presents and evaluates data on the co-infection of TB and the human immunodeficiency virus (HIV). Finally, it talks about the need to test symptomatic respiratory patients and direct contacts of bacilliferous patients.¹⁸

The document,¹⁸ it fulfills a double function when speaking in terms of Primary Care: informative and instructive. At the same time as it informs the general population – providing results –, it also points out actions that health professionals can take to improve care in the basic network¹⁸.

He cites, for example, Directly Observed Treatment (DOT) for TB as a strategy to be improved in the municipality¹⁸. This is in line with national guidelines, as published in the DOT protocol in Primary Care²³. This is a strategy that goes far beyond the mere observation of correct medication intake, also covering aspects of prevention, diagnosis and organization of health services for longitudinal care of patients with TB – and their direct contacts.²³

Junges, Burille and Tedesco also conducted a study²⁴ about the importance of DOT in Primary Care, noting that there is improvement in practically all treatment indicators. Furthermore, patients and healthcare professionals consider this decentralization better, which promotes greater adherence and a close healthcare professional-patient relationship. The authors assert that:

The TDO symbolizes a powerful commitment by public policies aimed at combating TB, whose decentralization to primary care, by the surveillance core, allows for greater chances of resolving the disease.²⁴ (p. 8).

Thus, the report is precise in bringing relevant data and instructing health professionals to take evidence-based measures

that are perfectly applicable in Primary Care, as seen^{23,24}. Furthermore, it brings other issues that are important to TB care, such as the issue of TB-HIV co-infection and the testing of direct contacts, further improving the public utility of the aforementioned report.^{6,18,24}

Another document found through a manual search on the internet was the Municipal Health Plan 2022-2025 of the city of Jabotão dos Guararapes¹⁹. With the status of Resolution, this plan was developed for a long time, according to the document itself, and had broad participation from civil society in the creation of plans and goals for the health area in this four-year period.¹⁹

As stated, the creation of the final document had broad popular participation, which took place through the 8th Municipal Health Conference in that municipality. On that occasion, proposals from different segments of society were collected to be evaluated and eventually incorporated into the final document¹⁹.

Soratto, Witt and Faria²⁵ recall that social control of health policies is something determined by law, whether through Health Councils or Health Conferences, such as the one mentioned above¹⁹. In this sense, there is a congruence between what is recommended and what was done in the construction of the municipal health plan.

But the authors warn that the mere representation of civil society is not enough. This is because the entities that participate in Health Councils and Health Conferences can, at times, have their argumentative power diminished, if not silenced. Therefore, vigilant observation is necessary so that actual active participation occurs, not just formal participation^{25,26}.

Regarding TB specifically, the document clearly sets out some objectives for the specified period. One of them is the implementation of the Municipal Program

to Combat Tuberculosis, within a broader context of combating Neglected Diseases¹⁹.

Several goals derive from this health objective, which will guide the actions taken in the coming years from the PC level to the high complexity level in the municipality. For example, one of the goals is to return to levels above 75% in the cure of new TB cases; reducing treatment abandonment to rates < 10% and testing more than 80% of contacts of TB patients are also goals for the four-year period 2022-2025, according to the document now analyzed¹⁹.

Critically analyzing, as Flick proposes¹³, it can be seen that this plan works as a guideline, that is, a document that points out the direction of efforts and makes clear the objectives and goals to be achieved. It does not necessarily explain or break down how this will be accomplished. As the reality of each health service is unique, it is assumed that the aforementioned guideline acts as a guide for the actions to be implemented in order to achieve the objectives.

Thus, in terms of content and suitability for the study theme of this work, this municipal plan stands out as the most relevant document rescued in the research.

Finally, the last document analyzed is the Booklet – Care Networks and Health Services in Jaboatão dos Guararapes, from 2019¹⁷. From the title itself, it is possible to infer that this is not something specific to TB in the municipality – although it addresses the topic, as will be shown.

The Booklet is aimed directly at a target audience: users of the JDG health network, as explained at the beginning. Therefore, its nature is eminently informative and instructive, showing citizens how the health system works and where to go in certain situations, for example¹⁷.

This is in line with what Rolim, Cruz and Sampaio found²⁶, who argue that calling

on users to understand the health network in which they are inserted is of paramount importance.

Taking into consideration, that they will not always understand, due to issues such as education and technical language, the role of the Community Health Agent is notable in clarifying doubts that may be considered trivial by health professionals, but which limit the search for assistance for many patients²⁷.

The Booklet was also a document evaluated as positive, since there is a lot of support in the literature regarding the use of this strategy as a tool for access to health and health promotion. This is even considered an empowerment strategy on the part of users²⁸.

Bringing the discussion back to the central objective of this work, it is possible to attribute good value to the aforementioned Booklet¹⁷, given the assumptions it shares. However, it only has a small section dedicated to TB which, despite containing basic information¹⁷, in the opinion of the authors of this study, it could be more detailed – or possibly there could be a separate booklet just for this topic, given the relevance of the disease burden for the health system.

CONCLUSION

It was found that the documents that guide the strategy to combat tuberculosis in Primary Health Care are those available for the entire state of Pernambuco. There are 3 documents among those rescued during the research that are from the municipality of Jaboatão dos Guararapes and that talk about tuberculosis to a greater or lesser extent. No specific public document was found on the strategy adopted by the municipality.

Thus, this study managed to summarize the main documents published in the last decade regarding the subject in the municipality of Jaboatão dos Guararapes. At the same time, it suggests that the creation of new documents

and, mainly, mass publication are measures considered by management entities on upcoming occasions, due to everything that has been discussed.

The Municipal Health Plan and Management Report contain objective data that show unsatisfactory treatment abandonment rates, detection and treatment rates of new cases, testing of contacts and other variables. However, more data or even a separate study would be needed to draw more robust conclusions. Therefore, this study, of an eminently qualitative nature, only partially responds to this problem in the care network for people with TB.

It is believed that a specific document that serves as a reference for both health professionals and researchers, as well as the population, and with a publication with

known frequency is an option that provides more solidity to the strategy to combat TB.

Regarding the limitations of this study, the heterogeneity of documents evaluated and the difficulty in accessing possible documents that are not available on the internet stand out. Thus, the global assessment of the care network for people with TB in Primary Care may have been underestimated due to these factors.

New research in the area can investigate in a quantitative way whether the objectives and goals set by the municipality were achieved and, mainly, critically analyze according to the areas assigned to each Basic Health Unit. This would allow identifying specific inequities in certain regions of the city and making it possible more targeted interventions.

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ANNEX 1 – RULES OF THE JOURNAL CHOSEN FOR ARTICLE SUBMISSION IN THE JOURNAL OF MEDICAL AND BIOLOGICAL SCIENCES, WHICH PRESENTS CAPES/QUALIS: A4 (MEDICINA II) AND ISSN (PRINTED): 1677-5090 / ISSN (ON-LINE): 2236-5222

Conditions for submission	<ul style="list-style-type: none"> • Original and unpublished contribution; • Not being submitted to another journal.
Formatting	<ul style="list-style-type: none"> • Spacing 1.5; • 12-point Times New Roman font; • Figures inserted in the body of the text, if applicable;
Original articles	<ul style="list-style-type: none"> • Between 15 and 25 pages; • Summary (Portuguese) and abstract (English); • Keywords and Keywords, maximum 5;
Structure	<ul style="list-style-type: none"> • Introduction; • Materials and methods; • Results; • Discussion; • Conclusion; • References.
Rule	<ul style="list-style-type: none"> • Vancouver.

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